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IN REPLY REFER TO
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OPNAV INSTRUCTION 5090.1C

From: Chief of Naval Operations

Subj: ENVIRONMENTAL READINESS PROGRAM MANUAL

Encl: (1) Table of Contents, Chapters 1-30 and 15 Appendices (B, C, D, E, F, G, H, I, K, L, M, N, O, P, Y)

1. Purpose

a. To discuss requirements, delineate responsibilities, and issue policy for the management of the environmental, natural and cultural resources for all Navy ships and shore activities.

b. This is a significant revision to the Environmental and Natural Resources Program Manual. The manual should be reviewed in its entirety.

2. Cancellation. OPNAVINST 5090.1B.

3. Scope and Applicability

a. The Navy is committed to operating successfully in a manner compatible with the environment. The mission of the Navy's Environmental Readiness Program is to ensure the ability of United States Navy forces to effectively operate world-wide in an environmentally responsible manner, both ashore and afloat. Navy, joint and combined operations and training must be planned and executed to fully meet operational readiness requirements and Navy environmental objectives. In order to ensure that the Navy can prepare, train and operate as required, personnel must be aware of the environmental requirements established by Federal, State and local laws and regulations; Executive Orders (EO); and Department of Defense (DoD) and Navy policy. National defense and environmental protection are, and must continue to be, compatible goals. Achievement of these goals requires the leadership and personal commitment of military and civilian personnel throughout the Navy chain of command.

b. The number of environmental implementing regulations has increased in recent years, and these regulations are in a

continuous state of change. This instruction discusses Federal laws and regulations, DoD and Navy policies applicable to Navy installations, organizations and platforms. In addition, shore activity personnel should be aware of and comply with the additional requirements imposed by State and local governments. This instruction also addresses procedures by which ships will be made aware of the applicable State and local requirements for U.S. ports in which they may be moored.

c. Summary of Changes

(1) This instruction has been revised to describe changes in Federal environmental legislation and regulations, as well as DoD and Navy policy, which have taken place since the issuance of OPNAVINST 5090.1B in November 1994. It also describes command responsibilities for environmental management and updated funding procedures.

(2) Two additional chapters have been added to the instruction. The previous Chapter 1 has been divided into two chapters, and a new chapter has been added covering the Munitions Response Program. In addition, the chapters have been realigned and renumbered to improve the flow of the instruction.

4. Action

a. This instruction is applicable to all Navy commands afloat and ashore. The policies, procedures, and actions required are published without the necessity for further implementing instructions from the various commands, budget submitting offices, and offices, except as specifically directed. However, organizations that have significant environmental, natural or cultural resources responsibilities may find it necessary to provide additional guidance and supplemental instructions specific to their local area.

b. All Navy military and civilian personnel, installation tenants, and contractors working for the Navy shall comply with all applicable Federal, State, and local environmental laws and regulations; as well as the requirements of Presidential Executive Orders; Navy/DoD policies, regulations, and requirements; and, where applicable, DoD Final Governing Standards (FGS).

c. This instruction is effective on the date of signature. All commands shall integrate the requirements of this instruction into their operations in an expeditious manner.

Monitoring of the implementation of this instruction will be a key element of implementing the Environmental Management System described in Chapter 3.

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NAVY ENVIRONMENTAL AND NATURAL RESOURCES PROGRAM MANUAL

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CHAPTER 1

ENVIRONMENTAL POLICY AND ORGANIZATION

1-1 Scope

1-1.1 Manual. This manual provides Navy policy, identifies key statutory and regulatory requirements, and assigns responsibility for the planning and execution of:

a. The Installation Restoration (IR) program and Munitions Response Program (MRP).

b. Programs for compliance with current laws, regulations and Executive Orders (E.O.'s) relative to the protection of the environment; pollution prevention (P2), and the conservation of natural, cultural and historic resources.

c. Programs that enable the planning and execution of Navy, joint and combined operations and training that fully meet operational readiness requirements and Navy environmental objectives.

1-1.2 Coordination. This manual has been coordinated with the Commandant of the Marine Corps, but does not apply to Marine Corps activities.

1-1.3 Applicability. The policies and procedures in this manual apply to all Navy personnel and activities within the Chief of Naval Operations' (CNO) chain of command. In addition, some requirements in this instruction are applicable by reference to personnel and activities outside of the CNO chain of command through Department of Navy (DON) policy statements and instructions. Specific policy and associated applicability are addressed in subject chapters, including this chapter. This instruction describes the internal management of the Navy's environmental program, and is not intended to create any right or benefit, substantive or procedural, enforceable at law by any party against the DON, its officers, employees, or any person.

1-1.4 Precedence. This instruction provides the primary Navy policies and procedures for managing environmental, natural resource and cultural resource programs, and any apparent conflict between this instruction and other Navy instructions, manuals and similar directives on environmental, natural resource or cultural resource programs will be resolved in favor of this instruction. This instruction is consistent with all applicable statutes, regulations, Executive Orders (E.O.), Department of Defense Directives and Instructions (DODD and DODI) and DON instructions, and readers will so construe it.

1-1.5 Instruction Format. This instruction establishes and provides Navy policy for complying with environmental, natural resource and cultural resource statutes, regulations and E.O.'s. Each chapter has been prepared around specific environmental, natural resource and cultural resource programs describing program scope, applicable references, program requirements, specific Navy policy and responsibility for complying with the requirements of that particular program. Specific program chapters are not all inclusive and may not meet your total requirement; thus the reader should refer to other chapters in this instruction as appropriate.

1-1.6 References.

(a) SECNAV INSTRUCTION (SECNAVINST) 5510.30A, Department of the Navy Personnel Security Manual; Not to All (NOTAL)

(b) SECNAVINST 5510.36, Department of the Navy Information Security Program (ISP) Regulation; (NOTAL)

(c) OPNAVINST 5400.24D, Command, Area Coordination and Command Relationships

1-2 Policy

1-2.1 General Requirements. The mission of the Navy's Environmental Readiness Program is to ensure the ability of United States Navy forces to effectively operate world-wide in an environmentally responsible manner, both ashore and afloat. The Navy is committed to operating in a manner compatible with the environment. Navy, joint and combined operations and training must be planned and executed to fully meet operational readiness requirements and Navy environmental objectives. To do so, the Navy must work effectively with other stakeholders to ensure that laws, regulations and policies are based on sound science and consider risks, costs and benefits. The Environmental Readiness program must provide Navy operators and installation managers with clear, comprehensive policy and guidance, as well as effective tools and training, to support operational readiness in compliance with environmental laws and regulations.

1-2.2 Compliance. All Navy personnel (civilian and military), installation tenants, and contractors working for the Navy shall comply with all applicable Federal, State, and local environmental, natural resource and cultural resource statutes and regulations; as well as the requirements of Presidential E.O.'s; Navy policies, regulations, and requirements; and, where applicable, Department of Defense (DOD) Final Governing Standards (FGS). Navy personnel shall obtain all necessary Federal, State, and local environmental, natural resource and cultural resource permits for the construction and operation of facilities and ranges, and for actions related to operations and training; and shall comply with all permit terms and conditions. When, in the interest of national defense and/or a particular mission, a Navy command considers that compliance with an applicable requirement is impractical or inappropriate due to security considerations or impact on the military mission, the issue shall be referred to the Deputy Chief of Naval Operations (Fleet Readiness and Logistics) (CNO (N4)), via the chain of command. National Defense Exemptions may be available under some statutes, but Navy policy is to achieve and maintain compliance with applicable laws and regulations. Activities shall seek waivers to applicable environmental requirements only as a last resort, and CNO (N4) will not authorize pursuit of such waivers where compliance is deemed to be practicable. Commands seeking waivers must comply with environmental requirements while the request is pending. Navy policy is to promptly correct any areas not in compliance with applicable requirements. Such prompt attention is the best defense to possible criminal charges or individual penalties.

1-2.3 Pollution Prevention. The preferred method of environmental protection is to eliminate or control, to the maximum extent feasible, the pollutant source. All Navy activities shall identify means and methods for the elimination or minimization of pollutants and, where possible, incorporate them at the earliest stages of planning, design, and procurement of facilities, ships, aircraft, weapon systems, equipment, and material. Commands shall strive to eliminate or minimize use of hazardous materials (HM) and generation of hazardous waste (HW). Chapter 4 describes these programs in detail.

1-2.4 Acquisition ESOH. The Navy is committed to developing systems that meet mission capabilities, while minimizing environmental, safety, and occupational health (ESOH) risks associated with the system. DODD 5000.1, DOD Instruction (DODI) 5000.2, and SECNAVINST 5000.2C, prescribe procedures for system acquisition, which include consideration of ESOH risks during the life-cycle of the system. By identifying, tracking, and mitigating ESOH hazards related to the life-cycle of the system, the Navy and its acquisition programs are better able to facilitate environmental stewardship, reduce the regulatory burdens and risks, and comply with the environmental regulatory requirements, policies, and procedures discussed in the remaining chapters and appendices. Policies and procedures specific to an acquisition program are discussed in each chapter, as applicable.

1-2.5 Sovereign Immunity. Federal agencies must fully comply with applicable Federal, state and local statutes. Some environmental statutes contain waivers of sovereign immunity that require Federal agencies to comply with Federal, State and local environmental laws and provide for enforcement of Federal, State, and local substantive, procedural, and administrative requirements. Because the application of sovereign immunity waivers varies somewhat with specific situations, personnel should seek the advice of appropriate Navy legal counsel. Requirements for the payment of fees, fines, or taxes are discussed in Chapter 2.

1-2.6 Executive Requirements. E.O. 12088 requires the head of each Federal agency to comply with "applicable pollution control standards" defined as the "same substantive, procedural and other requirements that would apply to a private person." It also requires Federal agencies to cooperate with the Federal, state and local environmental regulatory officials. Other applicable executive orders are discussed in the appropriate subject specific chapters.

1-2.7 Information Security. Representatives of Federal, State, and local agencies, exercising their regulatory authorities under environmental laws and regulations, periodically visit Navy shore activities. Activities shall properly enforce Navy regulations and Federal statutes governing the control and protection of classified and sensitive unclassified information but shall not interfere with the legitimate regulatory purpose of these visits. Activities shall follow these guidelines:

a. Only personnel with appropriate security clearances or access authorizations shall be permitted access to classified information, and then only upon a determination by the cognizant Navy official that a need-to-know exists to fulfill a legitimate regulatory purpose. In keeping with the need-to-know principle, such access shall be limited to classified information required to resolve the matter at hand. When permitting access, activities shall negotiate arrangements under references (a) and (b) to assure continued protection of the information by the regulatory personnel.

b. Navy commands handle a considerable amount of sensitive unclassified information controlled under Navy security regulations, Federal Export Control regulations, and other government- wide requirements. While security clearances or access authorizations are not required for access to this information, a need-to-know determination shall be made as described above for classified information, and only U.S. citizens may be permitted access in most cases. The holder of the information shall ensure that the recipient understands and complies with applicable security regulations governing dissemination and protection of the information before permitting access.

c. Access to certain categories of classified and sensitive unclassified information requires special authority. Specifically, access to classified or unclassified naval nuclear propulsion information or to

the propulsion plant spaces of nuclear powered ships requires the specific approval of the Director of Naval Nuclear Propulsion Program, CNO (N00N).

d. Because access to classified and sensitive unclassified information by regulatory personnel creates administrative burdens for both the Navy and the regulator, as described above, Navy commands are encouraged to satisfy the needs of regulatory personnel using information which is publicly releasable.

Subordinate commands shall ensure that these guidelines are reflected in instructions which they issue covering this area.

Chapter 22 discusses information security regarding ships.

1-2.8 Government-Owned, Contractor-Operated (GOCO) Facilities. Navy offices or activities sponsoring GOCO facilities shall exercise oversight through the facility's lease or management contracts to ensure that the operating contractor complies with applicable environmental regulations.

a. **Facility Use Operations.** The assigned Budget Submitting Office (BSO) for a GOCO plant shall exercise oversight through the facility's use or management contracts to ensure that the plant complies with environmental regulations. When a GOCO plant has no operating contractor or lessee, the BSO for the GOCO plant shall comply with the requirements of this instruction. Officially assigned BSO(s) for a leased property shall ensure that lease contract terms and conditions place full responsibility for environmental compliance on the lessee, and shall exercise appropriate oversight of the leased property to ensure lessee compliance with environmental regulations.

b. **Operations, Facility Use, or Lease Agreements.** These agreements shall require operation of all facilities and equipment under applicable substantive and procedural environmental requirements. Contractors shall obtain all necessary permits and sign the permits as operators unless otherwise directed by contract. Contractors shall advise the Navy of any permit, its conditions, and provide periodic compliance status reports as required by the managing Navy office. Each BSO for assigned GOCO plants, non-excess GOCO plants, and non-excess military installations, and each Navy sponsor of a GOCO facility shall sign as owner for all environmental permits which each respective operating contractor or lessee of such assigned plant or facility is required to have per environmental regulations and laws. The landlord command shall develop a schedule and document periodic review of the environmental compliance of its lease and license holders.

c. **Facilities Leased or Rented by the Navy.** Facility use contracts, rental agreements or leases shall require the owner of facilities leased or rented by the Navy to be responsible for ensuring that the facilities comply with all applicable environmental requirements. The Navy activity renting/leasing the facility shall operate all facilities and equipment under all applicable substantive and procedural environmental requirements, obtain all necessary permits, and sign as operator, unless otherwise directed by contract.

1-2.9 Real Estate Purchase. The purchasing activity shall conduct a pre-purchase environmental survey and a property transaction audit that includes a Preliminary Assessment (PA) for potential hazardous waste contaminated sites. If the seller did a PA, then the purchasing activity shall review documents for accuracy to determine the need for an on-site survey. If contamination is suspected or known, see Chapter 18 Section 4.21 of this manual for additional guidance.

1-2.10 Regional/Community Programs. The Navy supports the participation of its employees and officers in regional and community programs to prevent pollution, address waste management issues, and to protect natural and cultural resources. Such participation may include advisory functions or planning of pollution control facilities where Navy shore activities can contribute to the subject to be addressed by that facility. When beneficial and authorized, the Navy may participate in funding of regional/community pollution control and solid waste management solutions. Before committing to participation, employees and commands shall seek the advice of Navy counsel.

1-2.11 Reporting Noncompliance. Immediately upon discovery of existing or potential non-compliance with an environmental requirement, Navy military and civilian personnel, and contractors, shall report it to the responsible command. If the responsible command cannot be determined, the noncompliance shall be reported to the geographic Regional Commander. If reprisal is of concern to the reporting individual, he or she may submit reports via the Navy Hotline, (800) 522-3451. Navy organizations shall define and report Notices of Violation (NOVs) consistent with appendixes B and C.

1-2.12 Reporting Environmental Data. Navy organizations will report requested environmental data electronically either through the Environmental Program Requirements Web Database (EPRWeb) Portal or as directed by a datacall. EPRWeb Portal procedures are contained in Appendix C

1-2.13 Facility Inspections. Navy shore facility commanders/tenant commanders shall allow entry at reasonable times to Federal, State and local environmental regulators or their representatives, upon presentation of proper credentials and subject to information security requirements of paragraph 1-2.5, to examine or copy records, inspect monitoring equipment, inspect work being performed in regard to environmental/regulatory compliance, or sample any wastes or substances which they have the authority to regulate. Further, such inspections shall comply with information and facility security requirements set forth in references (a) and (b) and paragraph 1-2.7. Activities shall notify the BSO and the Regional Environmental Coordinator (REC) of all regulatory inspections and may request cognizant Naval Facilities Engineering Command (COMNAVFACENGCOM) organization or REC assistance at such inspections. Chapter 22 provides policy for inspections aboard ship.

1-2.14 Fleet/Shore Facility Relationship. When naval vessels or aircraft are present at a shore facility, personnel assigned to associated operating units shall comply with the host command's environmental, natural resource and cultural resource program policies.

Compliance with environmental, natural resource and cultural resource requirements often requires specialized knowledge, expertise, or capability that afloat units may lack. To the maximum extent possible, shore commands and RECs shall, upon request, provide afloat units with assistance in meeting shore facility environmental requirements.

1-2.15 Host/Tenant Agreements. Commanding officers/officers in charge of host activities are responsible for all aspects of environmental, natural resources and cultural and historical preservation resource compliance on their bases. Commands cannot delegate this responsibility. All Navy hosts and tenants shall develop agreements, or include in existing agreements, roles and responsibilities with respect to environmental compliance. Such agreements shall include pollution prevention, environmental compliance evaluations (see chapter 3), Environmental Planning documentation (see chapter 5), contact with regulatory agencies, payment of fines/fees, permit signatures/duties, HW management, emergency planning and community right-to-know implementation, training, corrective and/or response actions, etc. Where

appropriate, commands shall establish environmental compliance boards consisting of host and tenant management personnel. Commands may delegate authority for portions of environmental program management to senior managers consistent with "by direction" signature authority. Host commands may delegate authority to tenant commands, but overall responsibility shall remain with the host commanding officer.

1-2-16 Joint Bases. Pending further guidance from DoD, Joint bases where Navy provides facility services will coordinate with the tenant commands to insure environmental requirements are met. Where Navy activities are tenants on a joint base, they shall coordinate with the lead service.

1-2.17 Release of Information. Applicable law and information security requirements govern release of activity specific data and information to agencies outside the Navy. Persons outside the Navy shall forward requests for information to an activity for action by the commanding officer of the activity or cognizant BSO.

1-2.18 Radioactive Material. Use and management of radioactive material shall comply with applicable rules, regulations, and requirements of the Department of Energy (DOE), U.S. Nuclear Regulatory Commission (USNRC), Department of Transportation (DOT), and the Environmental Protection Agency (EPA), and shall comply with the requirements of the Naval Nuclear Propulsion Program for matters pertaining to nuclear propulsion. Commands shall coordinate any matters affecting or involving naval nuclear propulsion plants or nuclear support facilities or their associated radioactivity with CNO (N00N).

1-2.19 Environmental, Natural Resource and Cultural Resource Training

a. All naval commands afloat and ashore, shall provide adequate education and training to naval personnel to ensure they understand their role within the Navy's program and to enable them to comply with applicable environmental, natural resource and cultural resource requirements. Commanders shall provide Navy personnel with environmental, natural resource and cultural resource training appropriate to their position or employment. At minimum, personnel must attain a general awareness of Navy environmental, natural resource and cultural resource policies, as well as an awareness of the effects that their actions can have on the environment (see chapter 28).

b. Commands shall ensure that counsel assigned to provide advice on environmental law issues comply with the training recommendations, including continuing legal education, established jointly by the General Counsel of the Navy (OGC) and the Judge Advocate General (NAVY JAG). Individuals should complete this initial training en route where possible. Commands shall also ensure that counsel assigned to provide advice on environmental law issues have access to reference material that complies with the joint recommendations of the OGC and NAVY JAG.

1-2.20 Representation of Federal Employees

If a legal entity or individual brings action against an employee or service member in a civil lawsuit, consult with the command counsel immediately to initiate the steps to obtain U.S. Department of Justice (DOJ) representation. DOJ determines availability of DOJ representation after favorable chain of command endorsement. Members and employees should direct any further question regarding representation to the command counsel.

a. **Payment of Attorney Fees and Judgments.** DOJ representation will be free of charge to the employee or service member. If a court finds the employee or service member personally liable, the employee or service member will be responsible for paying any judgment or penalty from personal funds, regardless of whether DOJ provided representation. There are no specific provisions for reimbursing an employee or service member for judgments incurred.

1-2.21 Environmental Considerations During Celebrations/Events. Large-scale celebrations/events held aboard naval ships or shore facilities may adversely affect the environment if not planned carefully. Event organizers must consider factors such as solid waste source generation and reduction and wastewater collection and treatment when planning change of command ceremonies, commissioning and de-commissioning ceremonies, deployment homecoming celebrations, and other events that involve large gatherings of personnel and civilian guests.

a. **Use of Balloons During Celebrations/Events.** Helium-filled balloons travel significant distances from point of release and can harm marine mammals and other aquatic life if they deflate over water. Navy activities will **not** release helium-filled balloons during celebrations and other events regardless of distance from any coastline.

1-2.22 Environmental and Natural Resources Regulatory Permits. Navy organizations shall apply for Federal, State, and local permits, where appropriate. BSOs shall designate which organizations under their cognizance are responsible for obtaining and managing environmental permits. Regardless of the permit holder, permits for environmental and natural resources actions at Navy shore installations must be coordinated with the appropriate REC prior to the permit being signed. Additionally, permits for any actions from the high water mark seaward must be coordinated with the Area Environmental Coordinator (AEC). Host activities shall coordinate permit conditions with all affected tenant commands and ensure that responsibilities related to environmental and natural resources program permits, fees and fines are addressed in all host/tenant agreements. In jurisdictions that allow tenant commands to hold environmental permits, Commanding Officers (COs) of host commands may delegate authority to negotiate, sign and hold environmental and natural resources permits to COs of tenant commands where such permits directly impact the ability of the tenant command to perform its mission and operations under the permit fall completely under that tenant. Where authorized to negotiate, sign and hold environmental permits, COs of tenant activities must coordinate all such permits with the host activity and the REC prior to signing the permit. Disputes between host and tenant commands regarding environmental and natural resource program permits interaction should be elevated to the appropriate BSOs for resolution. CNO(N4) will adjudicate disputes among BSOs.

1-2.23 Environmental Regulatory Agency Interface. The REC is the primary Navy interface with regional Federal, State and local regulatory agencies. RECs may designate other Navy organizations within their region to serve as the primary interface with individual State and local regulatory agencies for specific actions. It is essential that Navy organizations provide consistent responses to the various regulatory agencies and avoid adverse precedents. As such environmental and natural resource permits conditions, demands for payment of Navy funds, compliance agreements, settlements, negotiations, responses to written notices of violation and other related interactions with regulatory agencies must be fully coordinated with the REC and all other affected Navy organizations. Interaction with regulatory agencies for actions occurring from the high water mark seaward must be coordinated with the appropriate AEC. All interactions with the National Oceanic and Atmospheric Administration (NOAA) and its National Marine Fisheries Service (NMFS) must be coordinated with CNO (N45). Appendix B contains instructions for the processing of notices of non-compliance and associated chain of command responsibilities. Commands shall send all

interpretations or agreements likely to set precedents to the Director, Environmental Readiness Division (CNO (N45)) immediately, via the chain of command, with copies to the REC.

1-2.24 Contractor Compliance. Navy contracting officers are responsible for ensuring that contractors and sub-contractors performing work on Navy installations and on Navy systems, platforms and other equipment comply fully with applicable Federal, State and local statutes and regulations and Navy policies and requirements. Further, contracting officers shall ensure that contractors and sub-contractors are aware of and comply full with Navy installation specific environmental and natural resources policies and requirement.

1-3 Organization

1-3.1 Area Environmental Coordinators. AECs are responsible for coordination of environmental issues within their designated area of responsibility (AOR), consistent with reference (c). AECs shall appoint a senior naval officer in each region under their cognizance to serve as the REC and Navy On-Scene Coordinator (NOSC)). Commander, United States Fleet Forces Command (COMFLTFORCOM) and the cognizant Naval Forces (NAVFOR) Commander (Commander, United States Pacific Fleet (COMPACFLT); Commander, United States Forces Europe (COMNAVEUR); and Commander, United States Naval Forces Central Command (COMNAVCENT)) serve as the AEC within their designated AORs.

a. **Regional Environmental Coordination.** RECs are designated by the cognizant AEC to serve as the senior Navy officer in a local region for coordination of environmental matters, including associated public affairs. The AEC may also appoint the RECs to be NOSC for spill response as discussed in chapters 12 and 22. Navy RECs shall report up the Navy chain-of command via the cognizant AEC on all mission/operational matters including, but not limited to, at-sea compliance, range documentation and permitting (e.g., Tactical Training Theater Assessment and Planning (TAP)), home-basing decisions, and afloat/shipboard environmental compliance. For shore installation management (SIM) matters, the REC shall report up the Navy chain of command via Commander, Naval Installations Command (CNIC).

b. **DOD Regional Environmental Coordination.** The Department of Navy has been designated as the DOD Executive Agent (EA) for the regional environmental coordination in EPA regions I, III, and IX, and the appointed Navy REC will therefore serve as the DOD REC in these regions. Designated DOD RECs shall report up the Navy chain-of command via the cognizant AEC on all mission/operational matters including, but not limited to, at-sea compliance, range documentation and permitting (e.g., TAP), home-basing decisions, and afloat/shipboard environmental compliance. For SIM matters, the DOD REC shall report up the Navy chain of command via CNIC.

1-3.2 Navy On-Scene Coordinator (NOSC). The NOSC is the Navy official pre-designated to coordinate Navy oil and hazardous substances (OHS) spill contingency planning and to direct Navy OHS spill response efforts in a pre-assigned area. NOSCs are designated by the cognizant AEC (see chapter 12). COMFLTFORCOM, COMPACFLT, and COMNAVEUR serve as the NOSC within their assigned AORs as appropriate. The NOSC is the Federal On-Scene Coordinator (FOSC) for Navy hazardous substance (HS) releases. The NOSC also acts as the incident commander (IC) for OHS spills beyond a facility's assigned AOR, and as IC for spills which exceed the response capability of a facility located within the NOSC AOR. The NOSC may designate a Qualified Individual (QI) who meets the qualifications of chapter 12-3.25 to implement a NOSC plan and manage an oil spill incident.

1-3.3 Naval Environmental Protection Support Service (NEPSS). The NEPSS includes offices in COMNAVFACENGCOM designated to provide environmental technical, legal, data management, and information exchange support to Navy organizations.

a. COMNAVFACENGCOM is the NEPSS manager.

b. COMNAVFACENGCOM, its subordinate field commands and the Naval Facilities Engineering Service Center (NFESC) provide expertise in environmental engineering and legal support, coordinate NEPSS actions, and provide NEPSS Navy-wide data collection.

1-3.4 Environmental Specialty Offices (ESO). The ESOs have been established under Naval Sea Systems Command (NAVSEA) and Naval Air Systems Command (NAVAIR) to provide Navy-wide support in unique areas of technical expertise. Specialty offices include:

- Ordnance Environmental Support Office (OESO), located in Indian Head, MD, serves as the lead Environmental Specialty Office, provides direct support to CNO (N45), and manages funding budgeted for both it and the Aircraft Environmental Support Office (AESO). OESO provides Navy-wide environmental protection support in the area of military munitions and incorporates environmental compliance into ordnance operations. This technical support includes the munitions rule, range sustainability issues, and munitions response.

- AESO, located in North Island, CA, provides Navy-wide support relative to aircraft and aircraft facility environmental protection. AESO serves as the Navy's technical expert and provides Navy organizations with environmental support on aircraft engines in areas including conformity determinations, environmental planning for basing, atmospheric dispersion modeling, noise mapping, and jet engine emissions testing.

1-3.5 Disputes. Unresolved issues between the REC and an organization under the cognizance of a different BSO should be elevated through both chains of commands for resolution. If the two cognizant BSOs cannot reach agreement, the issue will be elevated to CNO (N45) for resolution. Legal questions, including interpretations of laws, regulations, permits, compliance agreements and similar legal documents shall be referred to the REC counsel for the REC for determination consistent with Article 0327 of Navy Regulations, 1990.

1-3.6 Environmental Quality and Natural Resources Awards. The Navy recognizes outstanding environmental, natural resource and cultural resource achievements by Navy individuals and organizations. Secretary of the Navy (SECNAV) and the CNO annually present awards to installations, ships, weapons system acquisition programs, and individuals for outstanding leadership and programs, innovation in problem solving, and exemplary approaches to incorporating environmental, natural resource and cultural resource concerns into training and day-to-day operations. The SECNAV and CNO awards are the basis for nomination for annual DOD awards. Details of awards and nomination requirements are located in appendix D. DOD publishes its requirements annually, which may supersede appendix D.

1-4 Responsibilities

1-4.1 Deputy Chief of Naval Operations (Fleet Readiness and Logistics) (CNO (N4)) or designee shall:

(a) Monitor proposed Federal environmental legislation, Federal regulations and proposed rules, and coordinate Navy impact analyses, and ensure articulation of Navy positions and concerns in conjunction with the Navy Office of Legislative Affairs (OLA) and the Assistant Secretary of the Navy (Installations and Environment) (ASN (I&E)).

(b) Establish and regularly update policy, and direct and monitor progress of the Navy environmental and natural resources programs.

(c) Coordinate environmental policy and program matters with ASN (I&E), the Office of the Deputy Under Secretary of Defense (Installations and Environment) (ODUSD (I&E)), other services, EPA, and other Federal agencies.

(d) Coordinate review and issuance of National Environmental Policy Act (NEPA) documents and documents prepared under E.O. 12114.

(e) Serve as the CNO's assessment sponsor for the environmental and natural resources programs, and as the CNO's resource sponsor for shore activity environmental and natural resources protection requirements.

(f) Coordinate with resource sponsors, CNO (N8), Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN (FM&C), Fiscal Management Bureau (FMB) and the Office of Management and Budget (OMB) in the reconciliation of environmental compliance requirements vs. budgeted resources.

(g) Serve as the CNO's assessment sponsor for the cultural and historical preservation programs, and as the CNO's resource sponsor for shore activity cultural and historical preservation requirements (N46).

1-4.2 The Director of Naval Nuclear Propulsion Program, CNO (N00N) shall fulfill all responsibilities prescribed in E.O. 12344 and implement Navy instructions for all matters pertaining to naval nuclear propulsion, including all radiological aspects of naval nuclear propulsion, oversight of radiological environmental compliance and monitoring, and involvement, where needed, in other environmental compliance and monitoring matters that affect naval nuclear propulsion.

1-4.3 Chief of Information (CHINFO) shall:

(a) Provide guidelines for the release of information involving environmental and natural resources matters.

(b) Provide guidance on the conduct of public affairs matters and public hearings required by environmental laws or regulations.

(c) Establish and implement a program to gather and publicize Navy environmental program accomplishments.

1-4.4 Area Environmental Coordinators shall:

(a) Appoint a flag level Navy officer to serve as the Navy REC in each of the designated Navy regions. Should the AEC choose to appoint more than one REC within a region, the AEC must designate one REC to serve as the Navy's lead REC in each designated Navy region.

(b) In regions where the Navy is designated as the DOD EA for regional environmental coordination, assign Navy EA responsibilities to the lead REC.

(c) Appoint NOSCs as required.

(d) Ensure consistent application of environmental policy within AEC AOR's, monitor all mission/operational matters including, but not limited to, at-sea compliance, range documentation and permitting (e.g. TAP), home-basing decisions, and afloat/shipboard environmental compliance.

1-4.5 Regional Environmental Coordinators shall:

(a) Coordinate public affairs and community relations in the region with respect to environmental matters, and serve as the Navy point of contact for public and media inquiries when appropriate for matters of regional scope.

(b) Ensure consistent positions, agreements, permit conditions, and responses to regulatory agencies within the region, coordinating closely with affected shore activities, regional commanders, BSOs and COMNAVFACENGCOM organizations. Coordinate with other military service RECs on issues that affect regional DOD activities as a whole. Where activities are taking inconsistent positions on similar environmental issues, the REC shall assist in reconciling the positions and developing a single Navy position within the region. If differences remain unresolved among affected shore activities, BSOs, or other military service RECs, the REC shall elevate the issue to CNO (N45) via the chain of command for resolution as discussed in paragraph 1-3.5.

(c) Serve as the primary Navy interface with regional Federal and State regulatory agencies. RECs may designate activities within their region to serve as the primary interface with individual State and/or local regulatory agencies.

(d) Coordinate exchange of environmental information among Navy shore activities in the region, including the distribution of State, local, and regional laws, rules, and regulations. Hold meetings and/or conferences, as necessary, for regional commands on environmental compliance issues.

(e) Monitor environmental compliance at activities within their region.

(f) Develop regional plans of action for specific environmental initiatives in coordination with commanding officers of Navy shore activities in the region and BSOs. Coordinate regional training initiatives among Navy activities and with other Federal, State, and local agencies to promote efficient use of training resources.

(g) Review the NOSC spill contingency plans to ensure the NOSC clearly outlines responsibilities and provides procedures consistent with policies of the REC in cases where the REC is not the NOSC for spill response. See chapter 12 for more detail on contingency planning.

(h) Provide assistance to facilities in dealing with regulatory agencies as requested.

(i) Act as the liaison between visiting foreign warships, environmental regulatory personnel, and port services on environmental requirements during ship visits. See paragraph 22-15.10.5.

(j) Ensure that agreed upon Navy positions and concerns are articulated to State lawmakers and Federal, State, and local regulatory officials within their region by appropriate Navy officials.

(k) Review and evaluate proposed State environmental legislation and regulations for potential impact on Navy operations, and keep appropriate BSOs and shore activities informed on the status of State legislative and regulatory proposals.

(l) Refrain from entering into any compliance commitment or agreement for which it is not the permit holder; nor shall the REC sign any memorandum of understanding or similar document, if unresolved differences remain with any affected shore activities or commands.

(m) Execute Navy EA responsibilities for DOD REC designated by the cognizant AEC. Coordinate all DOD regional environmental issues via the chain of command.

(n) Review proposed Memoranda of Understanding/Memoranda of Agreement that are to be agreed upon within their respective AOR to ensure that they are consistent with Navy policy and legal requirements.

(o) Report up the Navy chain-of command via the cognizant AEC on all mission/operational matters including, but not limited to, at-sea compliance, range documentation and permitting (e.g., TAP), home-basing decisions, and afloat/shipboard environmental compliance.

1-4.6 COMNAVFACENGCOM shall:

(a) Provide environmental and natural resource program management information as requested by naval activities and commands.

(b) Plan, program, budget and provide overall coordination and management for the Environmental Restoration, Navy (ER, N) Account and the NEPSS program.

(c) Provide environmental engineering, environmental compliance, natural resource management and contracting assistance to naval activities and commands upon request.

(d) Prepare analyses of relevant operational, legal, and technical issues raised by proposed State environmental legislation as requested by the RECs.

(e) Perform designated tasks under the DON Strategic Environmental Quality Research, Development, Test and Evaluation (RDT&E) program.

1-4.7 Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) shall:

(a) Manage the shipboard, ordnance and munitions environmental protection RDT&E program.

(b) Maintain OHS pollution response equipment and expertise for Navy offshore and salvage related OHS spills or releases through the Supervisor of Salvage (SUPSALV).

(c) Plan, program, and budget to provide Navy-wide support on ordnance environmental issues through the OESO.

(d) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.8 Commander, Naval Air Systems Command (COMNAVAIRSYSCOM) shall:

(a) Plan, program, and budget to provide Navy-wide support on aircraft and aircraft facility related environmental issues through the AESO.

(b) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.9 Chief, Bureau of Medicine and Surgery (BUMED) shall:

(a) Determine, validate, and establish health-related criteria and standards that are not available through Federal, State, or local laws or regulations.

(b) Provide assistance to activities, offices, and commands concerning the health aspects of pollution sources or pollution control equipment, including development of medical monitoring programs.

(c) Provide industrial hygiene and medical expertise to activities during spill events and other environmental emergencies via Navy hospitals and clinics, Navy Environmental Preventive Medicine Units, Navy Disease Vector Ecology Control Centers, and the Navy Environmental Health Center (NEHC).

(d) Coordinate with the Agency for Toxic Substances and Disease Registry (ATSDR) for the timely completion of public health assessments for National Priorities List (NPL) sites, toxicological profiles on any specific contaminants, health education, health consultations, and other activities provided in the DOD/ATSDR Annual Plan of Work.

(e) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.10 Naval Education and Training Command (NETC) shall:

(a) Ensure effective training programs on environmental compliance and natural resources management exist throughout the Navy.

(b) Update as required, budget for and implement the Navy Environmental and Natural Resources Program Training Plan.

1-4.11 Commander, Naval Legal Service Command shall:

(a) Review recommended training and reference resource standards for counsel providing legal advice on environmental law issues, in consultation with the OGC.

(b) Develop, budget for and conduct training courses sufficient to meet recommended training levels for Navy military and civilian attorneys providing legal advice on environmental law issues.

1-4.12 NAVY JAG and OGC attorneys shall provide advice and counsel on:

(a) Interpretation of environmental laws and regulations and their effect on the operation of the Navy.

(b) Responses to NOVs or similar assertions of non-compliance and to demands for payment of Navy funds from any environmental agency.

(c) Provisions in contracts or agreements with respect to environmental matters.

JAG and GC attorneys within the chain of command are a command's primary legal resource. Counsel assigned to BSOs, RECs, Naval Legal Service Offices and COMNAVFACENGCOM subordinate commands are also available to provide additional environmental legal support upon request. The litigation office of the OGC provides environmental litigation support. Finally, environmental legal advice is available from the Office of the Assistant General Counsel (Installations and Environment) (OAGC (I&E)).

1-4.13 Budget Submitting Offices (BSOs) shall:

(a) Provide appropriate oversight of their subordinate commands to ensure that they adhere to the policies in this manual and comply with applicable environmental, natural resource and cultural resource requirements.

(b) Plan, program, budget and allocate sufficient resources to fund environmental, natural resource and cultural resource requirements at their activities.

(c) Issue guidance to activities regarding planning, programming, and budgeting of environmental, natural resource and cultural resource requirements and execution of associated programs and projects.

(d) Ensure all subordinate organizations, including GOCOs, submit all environmental, natural resource and cultural resource requirements to BSOs as soon as such requirements are foreseen.

(e) Support CNO (N4) as program assessment and resource sponsor by providing detailed information in support of program baseline assessments as requested.

(f) Provide input on RDT&E requirements via the DON Strategic Environmental Quality RDT&E program, and direct the implementation of innovative solutions to environmental compliance, cost, and liability issues.

(g) As requested, review draft policy, legislation and regulations and provide CNO (N45) with timely comments and assessments on the impact of draft legislation or regulations on their activities.

(h) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.14 Regional Commanders/COs of shore activities shall:

(a) Comply with applicable Federal, State, and local environmental laws and regulations and Executive Orders, and continuously strive for improvements in all areas of pollution prevention.

(b) Cooperate with Federal, State, and local environmental regulatory officials.

(c) Coordinate environmental and natural resources matters (especially enforcement actions, agreements and permit conditions) with RECs and cognizant BSO, and the AEC for any actions from the high water mark seaward.

(d) Submit nominations for the CNO and Secretary of the Navy Environmental Quality and Natural Resources Awards, as appropriate.

(e) Integrate environmental, natural resource and cultural resource requirements into all levels of activity management through the application of program management procedures (including oversight, inspection, and identification).

(f) Request sufficient resources from the cognizant BSO to fully support all environmental, natural resource and cultural resource program requirements. Budget for and execute all environmental, natural resource and cultural resource program requirements.

(g) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.15 Commander, Military Sealift Command (MSC) shall:

(a) Ensure that MSC-owned vessels and MSC-chartered vessels, as public vessels, comply with the policies and procedures of this manual.

(b) Include applicable environmental requirements of this manual in all charters, contracts, and leases for vessels.

(c) Ensure consistent application of environmental policy within AEC's AOR's, coordinate all environmental planning and compliance for actions taking place at-sea (from the high water mark seaward) with the appropriate REC and AEC.

1-4.16 COs and masters of naval vessels shall:

(a) Comply with written environmental directives of host shore facilities and cooperate with host's designated environmental management staff to ensure compliance with applicable Federal, State, and local requirements.

(b) Ensure proper maintenance and operation of shipboard environmental protection systems to conform with applicable Federal, State, and local regulations.

(c) Ensure proper training of ship's personnel whose actions could adversely affect the environment. Ensure they attend appropriate schools, and are fully aware of appropriate documentation.

(d) Report to the chain of command any conditions or systems/equipment malfunctions or personnel errors that could result or have resulted in unlawful emissions or discharge.

(e) Submit nominations for the CNO and Secretary of the Navy Environmental Quality and Natural Resources Awards, as appropriate.

CHAPTER 2

FUNDING

2-1 Scope. This Chapter provides policy/guidance for the planning, programming, budgeting, execution and reporting of environmental resources to comply with environmental laws, environmental regulations, E.O.'s and DODIs/DODDs. Funding for the Installation Restoration (IR) and Munitions Response (MR) Programs is addressed in Chapter 18, Section 4.1 (IR) and in Chapter 19, Section 4.1 (MR).

2-1.1 General Guidance. The Environmental Quality (EQ) program funding encompasses requirements for Environmental Compliance (EC), P2, Conservation (CN), Radiological Controls (RADCON) and Range Sustainment (RS) as related to Environmental costs on Ranges. It is the Navy's policy to fully fund compliance with all applicable Federal, State and local Laws; Executive Orders; and associated implementing rules and regulations in accordance with reference (a) and (b).

Although maintenance-repair, maintenance of sewage treatment works, replacement of bag-house filters, maintenance of continuous monitoring equipment, etc. may have an environmental compliance impact; routine maintenance and repair projects are usually not eligible for EQ program funding. In general, the criteria to differentiate between an environmental requirement and a maintenance/repair/operations requirement can be summarized as follows:

- The INITIAL acquisition or modification of a facility, appurtenance or piece of equipment to meet a NEW legal requirement is considered a valid "environmental" requirement. The requirement should be properly programmed/budgeted in the EPRWeb system.

- Initial and subsequent environmental permit applications, studies, plans, etc. required by an environmental legal driver, and not exclusively by operational, maintenance, and repair requirements of existing facilities and appurtenances, are also valid environmental program funding requirements and therefore appropriate for environmental funding and should also be properly programmed/budgeted in the EPRWeb system.

- The subsequent operation, modification/upgrade (for reasons other than to meet a NEW law/regulatory standard), maintenance, repair, and eventual replacement of the facility or equipment, is not considered a valid environmental requirement.

- Cultural and historical preservation resources are not eligible to be funded using EC resources but should be entered into EPRWeb for tracking. Requirements are to be resourced through appropriate BSO to the Chief of Naval Operations (CNO) (N46).

- Bird Air Strike Hazard (BASH) program requirements are not eligible for conservation resources.

- For all projects that meet the applicable funding threshold for Military Construction (MILCON) the appropriate funding source is MILCON. These construction project requirements must be addressed through the MILCON programming process.

a. **Working Capital Fund (WCF) Operations.** The cost of environmental, natural resources and cultural resources compliance shall be part of each activity's operating budget. WCF activities shall

build into their operating budgets and rates any costs associated with complying with applicable environmental laws and regulations.

2-1.2 References.

(a) SECNAVINST5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs;

(b) DODI 4715.6, Environmental Compliance.

2-1.3 Environmental Readiness Program Requirements Database. EPRWeb is an optimized online database used to define all programming for the Navy's EQ requirements. EPRWeb records data on project expenditures, and provides immediate, web-based access to requirements entered by the Activity, Region, and BSO locations, as well as from CNO (N45).

a. BSOs hold the responsibility for ensuring all EQ requirements are entered into the EPRWeb and that they are available for review/approval by the chain of command by the dates specified in the Guidance letter that is provided annually by CNO (N45). This database is the source document for determining all programming and budgeting requirements of the EQ Program. EPRWeb is also the tool for providing the four Environmental Readiness Level (ERL) capabilities used in producing programming and budgeting requirements for the various processes within the Planning, Programming, Budget, and Execution System (PPBES). At a minimum CNO (N45) will support funding for all applicable Federal, State and local laws and regulations, E.O.'s, DODIs/DODDs and applicable international and overseas requirements.

2-1.4 Environmental Readiness Levels. Four levels of Navy environmental readiness have been established, along with the specific types and scope of the capabilities required to provide each level. These ERL enable capability based programming and budgeting of environmental funding and facilitate required capability versus cost trade-off decisions. ERL4 is considered the absolute minimum level of environmental readiness capability required to maintain compliance with applicable legal requirements. The definitions of ERL1 through ERL4 follows:

a. **Environmental Readiness Level 4:**

- Supports all actions specifically required by law, regulation or E.O. (DOD Class I and II requirements) just in time.

- Supports all DOD Class 0 requirements related to a specific statute such as hazardous waste disposal, permits, fees, monitoring, sampling and analysis, reporting and record keeping.

- Supports recurring administrative, personnel and other costs associated with managing environmental programs that are necessary to meet applicable compliance requirements (DOD Class 0).

- Supports DOD policy requirement to comply with overseas FGS and Overseas Environmental Baseline Guidance Document (OEBGD).

- Supports minimum feasible Navy executive agent responsibilities formally designated by OSD, participation in Office of the Secretary of Defense (OSD) sponsored inter-department and inter-agency efforts, and OSD mandated regional coordination efforts.

b. **Environmental Readiness Level 3:**

- Supports all capabilities provided by ERL4.

- Supports existing level of Navy EA responsibilities, participation in OSD sponsored inter-department and inter-agency efforts, and OSD mandated regional coordination efforts.

- Supports proactive involvement in the legislative and regulatory process to identity and mitigate requirements that will impose excessive costs or restrictions on operations and training.

- Supports proactive initiatives critical to the protection of Navy operational readiness.

c. **Environmental Readiness Level 2:**

- Supports all capabilities provided under ERL3.

- Supports enhanced proactive initiatives critical to the protection of Navy operational readiness.

- Supports all Navy and DOD policy requirements.

- Supports investments in pollution reduction, compliance enhancement, energy conservation and cost reduction.

d. **Environmental Readiness Level 1:**

- Supports all capabilities provided under ERL2.

- Supports proactive actions required to ensure compliance with pending/strongly anticipated laws and regulations in a timely manner and/or to prevent adverse impact to Navy mission.

- Supports investments that demonstrate Navy environmental leadership and proactive environmental stewardship.

2-1.5 DOD Environmental Quality Project Classes. DODI 4715.6 Environmental Compliance classifies environmental quality projects into four categories:

- Class 0 projects are those necessary to cover the administrative, personnel and other costs associated with managing environmental programs that are necessary to meet applicable compliance requirements or which are in direct support of the military mission. Recurring class 0 costs consist of manpower; training; supplies; hazardous waste disposal; operating recycling activities; permits; fees; testing; and monitoring/sampling and analysis; reporting; record keeping; and compliance self assessments.

- Class I projects are those necessary to correct situations which are currently out of compliance with established regulatory deadlines. This class also includes projects necessary to correct situations not currently out of compliance but susceptible to noncompliance if projects remain not implemented within the current program year. This class includes overseas projects necessary to alleviate the human health threats, threats to ongoing operations or necessary to comply with applicable treaties and agreements.

- Class II projects are those in which facilities will be out of compliance at a specific, impending published deadline if action is not taken. If not accomplished by the deadline, projects become Class I.

- Class III projects are those needed to meet DOD, ASN (I&E), CNO and/or BSO goals related to environmental protection, P2, cost effectiveness, environmental quality, or enhancement initiatives. Law does not mandate these projects, but their accomplishment demonstrates Federal leadership and goodwill.

2-1.6 Fees and Taxes. As a rule, Federal facilities are subject to reasonable service charges or fees related to the administration of environmental enforcement programs imposed by Federal, State, and local agencies. Service charges related to the discharge of effluent into bodies of water, the discharge of air emissions into the atmosphere, underground storage tanks (USTs), and the storage, treatment, transportation, and disposal of solid waste are among the types of charges that may be billed to an installation. However, Congress has generally not provided for the payment of taxes by Federal installations and activities. It is therefore important to distinguish between those charges that are fees and those that, although not called taxes, have the character of taxes. Activities must make this distinction before payments are made. Disbursing authorities shall consult with command or REC counsels when an agency first presents a fee or service charge. Final determinations regarding the legality of new fees shall be formulated in consultation with DOJ at the headquarters level in appropriate cases.

In general, a command will examine charges presented as fees or for services to determine whether:

- The charge in question is imposed on all regulated entities without discriminating against Federal agencies; or

- The charge fairly approximates the cost to the State or local authority of making the services available; or

- The charge does not generate revenues over and above the cost of the relevant programs it supports.

Negative answers to any of these inquiries suggest that the charge is a tax rather than a fee or service charge, thus obliging the U.S. to determine whether to contest it. Commands should refer questions about these charges to command counsel or REC counsel.

Navy Organizations questioning a charge shall make clear to the authority demanding payment that the delay for review is not a reflection of Navy resistance to regulatory action, but is necessary because of legal issues that require resolution before payment may be made lawfully.

If a regulatory agency refuses to issue an environmental permit to an activity because the activity has not paid an assessment pending legal review, the activity shall immediately notify CNO (N45) via the chain of command, and their REC.

2-1.7 Citations and Fines. Commands shall report immediately any citation by a regulatory agency for an alleged violation of any substantive or administrative requirement or any attempt to levy a fine against a Navy facility. Commands shall process the citation by the procedures of appendix B.

2-1.8 Economic Analysis. When practical and appropriate, commands shall analyze the economic consequences before deciding among options for complying with environmental requirements. For example, it may be more efficient to contract out or transfer operations rather than fund pollution control projects. In other cases, it may be more economical to replace equipment as opposed to retro-fitting to meet requirements. Long term pollution prevention options take precedence over short term controls wherever practical.

2-1.9 Budgeting for Environmental Compliance. Navy organizations shall report Annual Environmental budget requirements on ASN (FM&C)) Exhibits PB-28 and Exhibits PB-28B, per (ASN (FM&C) guidance.

2-1.10 Funding Base Operations. The cost of environmental, natural resources and cultural resources compliance shall be part of each activity's operating budget. Navy Organization's shall program, budget, and execute compliance requirements in the same manner as other traditional base support costs. Host activities are encouraged to charge tenant commands which use facility services for the full cost of the service as it relates to assuring legally mandated environmental compliance for day-to-day work.

2-1.11 Weapon Systems and Platforms. The Navy funds alterations to existing Navy ships, aircraft or weapon systems and platforms for the purpose of meeting environmental compliance requirements in the Fleet Modernization Program (FMP) or Engineering Change Proposal (ECP) program, and also uses funds programmed by the applicable CNO resource sponsors. The appropriate hardware systems command budgets for special studies, equipment, and RDT&E for new environmental compliance requirements.

2-1.12 Limit on Use of Environmental Funds. Naval activities shall use funds allocated for environmental and natural resources protection *only* for those purposes, consistent with applicable (ASN (FM&C)) regulations.

2-1.13 Other Environmental Liabilities (OEL). The Chief Financial Officer Act of 1990 (expanded by the Government Management Reform Act of 1994 and the Federal Financial Management Improvement Act of 1996) requires that federal agencies follow federal accounting standards and prepare an annual financial report that includes audited financial statements. As part of this process, financial liabilities in general, and environmental liabilities in particular, are of interest to the U.S. Congress and the public.

On November 15, 2005, the ODUSD (I&E) issued "Guidance for Recognizing, Measuring and Reporting Environmental Liabilities Not Eligible for Defense Environmental Restoration Program Funding." This document is intended to further assist Department of Defense personnel in appropriately recognizing Other Environmental Liabilities. In addition, DOD Financial Management Regulation

Volume 4, Chapter 13, revised June 2005, prescribes the accounting policy for measuring, recognizing, and disclosing environmental liabilities and procedures for recording these environmental liabilities.

a. COMNAVFACENGCOM shall utilize the U.S. Navy Environmental Portal inputs to provide data on liability triggers, overall coordination, and management for the annual Other Environmental Liabilities Sustainment Process.

b. BSOs shall monitor and provide data on liability triggers, overall coordination, and management for the annual Other Environmental Liabilities Sustainment Process.

c. Regional Commanders/COs of Shore activities shall ensure timely reporting of data on liability triggers, overall coordination, and management for the annual Other Environmental Liabilities Sustainment Process.

CHAPTER 3

ENVIRONMENTAL MANAGEMENT SYSTEMS (EMSs) ASHORE

3-1 Scope

This chapter provides policy on environmental management systems (EMSs) and outlines procedures and responsibilities for the assessment and oversight of environmental quality at Navy shore installations. Navy's Environmental Quality Assessment (EQA) Program is an integral part of an EMS to accomplish the checking component. EQA Program requirements have been incorporated in this chapter. An EMS is required for all Navy shore installations within and outside the United States, its territories and possessions unless specifically exempt by this chapter.

An EMS integrates environmental considerations into day-to-day activities across all levels and functions of Navy enterprise. It is a formal management framework that provides a systematic way to review and improve operations, create awareness, and improve environmental performance. Systematic environmental management as an integral part of day-to-day decision making and long-term planning processes is an important step in supporting mission readiness and effective use of our resources. The most significant resource for every organization is their senior leadership's commitment and visibility in EMS implementation and sustainability. A robust EMS is essential to sustaining compliance, reducing pollution and minimizing risk to mission.

3-1.1 References. Relevant references are:

(a) Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, 24 January 2007;

(b) ODUSD Memorandum of 05 April 2002, Department of Defense Environmental Management System;

(c) ODUSD Memorandum of 16 July 2004, DOD EMS Self-Declaration Policy;

(d) DODI 4715.6 of 24 April 1996, Environmental Compliance;

(e) DODI 4715.5 of 22 April 1996, Management of Environmental Compliance at Overseas Installations; (NOTAL)

(f) ODUSD (ES) Memorandum of 23 April 1997, Root Cause Analysis Methodology and Implementation; (NOTAL)

(g) ISO 14001:2004, *Environmental Management Systems – Requirements with Guidance for Use;*

(h) ISO 14004:2004, *Environmental Management Systems – General Guidelines on Principles, Systems and Support Techniques;*

(i) ISO 19011:2002, *Guidelines for Quality and/or Environmental Management Systems Auditing;*

(j) *Navy Environmental Quality Assessment Guide*, 31 August 1999;

(k) DODD 5405.2 of 23 July 1985, Release of Official Information in Litigation and Testimony by DOD Personnel as Witnesses; (NOTAL)

(l) SECNAVINST 5820.8A; Release of Official Information for Litigation Purposes and Testimony by DON Personnel; (NOTAL)

(m) ODUSD (ES) Memorandum of 3 February 1997, Invocation of State Audit Privilege Laws; (NOTAL)

(n) DASN(E) Memorandum of 24 March 1997, Invocation of State Audit Privilege Laws; (NOTAL)

(o) EMS online resources:

- Defense Environmental Network and Information Exchange (DENIX) online repository of DOD EMS information. https://www.denix.osd.mil/denix/Public/Library/EMS/ems.html
- Navy Environmental Management System Library. http://p2library.nfesc.navy.mil/ems/index.html
- *Weekly Federal Regulatory Summary*, NFESC. Subscribe by sending an email to: NFESCRegDesk@navy.mil
- CECOS General EMS Awareness Training. http://ems.tecquest.net

3-2 Legislation

Freedom of Information Act (FOIA). This act provides for the release of government documents to the public upon request, unless the government specifically exempts them from release.

3-3 Terms and Definitions

3-3.1 Aspect. A characteristic of a practice that can cause, in normal operation or upset mode, an impact to an environmental or other resource. Each practice may have several aspects. Typical aspects of practices operated on Navy installations include: spill/release, air release, hazardous material use, hazardous waste generation, solid waste generation, medical waste generation, noise, electricity use, fuel use, and physical presence (in environmentally sensitive locations).

3-3.2 Controls. Means used to ensure that the impacts on resources are effectively prevented or minimized. Three basic types of controls are management controls, operational controls, and physical controls.

3-3.3 Corrective Action. Measures taken by the installation to correct and prevent future occurrences of an EMS nonconformance or compliance deficiency. The EMS Appropriate Facility shall determine root causes of deficiencies and implement corrective actions to prevent the occurrence of future deficiencies.

3-3.4 Criteria. Standards against which the effectiveness of EMS implementation may be audited. Audit criteria are contained in the ISO 14001:2004 EMS standard.

3-3.5 Effectiveness. Meeting military mission while fully meeting executive, Federal, state, and local environmental regulations, as well as the environmental policies of DOD, Navy, or the installation or regional complex.

3-3.6 Efficiency. Achieving effectiveness at the lowest possible cost (considering time, personnel resources, and money). A risk-based ranking of practices based on their aspects is the basis for efficiency enhancements under the EMS.

3-3.7 EMS Appropriate Facility. An EMS appropriate facility is any federal facility or organization that conducts activities that can have a significant impact on the environment, either directly or indirectly, individually or cumulatively, due to the operations of that facility's or organization's mission, processes or functions. Navy EMS Appropriate Facilities are those that have registered an environmental requirement with the Environmental Protection Agency (EPA) or a state or local regulatory authority. Examples include but are not limited to air, water, wastewater, storm water, and hazardous waste permits or acknowledgement of hazardous waste generation. A Navy EMS Appropriate Facility is typically a host command and its tenants within an installation fenceline demarking contiguous Navy property, plus any satellite properties under direct control of the installation commanding officer (ICO). In Navy concentrated areas the EMS Appropriate Facility may encompass multiple noncontiguous fencelines under direct control of a naval complex ICO, or even the entire area of responsibility of the regional commander (RC). An EMS Appropriate Facility may also be defined as a major mission tenant such as a naval shipyard or naval hospital where a BSO elects to define their component commands' EMSs separate from, but in coordination with, their respective host activity's EMS. Per EO 13423, Navy must identify and report EMS appropriate facilities to DOD, OMB and Congress. Changes to the Navy's EMS Appropriate Facilities List must be approved by the BSO and CNO (N45).

3-3.8 EMS Management Representative. Each EMS Appropriate Facility CO will designate an EMS Management Representative, responsible for implementing and maintaining the EMS. The EMS Management Representative will periodically update senior management on current status of the EMS.

3-3.9 EMS Self-Declaration Audit. An external EMS audit led by a Navy Qualified EMS Auditor, with all team members independent of the appropriate facility being audited. The purpose of the EMS Self-Declaration Audit is to determine whether the EMS under consideration conforms to the ISO 14001:2004 standard.

3-3.10 Environmental Management System (EMS). That part of the overall management system that enables an organization to manage its environmental aspects, reduce environmental impacts and increase operating efficiency. EMS implementation reflects management principles based on a "plan-do-check-act" model using a standard process to identify current practices, aspects, and impacts, establish goals, implement plans to meet the goals, determine progress, and make improvements to ensure continual improvement. It consists of a set of interrelated elements used to establish policy and objectives and to achieve those objectives. A management system includes organizational structure, planning activities, responsibilities, practices, procedures and resources.

3-3.11 Environmental Objective. A statement that defines an end-state supporting an appropriate facility's environmental goals and EMS policy.

3-3.12 Environmental Quality. That level of environmental excellence that has a baseline of consistent regulatory compliance, adding continuous process improvement with a concerted focus on pollution prevention.

3-3.13 Environmental Quality Assessment (EQA). Environmental Quality Assessments fulfill the Evaluation of Compliance element of the checking component in the ISO 14001:2004 standard. Establishing checking and corrective action procedures facilitates identification, root cause analysis, and correction and prevention of compliance deficiencies for similar or related practices and aspects across the facility.

3-3.14 Environmental Requirements. Federal, State, regional, local, Navy, Final Governing Standards, Status of Forces Agreements, Overseas Environmental Baseline Guidance Document and environmental and natural resources requirements.

3-3.15 Environmental Target. A detailed performance requirement that sets a limit, usually a quantity and/or a time frame, for the achievement of environmental objectives.

3-3.16 Fully Conforming EMS. An EMS shall be considered fully implemented when (1) it has been the subject of an External EMS Audit conducted by a Navy Qualified EMS Auditor from outside the control or scope of the EMS, (2) audit findings have been recognized by the senior management of the Appropriate Facility implementing the EMS, and (3) the EMS Appropriate Facility accountable for implementation of the EMS has declared conformance to EMS requirements of the ISO 14001:2004 standard according to the Navy EMS Self-Declaration Protocol contained in Section 3.6 of this chapter, including a signed Memorandum of Self-Declaration. Once conformance has been declared, the EMS shall then be audited by a Navy Qualified EMS Auditor from outside the control or scope of the EMS at least every three years from the date of the initial declaration.

3-3.17 Impact. An effect of a practice's aspect on an environmental or other resource. Each practice may have several impacts. Typical impacts associated with practices operated on Navy installations or regional complexes include: personnel exposure, indoor air quality degradation, outdoor air quality degradation, surface water degradation, groundwater degradation, soil quality degradation, wildlife or plant population or habitat disturbance, water consumption, electricity consumption, other resource (e.g., landfill space) consumption, cost to mitigate risk, adverse regulatory exposure, negative public perception, real property damage, historic/cultural resource damage, natural resource disturbance, soil erosion, and human health effects.

3-3.18 Management Review. The EMS is evaluated by senior management to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the EMS, including the environmental policy and environmental objectives and targets. Results of the review shall be documented, including topics discussed, decisions, recommendations and actions related to possible changes, consistent with the commitment to continual improvement.

3-3.19 Navy Qualified EMS Auditor. An EMS Auditor who has successfully completed an ANSI-RAB accredited EMS Lead Auditor training course or the Navy's Civil Engineer Corps Officers

School (CECOS) "Conducting EMS Reviews" training course. Navy Qualified EMS Auditors may be staff, other DOD components, other Federal Agencies (outside of DOD), and/or private consultants. Personnel conducting external EMS audits must be outside the scope of the subject EMS.

3-3.20 Plan of Action and Milestones (POA&M). The POA&M provides proposed corrective actions, process improvements and schedules to address a nonconformance or deficiency and its root cause(s). The documentation also serves as a record of completed corrective actions and to verify problems are resolved.

3-3.21 Practice. A process, action, or function with environmental aspects that can have an impact on environmental resources. Practices may impact other resources as well. Practices include the unit processes used to complete mission functions (e.g., degreasing of parts, oil and lubricant changes, battery recharging, refrigerant capture and replacement to support vehicle maintenance, etc.) and their associated physical controls (e.g., berms, oil/water separators, or alarms). A practice often includes multiple processes, personnel, equipment, and materials.

3-3.22 Practice Owner. The command, department, work center, tenant, or contractor responsible for day-to-day operation of a practice. Practice owners have the authority to accomplish their mission by conducting the practice, and thus, have responsibility for procedures necessary to control the practice.

3-3.23 Root cause. The cause of an occurrence that, if corrected, would prevent recurrence of that and similar occurrences. There may be a series of identifiable causes, one leading to another. Activities should pursue that series of causes until identifying the fundamental correctable cause.

3-3.24 Senior Management. Senior management is defined by the EMS Appropriate Facility consistent with scope and area of responsibility of their EMS. It consists of the EMS Appropriate Facility commanding officer (i.e., major mission tenant commanding officer, installation commanding officer, or regional commander), an EMS Management Representative, and key staff members responsible for the planning, implementation, and review of the EMS, including heads of departments and tenant representatives whose practices may have significant environmental aspects and impacts.

3-4 Requirements

Reference (a) requires federal agencies to implement an EMS at all appropriate organizational levels to ensure (i) use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions, (ii) establishment of agency objectives and targets to ensure implementation of this order, and (iii) collection, analysis, and reporting of information to measure performance in the implementation of this order. Further, each agency shall establish within the agency programs environmental management training, environmental compliance review and audit, and leadership awards to recognize outstanding environmental, energy, or transportation management performance in the agency. While reference (a) explicitly applies to US appropriate facilities, the head of a federal agency may provide that the order shall apply in whole or in part to overseas activities, personnel, resources, and facilities if it is in the interest of the United States.

Reference (b) requires DOD components to adopt an EMS and work to integrate it into all core business areas, with the stated intent of enhancing overall mission performance through better

environmental management. Reference (c) requires each DOD component to issue a self-declaration protocol where senior leadership at each appropriate facility conducts an EMS Management Review that includes a declaration of conformance with their respective component's EMS policy. The protocol shall be executed in a manner consistent with environmental compliance self evaluation procedures on a cycle of one-year internal and three-year external.

Reference (d) requires environmental assessments as a tool to achieve and maintain compliance with environmental laws and regulations. Reference (e), as implemented by the Overseas Environmental Baseline Guidance Document (OEBGD), requires an ongoing program to evaluate environmental compliance at overseas installations. Reference (f) requires DOD Components to incorporate root cause analysis in their environmental compliance assessment programs.

3-5 Navy Policy

To satisfy requirements of references (a) and (b), Navy EMS appropriate facilities shall implement an EMS that conforms to the International Organization for Standardization (ISO) 14001:2004 Environmental Management System standard, reference (g). The ISO 14001 EMS standard has five major components and 18 elements as shown in Table 3-1. Criteria for each element are found in reference (g), available for download from the DENIX website. Guidance for implementing an EMS is included in the annex to reference (g) and reference (h).

Full conformance with the ISO 14001:2004 standard shall be achieved as described in the Navy EMS Self-Declaration Protocol of Section 3-6 of this chapter no later than 30 SEP 2009. The protocol shall further be used to verify the continuing conformance of Navy EMSs to the ISO 14001 standard on an EMS audit cycle of one-year internal and three-year external. Guidelines for EMS auditing are provided in reference (i).

Third party registration to ISO 14001 is not required under the Navy Protocol. Third party registration involves an audit conducted by an ANSI-RAB accredited, independent registrar, resulting in the facility or organization being fully certified to the ISO 14001 EMS standard and receiving a certificate stating conformance. Mission-funded activities will not seek or fund third party certification. A Navy Working Capital Fund (NWCF) activity may pursue third party certification if it can demonstrate that it is a sound business decision.

3-5.1 EMS at Overseas Bases. It is Navy policy to implement an EMS at all Navy appropriate facilities worldwide by 30 SEP 2009. Changes to the Navy's Overseas EMS Appropriate Facilities List must be approved by the BSO and CNO (N45).

3-5.2 EMS at Closed and Closing Bases. Typically, closed and closing bases are in the process of bringing closure to environmental permits and other requirements; therefore, expenditure of additional resources on EMS implementation will not be required. However, these bases remain subject to environmental compliance requirements and shall maintain a compliance program until final property transfer has occurred.

3-5.3 Exemptions. The Navy has numerous shore activities that serve only administrative functions. Those shore activities typically have minimal environmental requirements and therefore pose little risk to the environment. BSOs with activities that serve only administrative functions may elect to

exempt them from EMS audit and compliance assessment requirements. The BSO shall document the exemptions in the External EMS Audit schedule.

Table 3-1 Elements of an ISO 14001 EMS	
ISO 14001:2004 Reference	**Element**
4.1	1. General requirements
Environmental Policy	
4.2	2. Environmental policy
Planning	
4.3.1	3. Environmental aspects
4.3.2	4. Legal and other requirements
4.3.3	5. Objectives, targets and POA&Ms
Implementation and Operation	
4.4.1	6. Resources, roles, responsibility and authority
4.4.2	7. Competence, training and awareness
4.4.3	8. Communication
4.4.4	9. EMS documentation
4.4.5	10. Control of documents
4.4.6	11. Operational control
4.4.7	12. Emergency preparedness and response
Checking	
4.5.1	13. Monitoring and measurement
4.5.2	14. Evaluation of compliance
4.5.3	15. Nonconformity, corrective action and preventive action
4.5.4	16. Control of records
4.5.5	17. Internal EMS audit
Management Review	
4.6	18. Management review

3-6 Navy EMS Self-Declaration Protocol.

This protocol provides Navy's procedure for declaring the conformance of our EMSs with the ISO 14001:2004 standard and requirements of this chapter. Successful validation of conformance with ISO 14001:2004 provides the basis and justification for declaration. This process ensures that Navy EMSs are operating as described**,** using on-going assessment and continual improvement to support overall performance. It gives Navy organizations the flexibility to implement the ISO 14001 standard in ways that support their overall mission while allowing outside parties to appreciate their EMS accomplishments.

3-6.1 Initial EMS Self-Declaration Audit. Once an Appropriate Facility's EMS has been fully implemented, addressing all 18 elements of an ISO 14001 EMS, the EMS Appropriate Facility CO shall schedule an External EMS Audit with their BSO for the purpose of declaring conformance with the ISO 14001 standard. The BSO shall conduct an External EMS Audit with Navy Qualified EMS Auditors from outside the scope of the EMS in question. The audit shall be conducted against pre-established audit criteria found in the ISO 14001:2004 standard, reference (g), and reflect objective observation against

those criteria. This meets the requirement for 2nd party (external) recognition of an EMS per reference (c).

a. **Scope of the Audit.** The Commanding Officer and EMS Management Representative of the EMS Appropriate Facility shall identify an audit scope for the external EMS audit team that demonstrates implementation of the eighteen ISO 14001:2004 EMS elements, facility-wide. The EMS Appropriate Facility CO shall ensure that pertinent records, procedures, and documentation are available for the audit team, as well as necessary documentation to verify completion of corrective actions.

b. **EMS Audit Report and Follow-up.** Upon the completion of the Initial EMS Self-Declaration Audit, the audit team shall prepare a report on the subject EMS's conformance. The report shall declare the appropriate facility's EMS as conforming to ISO 14001:2004, or else document those areas of nonconformance that must be corrected prior to the appropriate facility declaring conformance. Copies of the report shall be provided to the EMS Appropriate Facility CO and EMS Management Representative. For any findings of nonconformance, the CO and EMS Management Representative shall propose corrective actions to the audit team. Typically, proposed corrective actions should be submitted to the EMS self-declaration audit team within 30 days after receipt of the audit report. The EMS Management Representative must also follow-up with the necessary documentation to verify implementation/completion of corrective actions.

c. **Memorandum of EMS Self-Declaration.** Upon documented resolution of all findings of nonconformance and subsequent determination of ISO 14001 conformance by the EMS audit team, the CO of the EMS Appropriate Facility shall prepare a Memorandum of EMS Self-Declaration thereby declaring their ISO 14001 conformance status. Copies of the memorandum shall be provided to the EMS Management Representative, the EMS audit team leader, the EMS Appropriate Facility's BSO, and other interested parties. The BSO shall provide a copy to CNO (N45). Once an ISO 14001 fully conforming EMS has been achieved, it will be communicated widely within and outside the Navy.

3-6.2 Continuing Conformance. Navy EMS Appropriate Facilities shall execute the protocol to validate ISO 14001:2004 conformance on an audit cycle of one-year internal and three-year external per reference (c). Appropriate facilities with an externally registered EMS may use registration documents to meet this requirement.

a. **Annual Internal EMS Audit.** Navy EMS Appropriate Facilities shall conduct an Internal EMS Audit at least once per year and brief findings of that audit in an EMS Management Review. Management Reviews are required at least annually. The Internal EMS Audit team shall include at least one Navy Qualified EMS Auditor. The Internal EMS Audit team shall document any findings of EMS nonconformance. The EMS Management Representative shall propose corrective actions to the audit team, typically within 30 days after receipt of the audit report. The EMS Management Representative must also follow up with necessary documentation to verify implementation/completion of the corrective actions.

b. **External EMS Audit.**

(1) External EMS Audit Schedule. Each BSO shall prepare a schedule for External EMS Audits of its EMS appropriate facilities at intervals not longer than three years. The BSO may delegate this requirement to the regional commander if the regional command is external to the subject EMS. Compliance assessments may be conducted in combination with the external EMS audit, depending on

the complexity, needs, and demonstrated compliance posture of the EMS Appropriate Facility. The schedule will also indicate those activities that serve only administrative functions with minimal environmental requirements where exemptions are justifiable. The BSO shall review the schedule annually and update it as necessary. The BSO will provide the updated External EMS Audit Schedule to CNO (N45) annually.

(2) Scope of the External EMS Audit. The External EMS Audit scope will consist of conformance to the ISO 14001:2004 standard EMS elements and may include a compliance assessment, if requested by the BSO. External EMS audit teams shall consist of at least one Navy Qualified EMS Auditor, with all members of the audit team being independent of the EMS Appropriate Facility being audited. The EMS Appropriate Facility CO shall ensure that pertinent records, procedures, and documentation are available for the External EMS Audit team, as well as necessary documentation to verify completion of corrective actions. Results of the EMS audits shall be documented in the External EMS Audit Report.

(3) External EMS Audit Report and follow-up. The External EMS Audit team will prepare a report for the EMS Appropriate Facility's senior management and BSO on the effectiveness of the EMS and its role in supporting environmental performance with respect to: conformance with ISO 14001:2004 standard; status of meeting EMS Objectives &Targets (O&Ts); strengths and weaknesses of EMS elements; underlying causes of compliance deficiencies that correlate with weaknesses in the EMS, and recommendations for improvements to the EMS. The audit team shall present their findings in an out brief to the EMS Appropriate Facility CO and EMS Management Representative, and provide a working draft report at the end of the site visit. The BSO should release the final report to the EMS Appropriate Facility within 60 days of completion of the site visit. The EMS Management Representative will brief findings of the External EMS Audit at the next EMS Management Review. The EMS Management Representative shall propose appropriate corrective actions to the review team, including timeframes and staff responsible for corrective actions. Typically, proposed corrective actions should be submitted to the EMS audit team within 30 days after receipt of the audit report. The EMS Management Representative must follow up with the necessary documentation to verify corrective actions.

c. **Memorandum of EMS Self-Declaration.** Upon documented resolution of all findings of nonconformance, the EMS Appropriate Facility CO shall sign a Memorandum of EMS Self-Declaration. Copies of the memorandum and documentation confirming resolution of findings of nonconformance shall be provided to the Appropriate Facility's EMS Management Representative, the BSO, the audit team leader, and other interested parties. The BSO shall provide a copy of the memorandum to CNO (N45) no later than 30 SEP 2009.

3-7 Environmental Quality Assessment—Evaluation of Compliance. The Navy considers evaluation of compliance an essential element of an EMS. The checking component of the ISO EMS framework provides the opportunity to evaluate compliance requirements and identify opportunities for improvement. Environmental Quality Assessments fulfill the Evaluation of Compliance element of the checking component in the ISO 14001:2004 standard. Establishing checking and corrective action procedures facilitates identification, root cause analysis, and correction and prevention of compliance deficiencies for similar or related practices and aspects across the facility.

3-7.1 Internal Compliance Assessment. The EMS Appropriate Facility or host activity, in coordination with tenant activities, will conduct an internal compliance assessment annually. The internal

compliance assessment is a comprehensive environmental compliance review of installation processes, facilities and practices, completed within a 12-month period. The internal compliance assessment addresses all applicable compliance requirements on a schedule based on consideration of environmental aspects, vulnerabilities, and risk to the environment.

a. Internal Assessment Plan (IAP). The Internal Assessment Plan prepared by the Appropriate Facility or host activity describes how the comprehensive internal compliance assessment will be accomplished across the facility over the course of the year. The plan documents the EMS Appropriate Facility practice inventory and addresses assessment of all applicable compliance requirements on a schedule based on the environmental aspects, vulnerabilities, and risk to the environment. Activities shall review the Internal Assessment Plan annually and update it as necessary.

b. Internal Assessment Documentation. Internal Assessment documentation provides the results of assessments and includes identified deficiencies, assigned root cause(s), and POA&Ms for corrective actions and process improvements. The documentation contains deficiencies identified in internal and external assessments conducted during the assessment period as well as those that remain open from previous assessment periods. The POA&M provides proposed corrective actions, process improvements and schedules to address the deficiency and its root cause(s). The documentation also serves as a record of completed corrective actions and to verify problems are resolved. The BSO may request the EMS Appropriate Facility submit POA&Ms or, at a minimum, the BSO will review the POA&Ms during the external compliance assessment site visit.

3-7.2 External Compliance Assessment. External Compliance assessments may be conducted in combination with the External EMS Audit, depending on the complexity, needs, and demonstrated compliance posture of the EMS Appropriate Facility. The BSO of the EMS Appropriate Facility or host activity, in coordination with BSOs of tenant activities with significant environmental aspects, will conduct an external compliance assessment on a schedule determined by the BSO. The schedule and scope of the site visit are flexible and should be tailored to meet the facility's needs. At a minimum, the BSO will accomplish the external compliance assessment site visit during the traditional Command Inspection Process. Facilities may also contact their BSO and request a compliance assessment at anytime.

a. External Compliance Assessment Plan. The External Compliance Assessment Plan describes the schedule and scope of oversight planned for the external assessment site visit at each of the BSO's EMS Appropriate Facilities. The BSO of the facility, in coordination with BSOs of tenant activities with significant environmental aspects, determines the schedule and scope of oversight based on the review of the Internal Assessment Plan, Internal EMS audit documentation provided by each facility, and any additional information available on each facility's environmental performance. The plan will also indicate those activities that serve only administrative functions with minimal environmental requirements where exemptions are justifiable. The BSO shall review the plan annually and update it as necessary.

b. External Compliance Assessment Report. The External Compliance Assessment Report provides the results of the assessment conducted during a site visit and includes identified deficiencies and recommendations for corrective actions and process improvements. The BSO shall present findings in an out brief to the EMS Appropriate Facility's CO and EMS Management Representative and provide a working draft report at the end of the site visit. The BSO should release the final report to the EMS Appropriate Facility within 60 days of the site visit completion. The BSO legal counsel should review the External Compliance Assessment Report before releasing it.

3-7.3 Root Cause Analysis. Once a nonconformity or compliance deficiency is identified, it should be investigated to determine the cause, so that corrective action can be focused on the appropriate part of the system. In developing a plan for addressing a nonconformity or compliance deficiency, an organization should consider what actions need to be taken to address the problem, what changes need to be made to correct the situation, and what should be done to prevent the problem from recurring. The character and timing of such actions should be appropriate to the nature and scale of the nonconformity or compliance deficiency and the environmental impact. ISO 14001/2004 element 4.5.3, Nonconformity, corrective action and preventive action requires a procedure for dealing with actual and potential nonconformity(ies) and for taking corrective action and preventive action. Among other things, the procedure shall define requirements for investigating nonconformity(ies), determining their cause(s) and taking actions in order to avoid their recurrence. Additional information on performing root cause analysis is available in reference (j).

3-7.4 Checklists of Compliance Requirements. Checklists are available in several forms for use in evaluating compliance and EMS effectiveness. Checklists may be tailored to include those requirements applicable to a particular installation. For example, local requirements such as permit conditions and operating procedures may be added and non-applicable requirements deleted. Types of check lists include point-of-use checklists, derived from regulatory and policy requirements for use by practice owners in conducting compliance inspections and point-of-use-plus checklists that include the requirements-based questions of point-of-use checklists and a set of management-related questions. Media managers may use these checklists while conducting oversight evaluations. NAVFACENGCOM can assist EMS appropriate facilities with identifying and tailoring checklists.

3-7.5 Release of reports and information. The activities will consult legal counsel for advice on releasability and exemptions under the Freedom of Information Act (FOIA). If the request is made by a third party involved in litigation, references (k) and (l) also apply.

3-7.6 State Audit Privilege Laws. Installations must not invoke the protections of any of the various State Audit privilege or immunity laws without proper consultation with and approvals by the chain of command. References (m) and (n) provide the procedures for required consultation with the Office of the Deputy Assistant Secretary of the Navy (Environment) and the Office of the Assistant Deputy Under Secretary of Defense, Environmental, Safety and Occupational Health (OADUSD (ESOH)).

3-8 Reporting Requirements

3-8.1 DOD EMS Metrics. Navy EMS Appropriate Facilities world-wide shall report status of the DOD Metrics on a fiscal year basis by 1 November of each year.

3-8.2 Fully Conforming EMS In-place Indicator. BSOs shall maintain a roster of ISO 14001:2004 conforming EMS Appropriate Facilities and report updates to CNO (N45) on a semiannual basis for inclusion in the Environmental Management Review brief to OADUSD (ESOH). Per the Navy EMS Self-Declaration Protocol the BSO shall also provide to CNO (N45) a copy of the Memorandum of EMS Self-Declaration for each EMS Appropriate Facility.

3-8.3 Navy EMS Appropriate Facilities list. CNO (N45) maintains the list of Navy EMS appropriate facilities that have been identified and reported to Office of Management and Budget (OMB) and Congress in accordance with reference (a). Changes to the appropriate facilities list must be approved by the BSO and CNO (N45).

3-9 Training Requirements

3-9.1 Awareness-Level EMS Training. All personnel shall receive EMS awareness training and general environmental awareness training specified in Chapter 28. EMS awareness training at the time of indoctrination has proven effective. During the implementation phase of EMS, first priority shall be to provide training to senior management, environmental staff, and those owners of practices with significant aspects and impacts. Training may be accomplished through a number of means including standup meetings and other staff-led training, or on-line resources listed in reference (o). Completion of training must be documented.

3-9.2 Navy Qualified EMS Auditor Training. Lead auditors of External and Internal EMS Audits, EMS Management Representatives, and environmental staff responsible for implementation and maintenance of the EMS shall complete an ANSI-RAB accredited EMS Lead Auditor training course or the Navy's Civil Engineer Corps Officers School (CECOS) "Conducting EMS Reviews" training course, and shall be familiar with the provisions of this chapter.

3-9.3 EQA Training. Every person conducting, reviewing, or approving internal and external compliance assessments shall receive general environmental awareness training specified in Chapter 28 and specific comprehensive training in assigned subject matter or environmental media. Every person so assigned shall familiarize himself or herself with the provisions of this chapter.

3-9.4 Competence, Training, and Awareness. EMS Appropriate Facilities shall ensure practice owners performing tasks that have the potential to cause a significant environmental impact are competent on the basis of appropriate education, training or experience and shall retain associated records. EMS Appropriate Facilities shall identify training needs associated with its environmental aspects and its EMS, provide training or take other action to meet these needs, and retain associated records. Procedures shall be established and maintained such that practice owners are made aware of the following:

- Importance of conformity with the environmental policy, procedures, and requirements of the EMS, including emergency preparedness and response requirements.

- Significant environmental aspects and impacts associated with their work and environmental benefits of improved personal performance.

- Their roles and responsibilities in the EMS and specific procedures they will use to control environmental impacts of their activities, products and services.

– How to address the consequences (impacts) if the procedures fail to provide environmental protection.

3-10 Responsibilities

3-10.1 **CNO** shall:

(a) Ensure implementation of the EMS.

(b) Support EMS resource requirements, including funding to address nonconformances, deficiencies and findings from EMS audits and compliance assessments, as appropriate.

(c) Act on issues requiring broad coordination, as identified by the BSO or REC.

(d) Provide policy and guidance on common problems and innovative solutions identified in the EMS process.

(e) Review the Navy EMS Self-Declaration Protocol annually for continued suitability to mission requirements per reference (c).

3-10.2 **BSOs of EMS Appropriate Facilities** shall:

(a) Prepare a schedule for External EMS Audits of its EMS Appropriate Facilities at intervals not longer than three years. Compliance assessments may be conducted in combination with the External EMS Audit. BSOs may delegate this responsibility to the regional commander if the regional command is external to the subject EMS.

(b) In coordination with other affected BSOs of tenant activities with significant environmental aspects, develop and execute an External EMS Audit Schedule addressing all component EMS Appropriate Facilities. Review the schedule annually and update as appropriate. On an annual basis, provide the updated External EMS Audit Schedule to CNO (N45).

(c) Issue notification of upcoming External EMS Audits to the CO of the EMS Appropriate Facility.

(d) Assist in identification and programming for funding of corrective actions and process improvements. If necessary, submit funding requests as part of a midyear review to address emergent requirements.

(e) Advise CNO (N45), ICO/RC and REC if a nonconformance, deficiency or problem may result in adverse public relations and/or require national coordination to solve.

(f) BSOs of EMS Appropriate Facilities that are major mission tenants of a host command shall coordinate a cost effective EMS approach with the BSO of the host command that supports mission and operational requirements, achieves full compliance with legal requirements, and continually improves performance by reducing environmental risks and costs inherent to mission processes.

3-10.3 BSOs of Tenant Activities with Significant Environmental Aspects shall:

(a) Ensure their activities support and participate with the host EMS Appropriate Facility in implementing an EMS to cover all the tenant's processes, facilities and practices with environmental aspects.

(b) Coordinate with the BSOs of host EMS Appropriate Facilities in developing and executing a schedule/plan to conduct External EMS Audits and compliance assessment site visits, as appropriate.

(c) For nonconformances and deficiencies identified in internal and external EMS audits and compliance assessments, assist in identification and programming for funding of corrective actions and process improvements. If necessary, submit funding requests as part of a midyear review to address emergent requirements.

(d) Advise CNO (N45), BSO of host EMS Appropriate Facility, ICO/RC and REC if a nonconformance, deficiency or problem identified may result in adverse public relations and/or require national coordination to solve.

3-10.4 COMNAVFACENGCOM shall:

(a) Provide support to BSOs, Regional Commanders, and shore activities in the use of the EMS software, such as selection and customization of automated checklists of Federal and State regulations, final governing standards, overseas requirements, and Navy policy requirements.

(b) Upon request, assist BSOs in conducting External EMS Audits and preparing audit reports.

(c) Prepare and update guidance documents and training materials for conducting internal and external EMS audits and compliance assessments including root cause analyses.

(d) Support the Naval Education and Training Command (NETC) in developing and providing training in conducting internal and external audits and compliance assessments for personnel at shore activities, BSOs, NAVFACENGCOM FECs, COMNAVREGs and other commands.

(e) Where NAVFACENGCOM FEC components perform the environmental functions for an EMS Appropriate Facility, coordinate support of EMS and conformance with the ISO 14001:2004 standard with the EMS Appropriate Facility's commanding officer and BSO.

3-10.5 NETC shall:

(a) Through the Naval School, Civil Engineers Corps Officers School (CECOS), and in coordination with NAVFACENGCOM and the Interservice Environmental Education Review Board (ISEERB), provide training courses and materials for implementation of EMS and conducting internal and external EMS audits and compliance assessments including root cause analysis.

3-10.6 Regional Commanders shall:

(a) Provide adequate resources to support the EMS Appropriate Facilities in their region.

(b) Where the COMNAVREG is external to EMS Appropriate Facilities in the region, perform responsibilities assigned to the Budget Submitting Offices of EMS Appropriate Facilities as delegated by the BSO.

(c) In those regions where the EMS Appropriate Facility is defined as the region, perform the responsibilities assigned to the Commanding Officers of EMS Appropriate Facilities responsibilities.

3-10.7 RECs shall:

(a) Review External EMS Audit Reports and documentation of compliance assessments. Take any required coordinating actions, consistent with Chapter 1.

(b) Advise the BSO, RC, ICO and EMS Appropriate Facility CO if a nonconformance, deficiency or problem identified may result in adverse public relations and/or require regional coordination to solve.

(c) Participate in EMS Management Reviews as requested.

(d) Assist EMS Appropriate Facility Commanding Officers to declare conformance with the ISO 14001:2004 standard no later than the end of Fiscal Year 2009.

3-10.8 COs of EMS Appropriate Facilities shall:

(a) In coordination with the affected commands, implement an EMS to cover all processes, facilities and practices with environmental aspects within the scope of the EMS Appropriate Facility.

(b) Establish a means to communicate and coordinate with Navy and non-Navy tenants with significant environmental aspects for the purpose of planning and implementing EMS. Arrangements for EMS participation and support will be documented in interservice and intragovernmental support agreements as appropriate. Examples include such forums as Environmental Compliance Boards and Commanding Officer's Executive Management Boards.

(c) Designate an EMS Management Representative to establish, implement, and maintain the EMS and to report to senior management.

(d) Perform annual internal EMS audits and compliance assessments, identify nonconformances and deficiencies and their root causes, develop and execute POA&Ms with corrective actions and process improvements to address the root causes and document corrective actions and process improvements.

(e) For nonconformances identified in External EMS Audits, develop and execute POA&Ms with corrective actions and process improvements to address the causes and document corrective actions and process improvements.

(f) Advise the BSO, RC and REC as soon as possible if a nonconformance, deficiency or problem may result in adverse public relations and/or require regional coordination to solve.

(g) Coordinate identification and funding of corrective actions and process improvements to address deficiencies and their root causes. If necessary, submit to the BSO, and RC as appropriate, funding requests to support projects required to correct the deficiencies and root causes.

(h) In coordination with the affected commands, maintain internal EMS audit and compliance assessment documentation and present a summary of results to EMS Appropriate Facility senior management during EMS Management Reviews.

(i) Ensure EMS conformance and environmental compliance is a factor in the performance evaluations of appropriate personnel.

(j) Conduct periodic EMS Management Reviews (at least one per year) to coincide with internal and external EMS audit and declaration of conformance cycle.

(k) Achieve full conformance with ISO 14001:2004 and declare in accordance with the Navy EMS Self-Declaration Protocol no later than the end of Fiscal Year 2009.

(l) Where EMS implementation staff and/or environmental functions are part of a NAVFACENGCOM component command, coordinate support of EMS with the component's commanding officer.

(m) Where contractor's or concessionaire's tasks or actions affect the appropriate facility's environmental issues, those tasks and actions shall be addressed in the development, implementation and maintenance of the EMS.

3-10.9 COs of Tenants or Senior Managers of Tenants with Significant Environmental Aspects shall:

(a) Support and participate with the host activity in implementing an EMS to cover all processes, facilities and practices with environmental aspects within the scope of the EMS Appropriate Facility.

(b) Support and participate in annual review of the IAP and update as necessary.

(c) For nonconformances and deficiencies identified in internal and external audits and compliance assessments, identify root causes, develop, execute and document POA&Ms with corrective actions and process improvements.

(d) Coordinate identification and funding of corrective actions and process improvements to address deficiencies and their root causes. If necessary and appropriate, submit to the BSO funding requests to support projects required to correct the identified deficiencies and root causes.

(e) Support and participate with the host activity in preparing EMS audit and environmental compliance assessment documentation.

(f) Advise the host activity and the BSO as soon as possible if a nonconformance, deficiency, or problem may result in adverse public relations and/or require regional coordination to solve.

(g) Ensure EMS conformance and environmental compliance are factors in the performance evaluations of appropriate personnel.

(h) Assist the host activity to declare conformance with the ISO 14001:2004 standard no later than the end of Fiscal Year 2009.

(i) Where a Navy activity is a tenant on a non-Navy installation, the Navy activity may participate in the host's EMS and environmental compliance assessment program in accordance with their interservice or intragovernmental support agreement. Where the non-Navy host's environmental compliance assessments are not consistent with Navy or BSO objectives, Navy activities will implement an EMS and develop internal assessment plans and conduct audits and assessments that fulfill the objectives of the Navy EMS Self-Declaration Protocol.

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CHAPTER 4

POLLUTION PREVENTION

4-1 Scope

4-1.1 Summary. This chapter provides P2 policies and procedures applicable to all Navy shore facility operations, unless otherwise specified.

4-1.2 Related Chapters. Chapter 5 discusses P2 in NEPA actions. Chapter 6 discusses procedures for implementing the Emergency Planning and Community Right-to-Know Act (EPCRA). Chapter 16 discusses the Navy Qualified Recycling Program (QRP), solid waste pollution prevention, and solid waste reduction. Chapter 22 discusses P2 for ships.

4-1.3 References. References are:

(a) 40 Code of Federal Regulations (CFR) 355, Regulations for Emergency Planning and Notification Under CERCLA;

(b) 49 CFR 173, Shippers - General Requirements for Shipments and Packaging;

(c) 29 CFR 1910.1200, OSHA Hazard Communication (HAZCOM) Standard;

(d) 40 CFR 261, Identification and Listing of Hazardous Waste;

(e) 40 CFR 302, EPA Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA;

(f) 40 CFR 372, Toxic Chemical Release Reporting, Regulations;

(g) E.O. 13423: Strengthening Federal Environmental, Energy, and Transportation Management;

(h) DODI 4715.4 of 1 July 1998, Pollution Prevention (NOTAL);

(i) Deputy Under Secretary of Defense (Acquisition, Technology & Logistics) (USD (AT&L)) memo of 27 August 2004, Establishment of the DOD Green Procurement Program (GPP).

4-2 Legislation

4-2.1 Pollution Prevention Act of 1990. This Act establishes the national policy that: Pollution should be prevented or reduced at the source whenever feasible; Pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner, whenever feasible; and Disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

4-2.2 Resource Conservation and Recovery Act (RCRA). RCRA requires cradle-to-grave management of HW. The Act also encourages beneficial reuse of solid waste through recycling and reuse as an energy source. The 1984 RCRA amendments require HW generators and treatment, storage, and disposal (TSD) facility owners to certify that the generator has a program in place to "reduce the volume or quantity and toxicity" of waste and that the TSD method minimizes the threat to health and the environment. In addition, the Act requires generators to report the changes in volume and toxicity of waste actually achieved during the year of the report (in comparison with previous years).

4-3 Terms and Definitions

4-3.1 Authorized Use List (AUL). The list of all HM needed to support the requirements of a command or facility.

4-3.2 Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP). CHRIMP is a successful methodology to achieve life cycle hazardous material control and management (HMC&M) and P2 at the command and facility levels. The Navy CHRIMP manual provides a standardized approach and guidance for the development and implementation of centralized HMC&M practices that result in a reduction of HM procured, stocked, distributed, and eventually disposed of as waste.

4-3.3 Green Procurement. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service. Components of Green Procurement and associated websites for further information are:

- Recovered material (www.epa.gov/cpg)
- Environmentally preferable (www.epa.gov/epp)
- Energy efficient (www.eere.energy.gov/femp/technologies/eeproducts.cfm)
- Biobased products (http://www.biobased.oce.usda.gov and www.ofee.gov/gp/bioprod.html)
- Alternative fuels and fuel efficiency (http://www.eere.energy.gov/vehiclesandfuels/)
- Non-ozone depleting substances (http://www.ofee.gov/gp/snap.html)

Green Procurement is also known as Affirmative Procurement or Environmentally Preferable Procurement.

4-3.4 Extremely Hazardous Substance (EHS). Any substance listed in appendices A and B of reference (a).

4-3.5 Hazardous Material. In general, HM is any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. This definition includes all extremely hazardous substances, hazardous chemicals,

hazardous substances, and toxic chemicals. HM is any material *regulated as HM*, per reference (b), or any material that requires a material safety data sheet (MSDS), per reference (c). HM is also any material having components which meet or have potential to meet the definition of HW per reference (d), subparts A, B, C, and D, during any phase of its existence: end use, treatment, handling, packaging, storage, transportation, or disposal.

Designation of a material as HM does not eliminate the need for adherence to hazard-specific guidance, which for control purposes, takes precedence over this instruction when a material is separately regulated or controlled by other instructions or directives. Such materials include ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials are HM to the extent that personnel exposure may occur during manufacture, storage, use, and demilitarization of these items.

4-3.6 Hazardous Substance. Any substance listed in table 302.4 of reference (e).

4-3.7 Hazardous Substance Management System (HSMS). HSMS is an automated chemical tracking system providing "cradle-to-grave" tracking not only of the hazardous material used at a facility, but also the chemical constituents of those materials. The system facilitates EPCRA reporting. The system also provides activities with a tool to analyze the flow of hazardous material while developing sound P2 management techniques that (1) reduce the amount of hazardous material procured and used and (2) reduce the amount that becomes waste. The HMMS is a similar system used at the Naval Air Depots. The Regional Hazardous Inventory Control System (RHICS) is replacing HSMS at shore facilities.

4-3.8 Hazardous Waste. A solid waste, or combination of solid wastes, that because of quantity, concentration, or physical, chemical or infectious characteristics may:

- Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness.

- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

4-3.9 Pollution/Pollutants. Gaseous, liquid or solid by-products of industrial, agricultural or even natural processes, which after recycling, treatment, or other mitigating processes, still produce undesirable environmental effects.

4-3.10 Pollution Prevention. Source reduction and other practices that reduce or eliminate the creation of pollutants through:

- Increased efficiency in the use of raw materials, energy, water, or other resources.

- Protection of natural resources by conservation.

- Reduction/elimination of the use of dangerous, toxic and hazardous materials.

- Recycling/reuse of materials

Examples of P2 techniques include:

- Material substitution;
- Product reformulation;
- Process change;
- Process modification;
- Process Elimination;
- Improved operation and maintenance;
- Integrated recycling;
- Material Management.

4-3.11 Recycled Material. Previously used materials, substitutable for a raw or source material in the manufacturing process. If not so used, this material would become waste.

4-3.12 Recycling. Using, reusing, or reclaiming materials, including processes that regenerate a material or recover a usable product from it.

4-3.13 Source Reduction. Any practice which:

- Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal.
- Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

4-3.14 Toxic Chemical. Any substance listed in reference (f).

4-3.15 Toxic Chemical Use Reduction. P2 actions to reduce, avoid, or eliminate the use of toxic chemicals.

4-3.16 Toxic Chemical Use Substitution. P2 actions to substitute non-toxic or less toxic chemicals in maintenance/operations/industrial processes.

4-3.17 Used/Excess HM. HM for which there is no further, immediate use on board the ship or at the shore facility possessing the material. Another ship, shore facility or commercial industry may ultimately use such material for the same purpose or for purposes other than those for which it was initially manufactured.

4-3.18 Waste. See "Pollution/Pollutants."

4-3.19 Waste Minimization. Source reduction and the following types of recycling:

– Beneficial use/reuse;

– Reclamation.

Waste minimization does not include disposal or burning for energy recovery.

4-3.20 Waste Reduction. See "Waste Minimization."

4-4 Requirements

4-4.1 Navy P2 Level 1 Program Drivers

The Navy defines as "Level 1," those environmental requirements derived from Federal, State, or local environmental laws, regulations, or E.O.'s. Level 1 program drivers for the Navy P2 program include:

– Reference (g) requires Federal agencies to prevent pollution whenever feasible, incorporate waste prevention and recycling into daily operations, increase procurement of environmentally preferable items, expand existing affirmative procurement and recycling programs, establish model facility demonstration projects, integrate P2 and affirmative procurement into acquisition programs, and establish goals for reduction of solid waste generation and increased procurement of environmental preferable items. Chapter 16 contains policy and guidance related to solid waste reduction, recycling and affirmative procurement. Reference (g) also reemphasizes Federal agency requirements to reduce pollutant releases to the environment, prevent pollution, source reduction, and to use P2 as the preferred method of environmental compliance.

– RCRA requires that facilities which dispose of hazardous wastes have programs in place to minimize the generation of such hazardous waste.

– Other environmental statutes including the Clean Air Act (CAA) and Clean Water Act (CWA) include specific requirements for P2.

4-4.2 DOD P2 Policy. Reference (h) establishes policy, assigns responsibilities, and prescribes procedures for P2.

This document requires DOD to reduce use of HM, generation or release of pollutants, and any adverse effects on human health and the environment. It requires selection, use and management of HM over its life cycle so that DOD incurs the lowest cost required to protect human health and the environment. DOD policy emphasizes P2 and the Pollution Prevention Act environmental management hierarchy (see section 4-6) when developing solutions. DOD policy emphasizes avoiding or reducing the use of HM as the preferred method of P2. Where an activity cannot avoid the use of a HM, the directive requires the activity to follow regulations regarding use and employment of HM management practices that avoid harm to human health and the environment. This document requires emphasis on using less HM in processes and products instead of end-of-pipe management of HW. For related information, chapter 6 contains DOD policy on EPCRA and chapter 16 provides DOD policy on solid waste reduction and recycling.

4-4.3 DOD Green Procurement Program. Reference (i) establishes policy, assigns responsibility, and prescribes procedures for Green Procurement.

This document provides the strategy for implementing an effective GPP. Green procurement is the purchase of environmentally preferable products and services in accordance with one or more of the established Federal "green" procurement preference programs. The GPP applies to all acquisitions from major systems programs to individual unit supply and service requisitions.

GPP Objectives:

- Educate all appropriate DOD employees on the requirements of Federal "green" procurement preference programs, their roles and responsibilities relevant to these programs and the DOD GPP, and the opportunities to purchase green products and services.

- Increase purchases of green products and services consistent with the demands of mission, efficiency, and cost-effectiveness, with continual improvement toward Federally established procurement goals.

- Reduce the amount of solid waste generated.

- Reduce consumption of energy and natural resources.

- Expand markets for green products and services.

4-5 Navy P2 Program Description

The Navy's approach to P2 is to Assess, Implement, Manage and Measure (AIMM). The Navy P2 program assesses P2 opportunities through the P2 planning process, using such tools as Model P2 Plans, P2 Planning Standard Operating Procedures, the P2 Opportunities Handbook, the Tri-Service P2 Technical Library, Fleet Assistance Support and Technology Transfer Team (FASTT), P2 Afloat Program, and P2 Technology Demonstrations. After careful evaluation, the Navy implements P2 opportunities through the annual Baseline Assessment process and the Navy Working Capital Fund process. The Navy manages unavoidable and irreducible materials and waste streams through programs including the CHRIMP, the HSMS, the Navy QRP, as well as regulatory permitting programs. The Navy measures progress through reporting under EPCRA and the DOD Measures of Merit.

The Navy strives for Environmental Excellence using the AIMM P2 methodology as a primary tool. Navy Environmental Excellence requires two important components, Sustained Compliance and Operational Readiness. An excellent Navy environmental quality program must support both the operational readiness of the Navy to perform its national security mission and must also achieve and maintain sustained compliance. The Navy cannot maintain readiness without compliance, and compliance without readiness is not excellence for the United States Navy. Sustained Compliance plus Operational Readiness equals Environmental Excellence (SCORE).

The overall Navy P2 concept is to "AIMM to SCORE" to achieve environmental excellence through utilization of P2 as a tool to support sustained compliance at the lowest life cycle cost.

The Navy Environmental Quality Initiative (EQI) is an essential element in the AIMM to SCORE concept. This comprehensive initiative focuses on maximum P2 to achieve and maintain compliance. The EQI has four primary objectives:

– Reduce the life cycle cost of the Navy's environmental quality program.

– Achieve sustained environmental compliance at Navy activities.

– Reduce generation of pollutants at Navy activities.

– Increase use of P2 alternatives to meet environmental compliance requirements.

In addition to supporting the requirements of reference (g), Navy's EQI focuses on using current P2 tools to support statutory and regulatory compliance. The EQI supports a transition from P2 planning to more comprehensive environmental quality planning, focused on lowest life cycle cost and sustainable compliance. The Navy P2 program is designed to allow Navy activities to make the best possible use of the significant assets already available such as their activity P2 plans and the P2 Technical Library. Integrated environmental quality planning supports operational readiness by targeting source reduction efforts and in turn reducing regulatory and cost impacts on Navy operations.

4-6 Navy P2 Policy

The Navy shall act to prevent pollution and decrease the release of pollutants into the environment using the methods identified in the EPA P2 hierarchy shown below:

– Source Reduction;

– Recycling;

– Treatment;

– Disposal.

In establishing this hierarchy, the EPA stated the criteria for selecting the method depend upon the requirements of the applicable law, the level of achievable risk reduction, and the cost-effectiveness of the option. Under Navy policy, source reduction is always the most desirable option as it addresses reducing both the volume and toxicity of pollution.

The Navy shall take all necessary actions to comply with the requirements of reference (g), comply with other P2 requirements derived from applicable Federal, State and local laws and regulations, and use P2 to support full and sustained environmental compliance at Navy activities at the lowest feasible life cycle cost (LCC).

4-6.1 Pollution Reduction. All Navy facilities shall identify and implement source reduction opportunities to reduce releases of toxic chemicals to the environment, off-site transfer of such toxic chemicals for treatment and disposal, and generation and disposal of hazardous and non-hazardous solid wastes. Further, Navy facilities shall act to increase on- and off-site recycling of hazardous wastes, increase diversion of non-hazardous solid wastes for recycling or composting and increase procurement of environmentally preferable products and services.

4-6.2 Hazardous Material Control. Navy commands shall reduce the amount of HM used, and HW generated through up front HM control in procurement, supply, and use by:

– Developing local mechanisms at shore facilities to identify materials in use that are hazardous and limiting quantities of HM procured and stored. Facilities shall establish HM AULs to control the quantity of HM procured and stored.

– Implementing CHRIMP to reduce the amount of procured, stocked, and distributed HM eventually disposed of as waste.

– Establishing methods for substituting a less HM or non-HM for HM where possible.

– Developing and incorporating new technology or materials that have a reduced impact upon the environment, are safer and healthier, or result in reduced emissions.

– Modifying HM shelf life to reduce the generation of waste because of shelf life expiration, when possible.

- Modifying units of issue to reduce the generation of waste because of unused surplus material.

- Review of local documentation that directs the use of HM to determine possible changes to minimize further the use of HM and generation of HW.

- Requesting cognizant engineering authorities to modify weapon system maintenance requirement cards and technical manual requirements to reduce or eliminate the use of HM.

- Reviewing standardized documents, including specifications and standards, to identify opportunities to stop or reduce use of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of its mission.

- Integrating ESOH considerations into all acquisition and procurement actions.

4-6.3 Pollution Prevention Plans. Every Navy facility shall develop and implement a P2 plan. In it, facilities shall address the actions required to reduce pollution from all sources and to all media, and to support full and sustained compliance with environmental requirements at the lowest life cycle cost. (Note: Guidance on development of activity P2 plans is provided in the OPNAV P45 120 10 94 of October 1994)

Facilities should use their P2 Plans as a primary tool for identifying methods and means to achieve compliance with Federal, State and local environmental laws and regulations and E.O.'s, enhance personnel safety, and reduce the generation and release of pollutants.

Facilities should use their P2 plans in developing and justifying funding requirements for compliance with applicable regulations and to meet applicable requirements for reducing pollution.

a. **Purpose.**

(1) Identify activities and processes that generate pollutants, including hazardous and non-hazardous solid wastes and toxic releases to all media.

(2) Develop technically and economically feasible options to reduce generation of pollutants consistent with the DOD measures of merit and associated goals.

(3) Identify methods and mechanisms to use P2 as a tool to achieve full and sustained compliance with DOD and DON instructions and directives and Federal, State and local laws and regulations at the lowest feasible life cycle cost.

b. **Applicability and Scope.**

(1) All Navy activities are required to have a P2 plan. Host activities shall incorporate tenant activity P2 plans within their P2 plan or oversee the independent development of a plan by the tenant command. The result must support facility-wide P2 and environmental quality planning. The commanding officer, at his or her discretion, may develop separate P2 plans for geographically non-contiguous sites.

(2) To the extent feasible, the activity P2 plan should incorporate within it related plans such as the HMC&M plan, hazardous waste minimization (HAZMIN) plan, storm water P2 plan, solid waste management plan, and ozone depleting substances phase-out plan.

c. **Key Plan Elements.**

(1) Identification of all actions and processes which generate pollutants, including hazardous and non-hazardous solid wastes and toxic releases to all media.

(2) Identification of pollutants generated by the activity, including hazardous and non-hazardous solid wastes and toxic releases to all media.

(3) Identification of compliance vulnerabilities and potential impacts on DOD measure of merit goals associated with generation of pollutants.

(4) Identification of environmental and other quantifiable costs associated with the generation of pollutants.

(5) Identification of potential alternative actions, materials, and processes, including elimination of unnecessary requirements, which will support cost effective compliance and/or support achievement of DOD measure of merit goals.

(6) Identification of priorities for implementing administrative, managerial and process improvements required to meet P2 plan goals.

(7) Identification of any barriers to accomplishing P2 plan improvements, including funding, approval process, and document changes.

(8) Documentation of required administrative elements including:

– Methods and schedule for updating P2 plan.

– Methods for measuring and reporting progress.

– Plans to provide P2 training and techniques to establish activity-wide P2 awareness.

– HM management and control practices and procedures.

– Non-hazardous solid waste recycling and composting practices and procedures.

– CO Approval and Certification.

d. **P2 Plan Updates.**

As the guiding document for an activity P2 program, activities shall update the P2 plan on a regular basis. This update should support activity efforts to broaden the focus of the plan to integrate sustained compliance through P2, primarily source reduction.

Activities are required to review P2 plans on at least an annual basis. This review should identify any significant changes in activity mission, function and personnel; progress on actions identified in the P2 Plan; changes to compliance requirements; and changes in activity priorities. This review should be accomplished by base personnel if feasible and can be documented informally by marking up the existing P2 plan or simply adding a short update section.

Activities are required to revise their P2 Plan at least every three years. P2 plan revisions should focus on identification of opportunities to use P2 to meet compliance requirements and to lower overall environmental quality program life cycle costs. The revisions should include revalidation and documentation of the key plan elements identified in section 4.6.3c above. Activities shall provide a copy of the revised plan to the NFESC.

e. **Public Availability.**

Installations should make P2 plans readily available to the public. The means of providing this public access may vary widely from installation to installation, but availability only through FOIA requests is not desirable.

4-6.4 Training. One of the most effective P2 techniques is to train personnel properly on those job functions that have an environmental impact. Chapter 28 provides overall environmental training requirements. Individual chapters of this manual discuss the training necessary to achieve compliance with environmental laws and regulations.

4-6.5 P2 Committee.

P2 is a multi-disciplinary effort that requires participation from many functional areas of Navy organizations to be successful. While organization environmental personnel can and should take the lead to implement P2 opportunities, successful implementation requires the participation and support of functional areas including supply, acquisition/contracts, safety, systems maintenance, public works, and operational elements.

Navy organizations should establish a P2 Committee to advise the commander or commanding officer on P2. The primary responsibility of the committee should be the establishment of an integrated organizational P2 program and the development and implementation of policies and procedures required to comply with the requirement of this instruction. The P2 committee should be multi-disciplinary and bring together the various organizations and groups having functional responsibilities and authority over HM acquisition and use, etc. The commander or commanding officer should designate the chairperson of the committee and delegate him or her sufficient authority to ensure that the committee receives required participation and cooperation.

4-6.6 Green Procurement.

All Navy personnel shall consider green products and/or services as the first choice in all procurements, including service contracts. Navy personnel shall purchase green products when planning to purchase products and/or services in the following categories (note that this list is not all inclusive):

- Office products (including electronic equipment)
- Printing services
- Fleet maintenance products
- Building construction, renovation and maintenance (including janitorial and landscape)
- Traffic control
- Park and recreation
- Appliances
- Lighting

Further guidance on Green Procurement can be found at www.epa.gov/cpg/products.htm or at www.epa.gov/epp/database/htm.

4-7 Responsibilities

4-7.1 CNO (N45) shall:

(a) Identify Navy opportunities for P2 and facilitate transfer of P2 information and technology.

(b) Coordinate with Secretariats, Navy Program Sponsors, and acquisition program managers to ensure that Navy acquisition efforts are fully compliant with environmental laws and policies through all phases of the acquisition process including Research and Development (R&D), design, testing, manufacturing, operations, maintenance, and ultimate demilitarization/disposal.

(c) Actively participate with industry and other Services through joint initiatives to eliminate or reduce shared HM procurement, use, and requirements.

4-7.2 BSOs shall:

(a) Ensure that activities under their cognizance develop, review, revise, and implement P2 plans per the guidance of this chapter.

(b) Ensure that activities under their cognizance provide a copy of their Installation P2 Plan, and all subsequent revisions to NFESC.

(c) Plan, program, budget, and allocate funds for all facility P2 projects identified in facility P2 plans which support cost effective environmental compliance, support achievement of the DOD measure of merit goals, reduce generation of pollutants, or reduce the overall life cycle cost of the activities environmental program.

(d) Plan, program, budget, and allocate funds for implementing CHRIMP and HMMS at Naval Air Depots.

(e) Assist COMNAVSUPSYSCOM in implementing CHRIMP using HSMS/HMMS/RHICS at shore facilities.

(f) Develop and implement HM elimination or substitution processes for all systems and operations under their cognizance. These processes shall include the identification, evaluation, and use of the least hazardous material available.

(g) Develop processes to ensure that the facility AUL incorporates the least hazardous, technically acceptable materials.

(h) Take necessary actions to support Navy achievement of goals established by DOD under reference (g) and any subsequent P2 E.O.'s.

(i) Work with acquisition program managers to aggressively incorporate Environment, Safety and Occupational Health (ESOH) into systems engineering, including pursuing the reduction of HM used in acquisition systems. Inclusion of P2 practices in an acquisition program, such as designing systems to use less HM or emit fewer emissions, reduces risks and total ownership costs, and helps the Navy meet P2 goals.

(j) Work with the acquisition program managers to ensure a HM AUL is prepared for the system by coordinated with the respective ships, submarines, and/or shore facilities.

(k) Assess ESOH effects of chemicals, processes and materials posing a high hazard potential. Use the results in all life cycle cost and trade-off decisions.

(l) Review and revise standardized documents under their cognizance, including specifications, standards, technical manuals and handbooks to reduce/eliminate requirements for hazardous material/toxic substances and other pollution sources. Reviews shall occur with sufficient frequency to take advantage of P2 opportunities created by changes to management practices, technologies, materials, processes and requirements, as appropriate. Plan, program and budget for these P2 reviews and revisions.

(m) Submit P2 Program Metric data annually to CNO (N45) via the P2 Annual Data Summary (P2ADS).

4-7.3 Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) shall:

(a) Assist CNO (N45) in managing the HM aspects of the Navy P2 effort and serve as the overall manager for the supply aspects of the Pollution Prevention Program.

(b) Develop, implement, and maintain a Navy-wide system for acquiring only authorized HM, integrating command and shore facility HM AULs.

(c) When requested, assist system command program managers by providing life cycle costs for HM being considered for acquired systems.

(d) Develop and recommend to CNO (N45) HM shelf life policies and procedures to support the goal of eliminating disposal of unused HM as hazardous waste. Provide guidance to facility level supply functions in establishing and managing local shelf life control and management programs.

(e) Provide guidance to and coordinate efforts of the Navy-wide HM substitution efforts.

(f) Develop and recommend to CNO (N45) policies and procedures to reduce or minimize the entry of new HM into the supply system.

(g) Implement CHRIMP and regional CHRIMP at all shore facilities.

(h) Develop and maintain Navy-wide HM/HW tracking systems (HSMS/RHICS) in support of CHRIMP.

(i) Plan, program, budget, and allocate funds for implementing CHRIMP and HSMS/RHICS at shore activities.

(j) Support CNO(N45) in HSMS/HMMS/RHICS software development and consolidation efforts.

(k) Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the green procurement guidelines for recycled material content.

(l) Provide green procurement guidance to procurement community-contract officers, purchasing agents, supply corps officers, supply department managers, and customers. The guidance should address identification of National Stock Number (NSN), GSA, and local purchase green procurement products and items, keeping records of total value of green procurement items purchased and ensuring that green procurement practices are followed.

4-7.4 COMNAVFACENGCOM shall:

(a) Support P2 initiatives as tasked by CNO (N45).

(b) Assist CNO (N45) in managing P2 technology transfer efforts.

(c) Serve as financial manager in support of the Pollution Prevention Equipment Procurement Program.

(d) Provide technical assistance to shore facilities to implement P2 practices and incorporate P2 technology into facility processes.

(e) Develop plans for implementing the use of alternative fuel vehicles in Navy vehicle fleets.

(f) Assist COMNAVSUPSYSCOM in supporting activities in implementation and utilization of the CHRIMP program and the HSMS/HMMS/RHICS software systems.

(g) Designate NFESC as the central repository for all Navy Installation P2 Plans. NFESC shall collect and maintain an up to date copy of each installation's P2 plan.

(h) In support of Navy's EQI, review all Navy P2 plans, develop and distribute lessons learned to support P2 plan updates, identify and transfer Navy-wide P2 for compliance opportunities, and support identification of P2 solutions to meet compliance requirements.

(i) Assist CNO (N45) in development of process maps and metrics to identify and evaluate business process improvements.

(j) Collect information to prepare the annual green procurement program report for Office of Federal Procurement Policy (OFPP).

4-7.5 Regional Commanders shall:

(a) Assist CNO (N45) and COMNAVSUPSYSCOM in planning and preparation for CHRIMP and HSMS/HMMS/RHICS implementation.

(b) Coordinate implementation efforts within their regions and serve as a point of contact for activities in managing and prioritizing implementation.

(c) Serve as regional point of contact and coordinator for regional-scale P2 initiatives.

4-7.6 The **NETC** shall incorporate P2 practices into Navy training, including incorporation of information on source reduction initiatives in appropriate training courses.

4-7.7 COs of shore facilities shall:

(a) Develop and implement a facility Pollution Prevention Program to support implementation of Navy P2 Policy as specified in this instruction.

(b) Develop and implement an activity P2 plan per paragraph 4-6.3. Use the P2 plan as a primary tool for identifying the methods and means to reduce HM use, HW generation and toxic chemical releases, and to support cost effective, full and sustained compliance.

(c) Plan, program, budget, and allocate funds for all facility P2 projects identified in facility P2 plans that support cost effective environmental compliance, support achievement of the DOD measure of merit goals, reduce generation of pollutants, or reduce the overall life cycle cost of the activities environmental program.

(d) Update the P2 plan on a regular basis. P2 plan updates shall incorporate efforts to use P2 to achieve sustained compliance at the lowest life cycle cost. P2 plan updates should utilize integrated environmental quality planning to support operational readiness by targeting source reduction efforts and in turn reducing regulatory and cost impacts on Navy operations.

i. Review P2 Plans on at least an annual basis. This review should identify any significant changes in activity mission, function and personnel; progress on actions identified in the P2 Plan; changes to compliance requirements; and changes in activity priorities. Base personnel should accomplish this review, if feasible, and document it informally by marking up the existing P2 plan or simply adding a short update section.

ii. Revise their P2 plan at least every three years. P2 plan revisions should focus on identification of opportunities to use P2 to meet compliance requirements and to lower overall environmental quality program life cycle costs. The revisions should include revalidation and documentation of the key plan elements identified in section 4-6.3c above. Activities shall provide a copy of the revised plan to the NFESC.

iii. Submit requests for waivers of this policy to CNO (N45) via the appropriate chain of command. Waiver requests should cite State and/or local requirements specifying a different update cycle or demonstrate significant savings without negative program impact.

(e) Assist COMNAVSUPSYSCOM to establish or revise, as necessary, and implement procedures to control, track, and reduce the variety and quantities of HM in use, in storage or stock, or disposed of as HW per the Navy CHRIMP manual. This includes establishing hazardous material minimization centers (HAZMINCENs) to facilitate the central management of all HM at a facility.

(f) Assist COMNAVSUPSYSCOM to implement HSMS/HMMS/RHICS at the facility. This includes identifying an MSDS, industrial type process, and EPA waste stream for each manufacturer-specific HM used within the facility. It also includes adapting previously developed process algorithms or developing new ones for each of the identified processes.

(g) Develop, revise as necessary, and implement a facility level HM AUL using an inventory that identifies and quantifies HM, including categorizing the material as an extremely hazardous substance, hazardous substance, or toxic chemical as defined under EPCRA (see chapter 6).

(h) Limit local purchases of HM to purchases for which a stock numbered product is unavailable from the supply system and for which there is a valid controlling document (e.g., maintenance requirement card (MRC), maintenance requirement plan (MRP), technical manual, technical order, maintenance manual, or similar document). Make and control local purchases through the HAZMINCEN according to CHRIMP principles of HM management and adhere to the same requirements as any other HM stock procurement. In cases where a standard stock item appears inferior, provide complete information regarding the item to the supply officer who can then submit an HM AUL feedback report to document the apparent deficiency.

(i) Ensure facility level supply functions establish and implement a local shelf life control and management program.

(j) Submit P2 Program Metric data annually to the cognizant BSOs (via the P2ADS).

(k) Provide feedback to acquisition PMs and BSOs regarding any issues associated with the Program in relation to the facility's HM AUL.

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CHAPTER 5

PROCEDURES FOR IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

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5-1 Scope

The National Environmental Policy Act (NEPA) of 1969 (reference (a)) is a basic national charter for protection of the environment. It establishes policy, sets goals, and provides a means for carrying out environmental policy. This chapter contains policy and guidance to ensure that the Navy acts, per the letter and spirit of NEPA, on all actions with the potential to have significant environmental impacts. Navy activities should apply the requirements of this chapter to any action affecting the environment inside the U.S., its territories and possessions, including actions related to acquisition programs (see appendix E for policy on the applicability of NEPA and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions). This chapter applies to those actions that fall within the realm of weapons systems acquisition, training operations and exercises at sea, training operations and exercises on land, science and technology related programs, and shore installation management (SIM). This instruction incorporates by reference the CNO Supplemental Environmental Planning Policy of 23 Sep 04, which is included as appendix N.

5-1.1 References. Relevant references are:

(a) National Environmental Policy Act of 1969 , 42 U.S.C. §4321 *et seq*.

(b) 40 C.F.R. Parts 1500-1508, Council on Environmental Quality Regulations on Implementing National Environmental Policy Act Procedures.

(c) DOD Directive 6050.7 of 31 March 1979, Environmental Effects Abroad of Major Department of Defense Actions; (NOTAL);

(d) 32 CFR 775, Policies and Responsibilities for Implementation of the National Environmental Policy Act Within the Department of the Navy (and as adopted as SECNAVINST 5090.6A of April 26, 2004 Environmental Planning for Department of the Navy Actions.

(e) SECNAVINST 5000.2C Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System.

(f) SECNAV memorandum Compliance with Environmental Requirements in the Conduct of Naval Exercises of Training At Sea of 28 DEC 00.

5-2 Legislation

Environmental planning encompasses a wide variety of existing environmental legislation including, but not limited to, the: Clean Air Act (CAA), Clean Water Act (CWA), Coastal Zone Management Act (CZMA), National Historic Preservation Act (NHPA), Marine Protection, Research and Sanctuaries Act (MPRSA), Pollution Prevention Act (PPA), Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA), and Executive Orders (E.O.) 12898 and E.O. 13045. Please refer to appendix A for further discussion of specific laws.

NEPA further requires a detailed statement on the environmental impact of major Federal actions that significantly affect the environment be included in every recommendation or report on proposals for legislation. Two basic tenets of NEPA and the Council on Environmental Quality (CEQ) regulations (reference (b)) are that:

a. Procedures must exist to ensure environmental information is available to decision makers and citizens before making decisions and taking major Federal actions. The Department of Defense and the Department of the Navy have developed procedures to implement NEPA (references (c) and (d)).

b. The NEPA process should identify and assess reasonable alternatives to proposed actions to avoid or minimize adverse environmental effects.

5-3 Terms and Definitions

5-3.1 Action Proponent. The commander, commanding officer, or civilian director of a unit, activity or organization that is responsible for initiating and/or carrying out a proposed action. In general, the proponent should be at the lowest level in the chain of command that "owns" the entire action being proposed. The proponent has the responsibility to prepare and/or obtain funding for the preparation of the appropriate environmental documentation. To illustrate, the station commanding officer would normally be the action proponent for a military construction project for the station (but not other installations). The commander of an operational group would normally be the action proponent for training for the group (but not training for others). The U.S. Fleet Forces Command (FFC) or U.S. Pacific Fleet (COMPACFLT) would normally be the action proponent for the Navy-wide introduction of a new weapon system (e.g. new ship class, new aircraft model, new missile) within his/her Area of Responsibility (AOR). An acquisition program manager for a systems command would normally be the action proponent for systems testing, or for a programmatic action that has multi-base, multi-region or multi-Budget Submitting Offices (BSOs) impact. A regional commander would normally be the action proponent for action involving shore installation management. When prudent due to the significance of the action proposed or for other reasons, the designation of action proponent may be elevated to a person higher in the chain of command.

5-3.2 Categorical Exclusion. A category of action that does not have, under normal circumstances, individually or cumulatively, a significant effect on the human environment; or, that have been previously found to have no such effect as a result of procedures adopted by the Navy for implementing the CEQ regulations and for which, therefore, neither require an EA nor an EIS.

5-3.3 Cooperating Agency. Any Federal agency other than a lead agency, which has jurisdiction by law or special expertise concerning any environmental impact, involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian tribe, may by agreement with the lead agency become a cooperating agency.

5-3.4 Draft Environmental Impact Statement (DEIS). Statements prepared for actions that may have a significant impact on the quality of the human environment or that are potentially controversial in environmental effects. DEISs are filed with the Environmental Protection Agency (EPA) and distributed to cognizant Federal, State, local, and private agencies, organizations, and individuals for review and comment before preparation of a final EIS (FEIS). A DEIS requires a complete and comprehensive analysis of anticipated impacts to the human environment.

5-3.5 Environmental Assessment (EA). A concise public document that:

a. Briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or a Finding Of No Significant Impact (FONSI).

b. Aids to Navy compliance with NEPA when no EIS is necessary.

c. Facilitates preparation of an EIS when one is necessary.

5-3.6 Final Environmental Impact Statement (FEIS). Statement that incorporates all pertinent comments and information resulting from review of the DEIS. The FEIS is filed with EPA and distributed to recipients of the DEIS.

5-3.7 FONSI. A document, in which the Navy briefly presents the reasons why an action not otherwise categorically excluded, will not have a significant effect on the human environment, and for which an EIS will not therefore be prepared. The FONSI shall include a brief summary of the proposed action and brief summary of the basis for the finding regarding any relevant issues, mitigation, and/or regulatory concurrence used by the action proponent to make the finding. A FONSI may be one result of review of an EA. The decision to prepare an EIS may be another result.

5-3.8 Human Environment. The natural and physical environment and the relationship of people with that environment.

5-3.9 Impacts. Impacts, as used in this chapter, are synonymous with effects, and include direct, indirect, and cumulative impacts. Direct impacts result from some action and occur at the same time and place as the action. Indirect impacts also result from an action, but occur later in time or at a removed location from the action. They are reasonably foreseeable. Indirect impacts include:

a. Growth inducing effects.

b. Effects related to induced changes in the pattern of land use, population density, or growth rate.

c. Related effects on the human environment.

Cumulative impacts result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

5-3.10 Lead Agency. The Federal agency or agencies preparing or having taken primary responsibility for preparing an EA or EIS.

5-3.11 Legislative Environmental Impact Statement (LEIS). An LEIS is a detailed statement required by law for inclusion in a recommendation or report on a legislative proposal to Congress. A LEIS is part of the formal transmittal of a legislative proposal. However, one may transmit it up to 30 days later to allow time for completion of an accurate statement that can serve as the basis for public and congressional debate. The Navy does not prepare an LEIS for annual requests to Congress for Military Construction (MILCON) authorization or other funding appropriations. Following funding authorization, Navy provides appropriate NEPA compliance reviews for each project.

5-3.12 Major Federal Action. Any proposed Navy action that has the potential for physical impact on the human environment. Actions include, but are not limited to:

a. New activities, including projects the Navy is entirely or partly funding, assisting, conducting, regulating, or approving.

b. Substantive changes in continuing actions, such as substantial changes in operational tempo, areas of use, or in methodology/equipment.

c. Approval of specific projects, such as construction or management activities located in a defined geographic area (i.e., MILCON projects, public/private venture projects, unspecified minor construction projects, natural resources management projects, special projects, land acquisition, and locally funded projects).

d. Adoption of programs, such as a group of concerted actions to implement a specific policy or plan.

5-3.13 Mitigation. Actions, which reduce the severity or intensity of impacts of other actions, to include:

a. Avoiding the impact altogether by not taking a certain action or parts of an action or by moving the project location.

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, for example by adjusting site layout.

c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

d. Reducing or eliminating the impact over time by monitoring, maintaining, and/or replacing equipment or structures so that future environmental degradation due to equipment or structural failure does not occur during the life of the action.

e. Compensating for the impact by replacing or providing substitute resources or environments.

Action proponents should consider the avoidance of impacts as the preferred mitigation measures.

5-3.14 Notice of Intent (NOI). A required notice published in the Federal Register that formally announces the Navy's intent to prepare an EIS. The NOI provides a brief description of: the proposed action (including location, extent and duration of action), purpose and need for the action, any known alternatives to be considered, issues to be addressed (in particular, any sensitive issues), identifies any co-lead or cooperating agencies, and provides a Navy point of contact for any questions. The NOI formally opens the public scoping process and usually, though not required, provides information regarding public scoping meetings to be held.

5-3.15 Record of Decision (ROD). A concise summary for publication in the Federal Register of the decision made by the Navy from the alternatives presented in an FEIS. CNO (N45) prepares the document and the Secretary of the Navy (SECNAV) approves it. The ROD will state the decision, identify alternatives considered (including that which was environmentally preferable), and discuss other considerations (non-environmental) that influenced the decision identified. The ROD will also describe the intended implementation of all practical means to avoid impacts resulting from the chosen alternatives, and

explain any decision behind the non-implementation of any of these means. Additionally, the ROD shall address any monitoring associated with mitigation.

5-3.16 Scoping. An early and open process for determining the scope of issues and for identifying the significant issues related to a proposed action.

5-3.17 Significance. The context and intensity of an impact. Context means the area, resources, or processes affected. Intensity refers to the severity of impact as derived from evaluating magnitude of effects on public health or safety, unique characteristics of the geographic area, controversy of environmental effects, risk analysis, precedents, relationship to other actions, cumulative impacts, and the potential for violating laws imposed to protect the environment.

5-3.18 Supplemental Environmental Impact Statement. A document describing the environmental impacts of a project or proposal prepared when substantial changes relevant to environmental concerns are made in the proposed action, or when significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts becomes available. Action proponents shall prepare a supplemental EIS at any time after preparing and filing a DEIS, FEIS, or ROD. Action proponents will process the supplemental EIS (file with the EPA and distribute to recipients) in the same manner described in this chapter for any similar EIS.

5-4 Navy Policy

5-4.1 General. The Navy shall act with care to ensure, to the maximum extent practicable, that in conducting its mission of providing for the national defense, it does so in a manner consistent with national environmental policies, including environmental justice. In so doing, the Navy recognizes that the NEPA process includes the systematic examination of the likely environmental consequences of implementing a proposed action. To be an effective decision-making tool, the Navy shall integrate the process with other Navy-Marine Corps project planning at the earliest possible time. This ensures that planning and decision-making reflect environmental values, avoid delays, and avoid potential conflicts. The Navy shall take care to ensure that, consistent with other national policies and national security requirements, practical means and measures are used to protect, restore, and enhance the quality of the environment, to avoid or minimize adverse environmental consequences, and to attain the objectives of:

a. Achieving the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other consequences that are undesirable and unintended.

b. Preserving important historical, cultural, and natural aspects of our national heritage, and maintaining, where possible, an environment that supports diversity and variety of individual choice.

c. Achieving a balance between resource use and development within the sustained carrying capacity of the ecosystem involved.

d. Enhancing the quality of renewable resources and working toward the maximum attainable recycling of depletable resources.

e. Providing the opportunity for public comment.

Every person preparing, implementing, supervising, and managing projects involving categorical exclusions, EAs, and EISs shall have received environmental planning training as identified in appendix N, paragraph 3.14 of this instruction, and shall be familiar with the provisions of this chapter.

5-4.2 NEPA Compliance. To comply (see figure 5.1) with NEPA, the Navy shall:

a. Assess environmental consequences of proposed actions that could affect the quality of the environment in the U.S., its territories, and possessions per Department of Defense (DOD) and Council on Environmental Quality (CEQ) regulations.

b. Use a systematic, interdisciplinary approach that ensures the integrated use of the natural and social sciences and environmental considerations in planning and decision-making where there may be an impact on man's environment.

c. Ensure the consideration of presently unmeasured environmental amenities in the decision-making process.

d. Consider the reasonable alternatives to recommended actions in any proposal that would involve unresolved conflicts concerning alternative uses of available resources.

e. Make available to States, counties, municipalities, institutions, and individuals advice and information useful in restoring, maintaining, and enhancing the quality of the environment.

f. Use ecological information in planning and developing resource-oriented projects

LEVELS OF DOCUMENTATION

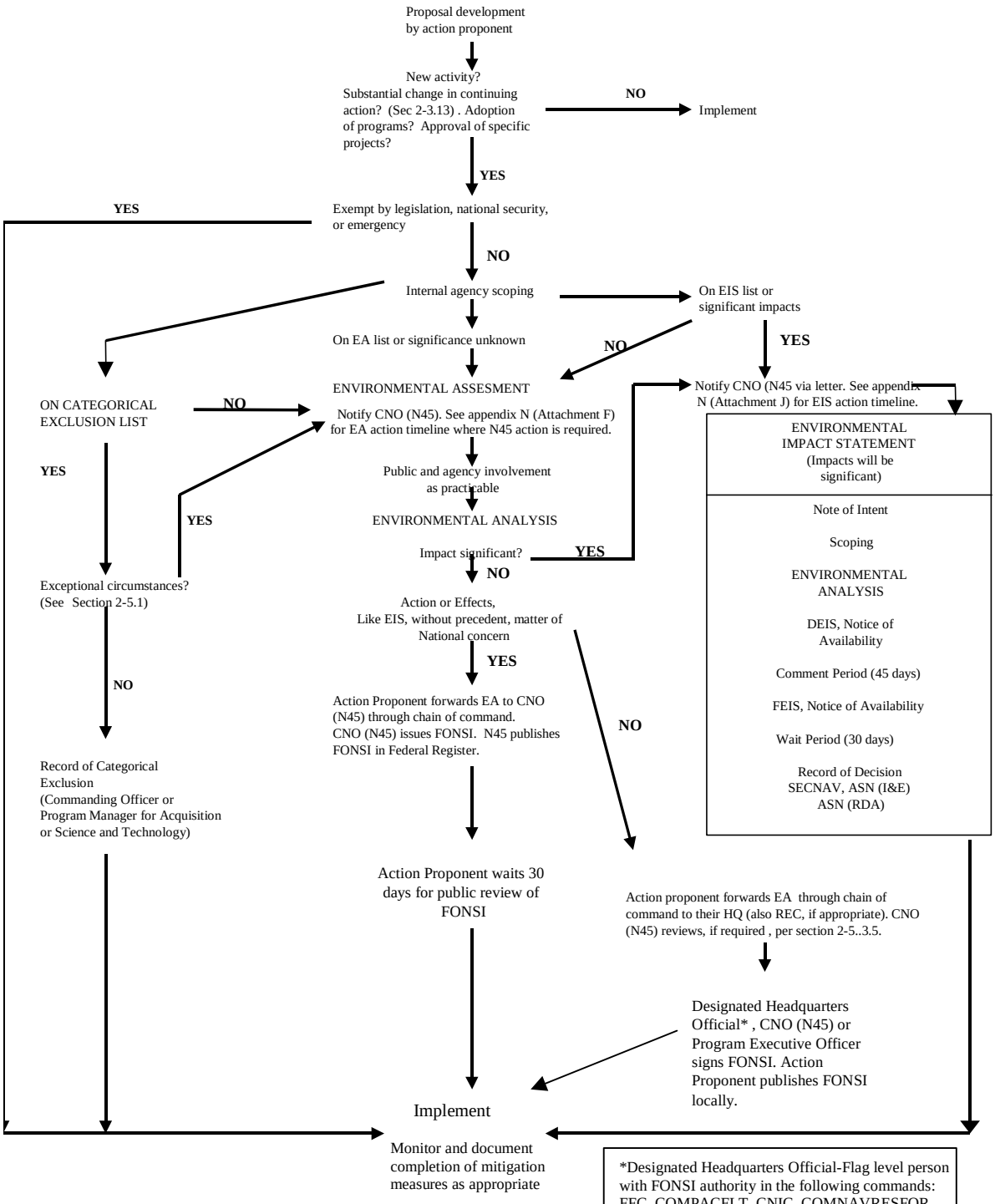

Figure 5.1

5-5 Requirements

NEPA created the CEQ, which provides regulations to implement the procedural provisions of NEPA. The CEQ regulations apply a three-tiered approach to ensure that pertinent environmental information for major Federal actions is available to decision makers and the public:

a. Categorical Exclusions

b. Environmental Assessments (EAs)

c. Environmental Impact Statements (EISs).

The remainder of this chapter discusses in detail compliance criteria for each level.

5-5.1 Categorical Exclusions. CEQ regulations provide for establishment of categorical exclusions for those actions that, after consideration by the Departments (Navy), have been found not to have a significant effect on the human environment individually or cumulatively, under normal circumstances, and therefore do not require an EA or an EIS. Categorical Exclusions are applicable to those kinds of military actions that do not significantly affect the quality of the human environment; do not result in any significant change from existing conditions at the site of the proposed action; and, whose effect is primarily economic or social.

a. **When a Categorical Exclusion Cannot be Used (Exclusion Criteria).** Even if a proposed action generally fits the definition of a Categorical Exclusion, a Categorical Exclusion will not be used if the proposed action:

(1) Would adversely affect public health or safety;

(2) Involves effects on the human environment that are highly uncertain, involve unique or unknown risks, or which are scientifically controversial;

(3) Establishes precedents or makes decisions in principle for future actions that have the potential for significant impacts;

(4) Threatens a violation of Federal, State, or local environmental laws applicable to the Department of the Navy; or

(5) Involves an action that, as determined in coordination with the appropriate resource agency, may:

(a) Have an adverse effect on Federally-listed endangered/threatened species or marine mammals;

(b) Have an adverse effect on coral reefs or on Federally-designated wilderness areas, wildlife refuges, marine sanctuaries, or parklands;

(c) Adversely affect the size, function or biological value of wetlands and is not covered by a nation-wide or regional permit;

(d) Have an adverse effect on archaeological resources or resources (including but not limited to ships, aircraft, vessels and equipment) listed or determined to be eligible for listing in the National Register of Historic Places; or

(e) Result in an uncontrolled or unpermitted release of hazardous substances or require a conformity determination under the standards of the Clean Air Act General Conformity Rule.

b. **List of Categorical Exclusions.** Subject to the criteria in paragraph 5-5.1.a, the categories of action in Table 5.1 (consistent with the list contained in reference (b)) are excluded from documentation in an EA or EIS.

Table 5.1 Department of the Navy List of Categorical Exclusions

1. Routine fiscal and administrative activities, including administration of contracts;
2. Routine law and order activities performed by military personnel, military police, or other security personnel, including physical plant protection and security;
3. Routine use and operation of existing facilities, laboratories, and equipment;
4. Administrative studies, surveys, and data collection;
5. Issuance or modification of administrative procedures, regulations, directives, manuals, or policy;
6. Military ceremonies;
7. Routine procurement of goods and services conducted in accordance with applicable procurement regulations, executive orders, and policies;
8. Routine repair and maintenance of buildings, facilities, vessels, aircraft, and equipment associated with existing operations and activities (e.g., localized pest management activities, minor erosion control measures, painting, refitting);
9. Training of an administrative or classroom nature;
10. Routine personnel actions;
11. Routine movement of mobile assets (such as ships and aircraft) for homeport reassignments, for repair/overhaul, or to train/perform as operational groups where no new support facilities are required;
12. Routine procurement, management, storage, handling, installation, and disposal of commercial items, where the items are used and handled in accordance with applicable regulations (e.g., consumables, electronic components, computer equipment, pumps);
13. Routine recreational/welfare activities;
14. Alteration of and additions to existing buildings, facilities, structures, vessels, aircraft, and equipment to conform or provide conforming use specifically required by new or existing applicable legislation or regulations (e.g., hush houses for aircraft engines, scrubbers for air emissions, improvements to storm water and sanitary and industrial wastewater collection and treatment systems, and installation of fire fighting equipment);
15. The modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations;
16. Routine movement, handling and distribution of materials, including hazardous materials/wastes that are moved, handled, or distributed in accordance with applicable regulations;
17. New activities conducted at established laboratories and plants (including contractor-operated laboratories and plants) where all airborne emissions, waterborne effluent, external ionizing and non-ionizing radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable federal, state, and local laws and regulations;
18. Studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, and engineering efforts to support environmental analyses);
19. Temporary placement and use of simulated target fields (e.g., inert mines, simulated mines, or passive hydrophones) in fresh, estuarine, and marine waters for the purpose of nonexplosive military training exercises or research, development, test and evaluation;
20. Installation and operation of passive scientific measurement devices (e.g., antennae, tide gauges, weighted hydrophones, salinity measurement devices, and water quality measurement devices) where use will not result in changes in operations tempo and is consistent with applicable regulations;
21. Short-term increases in air operations up to 50% of the typical operation rate, or increases of 50% operations per day, whichever is greater. Frequent use of this CATEX at an installation requires further analysis to determine there are no cumulative impacts;
22. Decommissioning, disposal, or transfer of Navy vessels, aircraft, vehicles, and equipment when conducted in accordance with applicable regulations, including those regulations applying to removal of hazardous materials;
23. Non-routine repair and renovation, and donation or other transfer of structures, vessels, aircraft, vehicles, landscapes or other contributing elements of facilities listed or eligible for listing in the National Register of Historic Places which will result in no adverse effect;

Table 5.1 Department of the Navy List of Categorical Exclusions

24. Hosting or participating in public events (e.g., air shows, open houses, Earth Day events, and athletic events) where no permanent changes to existing infrastructure (e.g., road systems, parking and sanitation systems) are required to accommodate all aspects of the event;
25. Military training conducted on or over nonmilitary land or water areas, where such training is consistent with the type and tempo of existing nonmilitary airspace, land, and water use (e.g., night compass training, forced marches along trails, roads and highways, use of permanently established ranges, use of public waterways, or use of civilian airfields);
26. Transfer of real property from the Department of the Navy to another military department or to another federal agency;
27. Receipt of property from another federal agency when there is no anticipated or proposed substantial change in land use;
28. Minor land acquisitions or disposals where anticipated or proposed land use is similar to existing land use and zoning, both in type and intensity;
29. Disposal of excess easement interests to the underlying fee owner;
30. Renewals and minor amendments to existing real estate grants for use of government-owned real property where no significant change in land use is indicated;
31. Land withdrawal continuances or extensions that merely establish time periods and where there is no significant change in land use;
32. Renewals and/or initial real estate in grants and out grants involving existing facilities and land wherein use does not change significantly (e.g., leasing of federally-owned or privately-owned housing or office space, and agricultural out leases);
33. Grants of license, easement, or similar arrangements for the use of existing rights-of-way or incidental easements complementing the use of existing rights-of-way for use by vehicles (not to include significant increases in vehicle loading); electrical, telephone, and other transmission and communication lines; water, wastewater, storm water, and irrigation pipelines, pumping stations, and facilities; and for similar utility and transportation uses;
34. New construction that is similar to existing land use and, when completed, the use or operation of which complies with existing regulatory requirements (e.g., a building within a cantonment area with associated discharges/runoff within existing handling capacities);
35. Demolition, disposal, or improvements involving buildings or structures when done in accordance with applicable regulations including those regulations applying to removal of asbestos, PCBs, and other hazardous materials;
36. Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) that use existing rights of way, easements, distribution systems, and/or facilities;
37. Decisions to close facilities, decommission equipment, and/or temporarily discontinue use of facilities or equipment, where the facility or equipment is not used to prevent/control environmental impacts;
38. Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site;
39. Relocation of personnel into existing federally-owned or commercially leased space that does not involve a substantial change affecting the supporting infrastructure (e.g., no increase in vehicular traffic beyond the capacity of the supporting road network to accommodate such an increase);
40. Pre-lease upland exploration activities for oil, gas or geothermal reserves, (e.g., geophysical surveys);
41. Installation of devices to protect human or animal life (e.g., raptor electrocution prevention devices, fencing to restrict wildlife movement onto airfields, and fencing and grating to prevent accidental entry to hazardous areas);
42. Reintroduction of endemic or native species (other than endangered or threatened species) into their historic habitat when no substantial site preparation is involved;
43. Temporary closure of public access to Department of the Navy property in order to protect human or animal life;
44. Routine testing and evaluation of military equipment on a military reservation or an established range, restricted area, or operating area; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the Department of the Navy was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment;
45. Routine military training associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and weapons systems conducted at the unit or minor exercise level; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the Department of the Navy was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment.

Source: 32 CFR 775.6(f), 23 February 2004.

c. Applying a Categorical Exclusion. It is the responsibility of the action proponent (often at the activity level) to decide to categorically exclude a proposed action. The action proponent may not apply a Categorical Exclusion in the following situations:

(1) When More than One Categorical Exclusion Must be Applied to a Proposed Action. A Categorical Exclusion is intended to completely address the effects of a single entire action. CEQ

direction is that a proposed action may not be divided into multiple components such that more than one Categorical Exclusion may be applied. If a single Categorical Exclusion doesn't completely address the entire action, the action does not fit into the category for which the Categorical Exclusion was justified or approved. An action proponent must prepare an EA or EIS if more than one Categorical Exclusion is required for an entire action.

(2) When an EA is Being Prepared. A Categorical Exclusion may not be applied to individual components of an action that is the subject of an EA. The entire action must be evaluated in the EA.

(3) Programmatically. Categorical Exclusions are not programmatic and may not be applied programmatically.

d. **Documenting Use of a Categorical Exclusion.** A decision by an action proponent to not prepare an EA or EIS on the basis of a Categorical Exclusions must be documented in a Record of Categorical Exclusion. The Record of Categorical Exclusion is normally 1-2 pages in length and signed by the Commanding Officer or his designee, or the Program Executive Officer for an acquisition action. The Record of Categorical Exclusion must describe:

(1) The Categorical Exclusion(s) found applicable by the action proponent;

(2) Facts supporting the use of the applicable Categorical Exclusion (s); and

(3) Specific considerations of whether the exceptions to the use of a Categorical Exclusion are applicable (i.e., exclusion criteria listed in paragraph 5-5.1.a above).

At a minimum, a Record of Categorical Exclusion should be retained in Command files for 5 years and made available for review during Environmental Compliance Evaluations (ECEs).

5-5.2 Environmental Assessments (EAs)

a. **General.** An EA is an analysis of the potential environmental impact of a proposed action. Action proponents must prepare an EA when they do not know beforehand whether or not the proposed action will significantly affect the human environment or be controversial regarding environmental effects. An EA will either result in a Finding Of No Significant Impact (FONSI), or, if a significant impact is expected, preparation of an Environmental Impact Statement (EIS).

b. **Action Normally Requiring EAs.** The action proponent prepares an environmental assessment of the action unless it is determined that an EIS shall be prepared or that an action falls within the scope of one or more categorical exclusions. The following are examples of actions that, under normal conditions, would require preparation of an EA:

(1) Training exercises on or over (airspace) non-military property.

(2) Major training exercises on military property not categorically excluded, for which the impacts are unknown, or for which the action proponent does not already know the impacts to be significant.

(3) Dredging projects that increase water depth over previously dredged or natural depths.

(4) Proposed utilization of tidal and non-tidal wetlands that would require a special permit.

(5) Real estate acquisitions or outleases of land involving one of the following:

(a) New ingrants/outgrants only, i.e., not renewals nor continuances wherein land usage remains the same,

(b) Fifty acres or more where existing land use will change and will not be categorically excluded, or

(c) Renewals of agricultural and grazing leases involving changes in animal stocking rates, season of use, or conversions to or from cropland.

(6) Real estate acquisition of any size or ingrants/outgrants, which may be considered environmentally controversial, regardless of the appropriation or intended use.

(7) Family housing projects when resident population changes substantially.

(8) New target ranges or range mission changes that would increase environmental impact.

(9) Exercises conducted at the request of States (e.g., ship sinking for artificial reefs) or territorial governments wherein they are expecting an environmental impact.

(10) New low altitude aircraft training routes and/or special use airspace and warning areas wherein overflights impact persons or wildlife (particularly endangered species).

(11) Mission changes, base closures/ relocations/consolidations and deployments that would cause major long term population increases or decreases in affected areas. EAs are not required where impacts are purely socioeconomic and involve no potential for significant environmental impacts.

(12) Any activity proposed that may adversely affect threatened or endangered species, or the designated or proposed critical habitat of an endangered species. Chapter 24 discusses the associated but separate need for a biological assessment and consultation under the Endangered Species Act.

(13) Any activity proposed that would adversely affect historical or cultural sites either now listed on the National Register of Historical Places or deemed eligible for inclusion on the National Register (see chapter 27).

(14) Permanent closure or limitation of access to any areas that were open previously to public use, such as roads or recreational areas.

(15) Construction or any other action resulting in discharges to or potential contamination of an aquifer, watershed, or recharge zone regulated by the Safe Drinking Water Act (SDWA).

(16) Irreversible conversion of "prime or unique farmland" to other uses.

(17) Transportation of hazardous substances, conventional munitions, or other wastes for intentional disposal into the oceans by any naval unit.

(18) Award or termination of contracts involving substantial quantities of natural resources, wherein the Navy is the contracting agency.

(19) Any action for which the environmental effect is scientifically controversial.

c. **The STEP-R Process.** The Strategic Environmental Planning Roadmap (STEP-R) described in appendix N (paragraph 3.15) should be used in initiating or conducting pre-planning activities during the environmental planning process for EAs. The Strategic Environmental Planning Roadmap (STEP-R) has been developed for universal application by action proponents and service providers. Implementation of STEP-R will ensure early initiation of environmental planning for all proposed actions; establish a foundation for communication, awareness, and consensus among internal Navy stakeholders; provide adequate information for cost effective contracting and document review; and, establish a strong core of information that will lead to the preparation of high quality documents. The STEP-R process should culminate in a common understanding of the proposed action, the alternatives to be considered, and likely public reaction to the proposed action.

d. **Content of EAs.** When preparing an EA, the action proponent should follow the same evaluation thought process as for EISs (i.e., focus on the issues of concern and make the EA length sufficient to address those issues). Briefly discuss the need for the action; discuss alternatives considered; describe the environmental impacts of the proposal and any environmental monitoring requirements and provide a listing of the agencies and persons consulted. Additional guidance on alternatives is provided in appendix N, paragraph 3.3.

e. Other Regulatory Concerns Regarding EA Analysis.

(1) See chapter 27 for additional information regarding cultural resources.

(2) See chapter 25 for additional information regarding federal consistency under the Coastal Zone Management Act.

(3) The action proponent must discuss the potential impact on threatened or endangered animal or plant species, or if the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) designates the area a "critical habitat" for such species. See chapter 24 for additional responsibilities regarding the protection of endangered species. Additional policy on coordination with USFWS and NMFS is provided in appendix N, paragraph 3.10.

(4) To satisfy the General Conformity Rule under Section 176(c) of the Clean Air Act, include the results of the Conformity Review as an appendix to an EA that proposes an action in a nonattainment or maintenance area. The action proponent should include in the Conformity Review one or a combination of the following: (1) a determination that the action is not subject to the rule, citing the specific exception from 40 CFR 51.853(c); (2) a Record of Non-Applicability, or; (3) a Conformity Determination.

f. **Public Participation.** CEQ regulations recognize the importance of public participation in preparing EAs. Action proponents should ensure that appropriate communications are initiated and

maintained with affected and interested parties. In determining the extent to which public participation is practicable for EAs, the action proponent should consider the following factors:

(1) The magnitude of the environmental considerations associated with the proposed action;

(2) The extent of anticipated public interest;

(3) Any relevant questions of national security and classification.

g. **EA Process**

(1) Notification Letter. At the commencement of EA preparation, the action proponent will notify CNO (N45) via a brief letter that describes the proposed action. This letter will afford CNO (N45) the opportunity to inform the action proponent of any policy issues or regional concerns that will need to be addressed in preparing the EA. Additional detail on the content of the notification letter is found in appendix N, paragraph 3.3b. Appendix N provides policy on interaction/coordination with public, Tribal Government, or State or Federal regulatory agency when a proposed action involves the marine environment.

(2) Determining Applicability of the General Conformity Rule. The action proponent must determine if the General Conformity Rule under Section 176(c) of the Clean Air Act applies to the proposed action as defined in the EA. The CNO Interim Guidance on Compliance with the Clean Air Act General Conformity Rule (appendix F) describes the requirements and procedures for preparing a Conformity Review. The results of the Conformity Review should be included as an appendix to an EA that proposes an action in a nonattainment or maintenance area. The action proponent shall include the Conformity Review either one or a combination of the following:

(a) A determination that the action is not subject to the rule;

(b) A Record of Non-Applicability citing the specific exception from 40 CFR 51.853(c), including the supporting de minimis calculations, if applicable; or

(c) a Conformity Determination.

If an action proponent prepares a Record of Non-Applicability for a proposed action occurring in a nonattainment or maintenance area, he/she shall sign the record and include it, along with the supporting analysis, in the EA for processing.

Where a case requires a Conformity Determination, the action proponent shall distribute a "review EA" with the draft Conformity Determination as an appendix to appropriate review agencies listed in the Conformity Rule and interested parties for a 30-day comment period (See appendix F). Concurrently, the action proponent shall publish a public notice on the availability of a Draft Conformity Determination in the local newspaper. Once the EA and its Conformity Determination are finalized by the action proponent, the Navy shall process the EA internally as shown in Figure 5.1 (except as noted in paragraph 5-6.8).

(3) Processing of EAs Not Requiring CNO (N45) Review or Action

(a) If the action proponent is in one of the following commands: FFC, COMPACFLT,

Commander, Navy Installations Command (CNIC), Navy Education and Training Command (NETC), Commander, Navy Reserve Force (COMNAVRESFOR), Commander, Naval Sea Systems Command (NAVSEA), (COMNAVSEASYSCOM), or Commander, Naval Air Systems Command (COMNAVAIRSYSCOM), he or she shall submit the designated number copies of the completed EA via the chain of command to the flag-level official designated to sign FONSIs at its headquarters ("designated headquarters official"). Each command with a designated headquarters official shall keep CNO (N45) informed of the name of that official. If the action proponent is not in the chains of command mentioned above, and the proposed action is not acquisition related, the action proponent shall submit the EA to CNO (N45) via the chain of command. Action proponents shall continue to process acquisition-related EAs in accordance with reference (e). If the EA involves actions that affect resources under the cognizance of an Area Environmental Coordinator (AEC) or Regional Environmental Coordinator (REC), the action proponent shall coordinate with the AEC or REC to obtain their concurrence. Should the AEC or the REC not concur with the proposed action, alternatives considered, criteria for development of alternatives, or mitigation, he or she shall forward the matter to the applicable Echelon II command for resolution. If resolution cannot be obtain, the matter should be forward by the Echelon II command to CNO (N45).

(b) The designated headquarters official for the commands listed in the previous paragraph shall evaluate the documented impact of the proposed action on the environment and shall advise the action proponent if additional information is required. The designated headquarters official shall ensure that each EA includes, as applicable, appropriate regulatory/statutory conclusions as supported by the analysis (see appendix N, paragraph 3.11 for further guidance on regulatory/statutory conclusions).

(c) After evaluating the EA, the designated official of the commands that have been delegated FONSI signature authority shall decide whether a FONSI is appropriate, or whether the proposed action would generate significant impacts. The inclusion of mitigation measures as part of the proposed action may bring impacts below the threshold of significance. If appropriate, he/she shall prepare a FONSI. All mitigation committed to in the FONSI is legally binding on the action proponent, and he or she must implement it. The action proponent shall document the completion of mitigation measures committed to in the FONSI that bring a potentially significant impact to a non-significant level and retain this record with the project file. If the proposed action (operations, exercise, test, construction, land use decision, or other activity) involves threatened and endangered species (marine and terrestrial), marine mammals, and essential fish habitat, the action proponent shall prepare a post-action analysis as described in appendix N (paragraph 3.5).

(d) After preparation of the FONSI, the designated official shall notify the action proponent to complete public notification and the NEPA process. Public notification shall normally consist of newspaper publication of a summary of the FONSI and direct mail-out of the full FONSI by the action proponent to any interested or affected parties (as defined during preparation of the EA). The action proponent shall publish the summary of the FONSI for 3 consecutive days in the "Public Notices" section of a newspaper with distribution in the area of the proposed action. In some cases where publication in large-city newspapers would result in prohibitively high cost, the action proponent may opt for a broad mail-out of the FONSI to all regulatory/resource agencies, interested or affected parties, libraries, and elected officials, instead of newspaper publication. Where appropriate, the action proponent should also publicize in foreign-language newspapers.

(e) If the EA includes a Conformity Determination, which has undergone public review, CNO (N45) shall review and sign the Conformity Determination and shall include it in the FONSI.

In these cases, the action proponent must publish a notice of the availability of a FONSI/ Conformity Determination in a local newspaper within 30 days of signature.

(f) The designated headquarters official must ensure that within three weeks of FONSI signature, copies of all final EAs are uploaded to the CNO (N45) Environmental Planning Library. The uploaded files should be in the most recent version of Adobe Acrobat (.PDF) and include the final EA, the signed FONSI for an EA, Notice of Availability for the EA, signed legal and technical sufficiency documents, and all endorsement letters. Paper copies must be made available, if requested. Guidance on the CNO (N45) Environmental Planning Library is provided in paragraph 5-6.10 of this instruction.

(4) Processing of EAs Requiring CNO (N45) Review or Action. If the action proponent is not in any of the chains of command mentioned above, and the proposed action is not acquisition related, the action proponent shall submit the EA to CNO (N45) via the chain of command. The timelines identified in appendix N shall be followed. Action proponents shall continue to process acquisition-related EAs in accordance with reference (e).

(5) If the proposed action involves:

(a) Effects of national concern,

(b) An action closely similar to that which normally requires the preparation of an EIS, or

(c) An action without precedent,

the action proponent will forward the EA to CNO (N45) via the regional environmental coordinator and chain of command. CNO (N45) will review the EA and determine if a FONSI is appropriate. If so, CNO N45 shall prepare the FONSI in coordination with, and for approval by, Assistant Secretary of the Navy (Installation & Environment) (ASN (I&E)) for publication in the Federal Register. CNO (N45) shall also notify the action proponent to complete the public notification and NEPA process.

For projects under these circumstances, the action proponent shall make the FONSI available to the public for 30 days before the FONSI becomes final at which time the action may begin.

(4) EA Addendums. See appendix N (paragraph 3.3c).

5-5.3 Environmental Impact Statements (EISs)

a. **General.** In an EIS, the action proponent provides full and unbiased discussion of significant environmental impacts and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impact or enhance the quality of the human environment.

b. **Guidelines and Standards.** The action proponent may use several guidelines to judge the significance of the effect of an action on the environment, including:

(1) The Geographical Extent of the Action. For example, construction, land use modification, etc., to support a limited maneuver or training exercise by an individual command may not normally have a significant effect upon the environment. However, training exercises on a broad geographic scale involving diverse natural areas would be more likely to have a significant effect on environmental quality.

(2) The Long-Term Impact of the Action. The action proponent should maintain an objective view toward the magnitude of environmental effects of both the immediately contemplated action and future actions, for which the proposed action may serve as a precedent, and which may result in a cumulatively significant impact.

(3) The Risk Potential of the Action. For example, even though the environmental impact of an efficiently run fuel depot may not be significant, the effects of an oil spill (if determined “reasonably foreseeable” within the timeframe of the project) on the local fishing industry or the surrounding beaches, in the case of a tourist-oriented economy, may well render construction of such a depot very significant.

(4) The Existing or Possible Historical, Architectural, or Archeological Interest of the Site. See chapter 27 for additional information regarding cultural resources.

(5) The Potential Impact on Endangered Animal or Plant Species. Particularly if the USFWS or the NMFS designates the area a "critical habitat” for such species. See chapter 24 for additional responsibilities regarding the protection of endangered species.

c. **Actions for Which EISs Must Be Prepared.** The following are examples of actions that may have a significant impact on the quality of the human environment or are potentially controversial in environmental effects, and therefore require preparation of an EIS by an action proponent:

(1) Large dredging projects or dredging projects where dredged material disposal may result in significant impacts.

(2) Proposed major construction and filling in tidelands/wetlands.

(3) Establishment of major new installations.

(4) Major land acquisitions that result in a change in how the property is used.

(5) New sanitary landfills.

(6) Disposal of biological or chemical munitions and pesticides or herbicides other than in the manner in which they are authorized for use or disposal.

When an action is among those listed above, closely analogous to the same, or when an EA concludes impacts to be significant or environmentally (scientifically**)** controversial, the action proponent will prepare an EIS using procedures outlined in this instruction. The action proponent shall notify CNO (N45) before commencing an EIS (see 5-5.4.h).

d. **EIS Preparation.** To achieve the goal of NEPA to prepare a concise and useful statement, action proponents are to prepare EISs in the following manner:

(1) Make EISs analytic rather than encyclopedic.

(2) Discuss the impacts in proportion to their significance. Discuss only briefly other, non-significant issues.

(3) Keep EISs concise and no longer than necessary to comply with NEPA, these regulations, and those issued by the CEQ. Vary the length of discussion with respect to: (1) the potential environmental issues, and (2) the context and intensity of the action.

(4) Describe the criteria for selecting alternatives.

(5) The range of alternatives discussed in EISs, including the No Action alternative, will encompass the ultimate decision-maker's alternatives, and those directed by the lead agency if the DOD is a cooperating agency.

(6) Before making a final decision, cognizant commands will not make irreversible commitments of resources that change the physical environment.

(7) Use EISs as a means of assessing whether the environmental impacts of proposed actions include disproportionately high adverse human health or environmental effects on minority and low-income populations.

(8) To satisfy the General Conformity Rule under Section 176(c) of the Clean Air Act, include the results of the Conformity Review as an appendix to the DEIS proposing an action in a non-attainment or maintenance area. Appendix F describes the requirements and procedures for preparing a Conformity Review.

e. **Document Length.** The action proponent should make every effort to prepare a document that focuses only on pertinent facts and excludes material not directly applicable to the expected impact while ensuring that the statement contains sufficient information and baseline data to support the conclusions reached. If desired, the action proponent may include additional data to the statement as appendices.

f. **Contractor Involvement in EIS Preparation.** Contractors frequently prepare EISs and EAs. To obtain unbiased analyses, commands must select contractors in a way that avoids any conflict of interest. Contractors must therefore execute disclosure statements specifying they have no financial or other interest in the outcome of the project. Action proponents must closely monitor the contractor's efforts throughout the contract to ensure an adequate assessment/statement and thus avoid extensive, time consuming, and costly revisions. Navy remains fully responsible for the scope and content of EISs that are prepared by contractors.

g. **Cooperation with State and Local Agencies.** To eliminate duplication of State and local procedures, action proponents will cooperate fully with State and local agencies to reduce duplication among NEPA, State and local requirements. Such cooperation could include:

(1) Joint planning processes.

(2) Joint environmental research and studies including assessments of the presence or special needs of minority and low-income groups, including foreign language interpretation, collection, and analysis of demographic characteristics.

(3) Joint public hearings (except where otherwise provided by statute).

(4) Joint EAs.

(5) Joint EISs.

h. **Notice of Intent and Scoping**

(1) Notice of Intent Package. To facilitate early resolution of policy issues affecting preparation of an EIS, action proponents will forward to ASN (I&E) via CNO (N45), an Notice of Intent (NOI) Package. The required contents of the NOI package and the timeline for its review by CNO (N45) are described in appendix N. In preparing the NOI Package, particularly the Preliminary Description of Proposed Action and Alternatives, the action proponent shall follow the requirements of STEP-R (appendix N, paragraph 3.15).

(2) Scoping. During the scoping process action proponents will:

(a) Invite the participation of affected Federal, State, and local agencies, any Indian tribe, minority and low-income populations, and other interested persons.

(b) Determine the scope and the significant issues that the EIS will analyze in depth.

(c) Identify and eliminate from detailed study insignificant issues or those previously covered by environmental review, narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere.

(d) Allocate assignments for preparation of the EIS among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement.

(e) Indicate any public EAs and other EISs, which are being or will be prepared, that relate to but are not part of the scope of the impact statement under consideration.

(f) Indicate the relationship between the timing of the preparation of EISs and the agency's tentative planning and decision making schedule.

(g) Identify other environmental review and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies concurrently with, and integrated with, the EIS.

CNO (N45) will publish the NOI to prepare an EIS in the Federal Register. The NOI will briefly describe the proposed action and the scoping process. In addition to publication of the NOI in the Federal Register, the action proponent will mail the NOI directly to concerned agencies and persons. The action proponent should also publish the NOI in local newspapers (especially if extensive mailings are not

practicable or may not reach all affected or interested persons). CNO (N45) should make these notifications as soon as practicable after deciding to require an EIS and notifying the proper chain of command. Action proponents may carry out the functions identified in the preceding paragraphs in the context of a public, informal meeting at which written responses or oral presentations resulting from the public notices may be received.

Action proponents may hold such scoping meetings whenever practicable, but they are not mandatory. There is no authority for the payment of expenses incurred by any private person(s) in the preparation and presentation of information at these meetings. If no meeting is to occur, the cognizant command will address the issues based upon responses to notices processed and documented. If a public scoping meeting is to occur, a notice of the public scoping meeting will be published in the Federal Register as part of the NOI, or as soon as practical after the NOI is published. In no case shall the command publish a notice less than 15 days before the day of the public meeting. In addition to publication in the Federal Register, the action proponent will mail the NOI and/or announcement of scoping meeting directly to concerned agencies, organizations and individuals, and publish it in local newspapers. Per E.O. 12898, whenever practicable and appropriate, the action proponent will translate the NOI and announcement of the scoping meeting for non-English speaking communities or persons interested.

i. **Processing the DEIS.** The Navy shall process the DEIS as described in appendix N, paragraph 3.4.

(1) Distribution of the DEIS. In conjunction with distribution of the DEIS, the action proponent may request specific comments from:

(a) Any Federal agency that has jurisdiction by law or special expertise regarding any environmental impact involved, or one authorized to develop and enforce standards applicable to the proposed action.

(b) Appropriate State and local agencies that are authorized to develop and enforce standards applicable to the proposed action.

(c) Indian tribes, when the effects may be on a reservation.

(d) Any agency that has requested that it receive statements on actions of the kind proposed.

(e) The public, affirmatively soliciting comments from those persons or organizations that may reasonably be interested or affected.

(f) Minority and low-income populations.

(2) Public Review Period. A minimum of 45 days is allocated for agency/public review, beginning with the date on which notice of the DEIS appears in the Federal Register. Normally that date shall be the Friday following the week that EPA receives the statement. The action proponent may extend the review time for anyone making a timely request for additional comment time. Failure to file timely comments shall not be a sufficient reason for the Navy to extend the review period.

Action proponents may hold public hearings as part of the public review process for the DEIS. If the hearing is likely to be contentious, the action proponent should consider using a military judge from the JAG as a hearing officer, coordinating this decision with CNO (N45). Action proponents shall prepare a notice of public hearings (includes hearing schedules and provide the notice to CNO (N45) with adequate time for publishing it in the Federal Register at least 15 days prior to the hearing.

(3) General Conformity. The General Conformity Rule reporting requirements are similar to those for an EA. The action proponent shall include the appropriate documentation to satisfy the Conformity Review in the DEIS. The action proponent shall also publish a notice of availability of the Draft Conformity Determination in the local newspaper when the DEIS is filed with EPA and ensure that the comment period runs concurrently with the 45-day DEIS review period.

j. **Processing the FEIS.** Action proponents shall process the FEIS as identified in Attachment J of appendix N, paragraph 3.4.

(1) After the passage of a minimum of 45 days from the date the announcement of the DEIS appears in the Federal Register, action proponents may file an FEIS. Action proponents shall incorporate into the FEIS all comments received on the DEIS. Where comments reveal previously unrecognized impacts or changes to identified impacts, action proponents shall include sufficient analysis thereof. Action proponents shall reproduce individual comments received from agencies and the public where relevant but should discourage the inclusion of verbatim records from public hearings. Action proponents shall ensure the consideration of the hearings by summarizing comments under relevant topic headings, followed by an appropriate response. Action proponents shall also include a meaningful response to all responsible opposing views that have not been adequately addressed in the DEIS. Possible responses in the FEIS include:

(a) Modify alternatives including the proposed action.

(b) Develop and evaluate alternatives not previously given serious consideration.

(c) Supplement, improve, or modify the analyses.

(d) Make factual corrections.

(e) Explain why the comments do not warrant further response, citing the sources, authorities, or reasons that support such a position, and, if appropriate, indicate those circumstances that would trigger a reappraisal or further response.

(2) Where Navy response to comments can be accomplished by referencing sections contained in the DEIS, the action proponent shall clearly identify pertinent sections in the response.

(3) If appropriate, the action proponent shall include an unsigned version of the Final Conformity Determination in the FEIS.

(4) The action proponent shall distribute the FEIS to recipients of the DEIS and to any person, organization, or agency that submitted substantive comments on the DEIS.

(5) Each week, EPA publishes notices of availability in the Federal Register for EISs filed the previous week. The minimum time for FEIS public review shall be calculated from the date of this notice. Action proponents shall publicly distribute FEISs no later than the time they file copies with EPA.

k. **Record of Decision.** Action proponents shall delay committing resources irreversibly for a proposed action until the later of the following dates:

(1) 90 days after publication of the Federal Register notice announcing the filing of the DEIS with EPA.

(2) 30 days after publication of the Federal Register notice of the filing of the FEIS with EPA.

The action proponent will forward all comments on the FEIS along with draft responses to CNO (N45) as soon as the 30-day Wait Period is over or as soon as practicable.

The preparation and timeline for review of the draft ROD shall be consistent with appendix N, paragraph 3.13. CNO (N45) shall forward the draft ROD to the appropriate CNO codes to ensure consistency with operational policies. Once CNO issues are resolved, CNO (N45) will forward the draft ROD to ASN (I&E) for approval and signature. If appropriate, ASN (I&E) will incorporate the Final Conformity Determination into the ROD. When ASN (I&E) approves and signs the ROD, CNO (N45) shall arrange for its publication in the Federal Register.

In addition to Federal Register publication, the action proponent shall distribute the ROD to all interested parties, and, if appropriate, publish a notice of availability of Final Conformity Determination in local newspapers and distribute it to agencies and interested parties within 30 days of the approval of the ROD.

l. Mitigation Implementation. See appendix N, paragraph 3.5 for additional policy regarding implementation of mitigation proposed in an EIS.

5-5.4 Significant Issues and Other Factors

a. **Classified Actions.** Some aspects of a proposed action may involve information not releasable to the public because it is classified or for some other legal reason. This does not relieve the action proponent from complying with the requirements of this instruction. The action proponent shall prepare, safeguard and disseminate EISs, both draft and final, as well as EAs, per the requirements applicable to classified or sensitive unclassified information. When feasible, the action proponent should organize the documents in such a manner to include the classified or sensitive unclassified portions as appendices. In this way, the action proponent can make unclassified portions available to the public. The action proponent shall coordinate the review of classified or sensitive unclassified EISs with the EPA to fulfill requirements of Section 309 of the Clean Air Act (CAA).

In rare circumstances where even public notice of the desired action would disclose classified information, there is no "proposal" under NEPA, and neither an EA nor EIS is required. Plans for actions that would disclose the presence of nuclear weapons, for example, do not constitute "proposals" under NEPA. CNO (N45) must review such instances and should require the consideration of environmental factors using other internal procedures that would provide decision-makers with information of a quality

equivalent to that produced under NEPA and excepting public review and comment, to evaluate the potential environmental impacts of the action. For such actions involving nuclear weapons, the internal procedures will address the following elements:

(1) A description of the worst case accident considering the particular weapons involved.

(2) The best estimate for accident probabilities.

(3) Alternative site impact information.

(4) Additional information on potential land contamination and clean up.

An EA or EIS containing classified information or other information, prohibited from release by law, serves the same purpose as an ordinary EA or EIS although not all its contents are subject to public review and comment. Action proponents must ensure that the entire package accompanies the proposal through the decision making process. In this way, the content of an EIS or EA containing portions that cannot be released to the public will meet the same overall content requirements that are applicable to an EA or EIS that is fully published.

b. **Continuing Actions.** CEQ regulations define major Federal actions subject to evaluation under NEPA to include, among other things, "new and continuing activities." The term "new activities" encompasses future actions (i.e., those not ongoing at the time of the proposal). The DON will apply the term "continuing activities," which may necessitate the preparation of a NEPA document, to include activities that are presently being carried out in fulfillment of a military mission and function, including existing training functions where there are:

(1) Currently occurring environmental effects, not previously evaluated in a NEPA document, and there is a discovery that substantial environmental degradation is occurring, or is likely to occur, because of ongoing operations. Examples: A discovery that significant beach erosion is occurring because of continuing amphibious exercises; new designation of wetland habitat or discovery of an endangered species residing in the area of the activity.

(2) Environmental effects of an ongoing activity that are significantly and qualitatively different or more severe than predicted in a NEPA document prepared in connection with the commencement of the activity.

Navy activities shall consider substantial change in a continuing activity, which has the potential for significant environmental impacts, as a proposal for a new action and document it accordingly. Preparation of an appropriate NEPA document is not a necessary prerequisite, nor a substitute, for compliance with other environmental laws.

c. **Emergency Actions.** Where emergency circumstances outside the control of the Navy make it necessary to take an action with significant environmental impact without observing the provisions of CEQ regulations, the Navy must consult with the CEQ about alternative arrangements. Action proponents must submit requests for such consultation to CNO (N45) as soon as they identify the need to consult with the Secretariat and in appropriate cases, the CEQ. The action proponent shall limit alternative arrangements to those aspects of a proposal that must continue on an emergency basis. The remainder is subject to normal NEPA review. Ordinarily, the failure to plan properly does not establish an emergency.

5-5.5 Weapons System Acquisition Programs. The program manager must comply with NEPA or E.O. 12114 (Environmental Effects Abroad of Major Federal Actions) when a proposed action within an acquisition program will impose a physical effect on the natural environment.

Reference (c) provides the requirement for the program manager to develop a Programmatic Environment Safety and Occupational Health Evaluation (PESHE) for all acquisition programs. For acquisition-related programs that may trigger compliance with NEPA or E.O. 12114, the PESHE must contain a Compliance Schedule that discusses how compliance with NEPA and E.O. 12114 will be obtained. The requirements of the Compliance Schedule are provided below.

(1) Compliance Schedule. In the NEPA/E.O. 12114 Compliance Schedule program managers should list:

(a) The proposed action;

(b) Anticipated date and location of the action;

(c) The action proponent;

(d) The anticipated level of NEPA/E.O. 12114 documentation required;

(e) The anticipated initiation date of the action;

(f) Start and completion date for the NEPA/E.O. 12114 analysis/document;

(g) Decision date;

(h) Approval authority for the NEPA/E.O. 12114 document.

(2) PESHE Plan of Action and Milestones. The PESHE should include a current plan of action and milestones (POA&M) that matches the upcoming actions (tests, for example) with milestones for budgeting and completing the necessary NEPA or E.O. 12114 documentation. The program manager can refer to the PESHE POA&M to plan and budget his/her NEPA or E.O. 12114 compliance. In many cases, preparation of an EA must begin at least 6-8 months before decision deadlines for a test (e.g., siting or methodology). Budgeting for an EA or EIS may be needed a year earlier. Because environmental concerns may develop at any point during the acquisition process, reference (e) requires program managers to keep the PESHE current throughout the program life cycle. If the program manager indicates the requirement for NEPA/E.O. 12114 documentation in the PESHE, he or she must complete it before making a decision having an adverse environmental impact or limiting a choice from reasonable alternatives.

(3) Determining the Potential for Significant Impact. The program manager bases the determination of when the potential for significant impact exists on project specific requirements and the criteria in this instruction. For example, concept development during early phases of acquisition programs may use techniques known not to cause a significant environmental impact (e.g., computer simulations). In other cases, the potential for significant impact may occur during these early phases, due to testing and evaluation requirements. Section 5-5.3.b and 5-5.4.c list examples of actions with the potential for environmental impact.

5-5.6 Pollution Prevention

Pollution prevention initiatives, as applicable, should be addressed in the ENVIRONMENTAL CONSEQUENCES section of an EA or EIS. The following considerations may be addressed in the analysis:

a. EPA will evaluate NEPA documentation reviewed under authority of Section 309 of the Clean Air Act for incorporation of pollution prevention measures and will assist Federal agencies in acknowledging and receiving credit for commitment to pollution prevention.

b. The term "pollution prevention" includes: equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

During all stages of project formulation, from early planning and NEPA documentation through implementation, action proponents should seek opportunities to incorporate pollution prevention into their programs.

c. The following list describes areas where action proponents may appropriately discuss pollution prevention during the NEPA scoping and subsequent environmental review phases:

(1) The definition of the project's purpose and need (the proponent should clearly identify the purpose and not slant the definition to support the proponent's desires, which could limit pollution prevention options).

(2) The project design specifications and standards.

(3) The sizing of a project (e.g., a smaller project may affect less habitat, have fewer Impacts on soil erosion and water quality, and/or result in less induced growth).

(4) The location of a facility (i.e., away from sensitive habitats, close to centralized transportation or other compatible uses).

(5) The range of alternatives (e.g., whether pollution prevention opportunities are included).

(6) Rejection of certain alternatives (e.g., because of their potential to cause pollution).

(7) Emphasis on environmental requirements (whether the focus is on pollution prevention, source reduction, innovative technologies or traditional end-of pipe, add-on controls).

(8) The capability of the proposed action to prevent pollution.

(9) The secondary effects of a proposed action, which may discourage pollution prevention.

(10) The mitigation measures incorporated into the proposal (i.e., some mitigation measures may have more pollution prevention benefits than others, and significant pollution prevention may require a basic change in the project).

d. Chapter 4 provides further guidance on compliance with the Pollution Prevention Act as well as pollution prevention strategies.

5-5.7 Time Limits. Action proponents commencing the preparation of an EIS should set time limits with due regard for operational requirements as well as the public and agency comment periods established by CEQ regulations. State or local agencies or members of the public may request that the cognizant command set time limits on the NEPA process. In determining time limits (required to complete the EIS), the action proponents may consider the following factors:

a. Potential for environmental harm.

b. Size of the proposed action.

c. State-of-the-art analytic techniques.

d. Degree of public need for the proposed action, including the consequences of delay.

e. Number of persons and agencies affected.

f. The certainty of relevant information, and if it is uncertain, the time required to obtain information of required authenticity.

g. Degree to which the action is controversial.

h. Other time limits imposed on the agency by law, regulations, or E.O.

5-5.8 Format. Action proponents should prepare all pages of the original document on 8 1/2 x 11-inch bond, although it is permissible to use foldout sheets as long as they retain the 11-inch vertical dimension. Use the following format for all EISs and, to the extent appropriate, EAs:

a. **Outside Cover.**

(1) Identify the type of environmental planning document (EA, Draft EIS, or Final EIS).

(2) Identify the proposed action by title.

(3) Identify the action proponent.

(4) Date of publication in month and year.

b. **Inside Cover Sheet**. Do not exceed one page for the inside cover sheet and include:

(1) A list of the responsible agencies including the lead agency and any cooperating agencies.

(2) The title of the proposed action that is the subject of the environmental analysis (and if appropriate the titles of related cooperating agency actions), together with the State(s) and county(ies) (or other jurisdiction if applicable) where the action is located.

(3) The name, address, and telephone number of the person at the responsible command who can supply further information.

(4) A designation of the analysis as an EA, DEIS, or FEIS or draft or final supplement.

(5) A one-paragraph abstract of the statement.

(6) The date by which comments must be received.

c. **Executive Summary.** Action proponents will include an executive summary in each EIS that adequately and accurately summarizes the statement. Place the Executive Summary (it is preferable that the Executive Summary not to exceed ten pages) at the beginning of the document immediately after the cover sheet and include:

(1) The name of the action and whether it is administrative or legislative.

(2) A brief description of the action and what geographical region (including State and county, as applicable) is particularly affected.

(3) A description of alternatives considered.

(4) A summary of the environmental impact, particularly adverse environmental effects, and major mitigating actions required. The action proponent should include a statement regarding the possible exemption from the general conformity rule of the action, or if the action conforms or does not conform to an applicable State Implementation Plan (SIP) or Federal Implementation Plan (FIP).

(5) A statement as to whether the action is anticipated to have a significant environmental impact or will be scientifically controversial.

d. **Distribution List.** The action proponent shall provide a brief, concise list of the names and addresses of all Federal, State and local organizations and persons to whom he or she will distribute the EIS.

e. **Purpose and Need.** Begin the body of the document by explaining the need for any action. Concisely and objectively, set out the justification for the proposed action and the essential requirements that must be satisfied to achieve the purposes of the proposed action.

f. **Alternatives Including the Proposed Action.** Based on the information and analysis presented in the sections entitled EXISTING ENVIRONMENT and the ENVIRONMENTAL CONSEQUENCES present the environmental impacts of the proposal and the alternatives in comparative (matrix) form, thus sharpening the issues and providing a basis for choice among the options by the decision-maker and the public.

The action proponent shall include in the alternatives to the proposed action, where relevant, those not within the existing authority of the agency. A rigorous exploration and objective evaluation of the

environmental impacts of all reasonable alternative actions are essential, particularly those actions that might enhance environmental quality or avoid some or all adverse environmental effects. The action proponent should include sufficient analysis, if applicable, of such alternatives and their environmental benefits, costs, and risks to accompany the proposed action through the review process. If the action proponent is considering whether a cost-benefit analysis is relevant to the choice among environmentally different alternatives for the proposed action, he or she should incorporate it by reference or append it to the analysis as an aid in evaluating the environmental consequences. When a cost-benefit analysis is prepared, discuss the relationship between the analysis and any analysis of unquantified environmental impacts, values and amenities in the EA or EIS. Action proponents need not weigh the merits and drawbacks of the various alternatives where there are important qualitative considerations. However, the action proponent should indicate in the analysis those considerations, including factors not related to environmental quality that are likely to be relevant and important to a decision. This will prevent premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

Examples of alternatives include:

(1) Taking no action.

(2) Postponing action.

(3) Selecting actions of a significantly different nature, meeting mission and project objectives with different environmental impacts.

(4) Different designs or details of the proposed action that would present different environmental impacts (including mitigation measures).

In each case, the action proponent should make the analysis sufficiently detailed to reveal the comparative evaluation of the proposed action and each reasonable alternative. Throughout the EA or EIS, the action proponent shall structure the discussion and analysis to prevent premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

g. **Existing Environment of the Proposed Action**. The EA or EIS shall concisely describe the environment of the affected area, including the baseline conditions used to compare the impacts of the various alternatives. The EA or EIS should make the amount of detail provided in such descriptions commensurate with the extent and impact of the action, and with the amount of information required at the particular level of decision making. The EA or EIS should discuss, where appropriate, urban quality, historical and cultural resources, and the design of the built environment including the reuse and conservation potential of various alternatives and mitigation measures.

h. **Environmental Consequences.** This section forms the scientific and analytic basis for the comparisons presented under the alternatives section. The EA or EIS shall include the environmental impacts of reasonable alternatives in the discussion; note any adverse environmental impacts that cannot be avoided if the proposal is implemented; discuss the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and mention any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. The EA or EIS should not duplicate the discussions of the alternatives section. Instead, this section should involve:

(1) Direct effects and their significance (i.e., an assessment of the positive and negative effects of the proposed action). Action proponents should vary the attention given to different factors according to the nature, scale, and location of the proposed action, and give primary attention to the discussion of those factors most evidently affected by the proposed action.

(2) Indirect effects and their significance. The EA or EIS shall include secondary or indirect consequences for the environment in the analysis. Many major Federal actions, especially those that involve construction (for example, new installations, joint use of an installation, etc.), stimulate or induce secondary effects in the form of associated investments and changed patterns of social and economic activities. Such secondary effects, by their impacts on existing community facilities and activities, by inducing new facilities and activities, or by changes in natural conditions, may often be even more substantial than the primary effects of the original action itself. For example, the EA or EIS should estimate the effects of the proposed action on population and growth impacts if expected to be significant and evaluate the effect of any possible change in population patterns, particularly those which may affect minority and low-income population. If applicable, the EA or EIS shall also evaluate the growth upon the resource base including land use, water, and public services of the area in question.

(3) Relationships between the proposed action and the objectives of Federal, State and local land use plans, policies, and controls for the area concerned. The EA or EIS shall discuss how the proposed action may conform or conflict with the objectives and specific terms of approved or proposed Federal, State, and local land use plans, policies, and controls, if any, for the area affected, including those developed in response to environmental legislation. Where a conflict or inconsistency exists, the EA or EIS shall describe the extent to which the action proponent has reconciled its proposed action with the plan, policy, or control. The action proponent shall document justification for any decision to proceed, in the absence of full reconciliation.

(4) The environmental effects of alternatives including the proposed action. These narratives are the basis for the comparisons made in the alternatives section of the document.

(5) Energy requirements and conservation potential of various alternatives and mitigation measures. The EA or EIS shall address comments regarding the energy impact, including the alternatives considered.

(6) Any irreversible and/or irretrievable commitments of resources involved anticipated upon implementation of the proposed action. The EA or EIS shall identify from a survey of unavoidable impacts the extent to which the action irreversibly curtails the range of potential uses of the environment. The term "resources" in this regard refers to the natural or cultural resources that would be irretrievably committed or lost if the action goes forward.

(7) Relationship between local, short-term use of man's environment and maintenance and enhancement of long-term biological productivity. The EA or EIS shall briefly discuss the extent to which the proposed action involves tradeoffs between short-term environmental gains and the expense of long-term losses or vice versa. Also, the EA or EIS shall discuss the extent to which the proposed action forecloses future options. In this context, short-term and long-term do not refer to any fixed time periods and should be viewed in terms of the environmentally significant consequences of the proposed action.

(8) Means to mitigate and/or monitor adverse environmental impacts (if not previously discussed). Where appropriate, the EA and EIS shall discuss mitigation measures such as avoidance, design

modification, rehabilitation, preservation, or compensation. It shall also address the extent of any benefits derived from implementing mitigation measures and/or monitoring programs to avoid or reduce some or all of the adverse environmental effects, if appropriate.

The action proponent shall coordinate any mitigation measures included in the NEPA document with the appropriate chain of command to ensure concurrence, implementation feasibility, and funding availability. If necessary, the action proponent shall coordinate mitigation measures with cognizant regulatory agencies.

(9) Possible conflicts between the proposed action and the objectives of Federal, regional, State and local (and in the case of a reservation, Indian tribe) land use plans, policies, and controls for the area concerned.

(10) Cumulative impacts (see paragraph 5-3.10) as appropriate and in context with the scope and magnitude of the proposed action.

i. **List of Preparers.** Action proponents will prepare EAs and EISs using an interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts. To ensure that this approach is undertaken, EAs and EISs shall list the names, together with their qualifications (expertise, experience professional disciplines) of the persons who were primarily responsible for preparing the documents or significant background papers, including basic components of the statement. Where possible, the EA or EIS shall identify the persons who are responsible for a particular analysis, including analyses in background papers. This list should not exceed two pages.

j. **Appendix.** Action proponents shall include any of the following information as appendices in the EIS:

(1) Material prepared in connection with an EIS (as distinct from material that is not so prepared or that is incorporated by reference) such as collected comment letters, etc.

(2) Material that substantiates any analysis fundamental to the impact statement.

(3) Analytic and relevant material to the decision to be made.

k. **Incorporation by Reference.** To the extent practicable, action proponents preparing EAs or EISs shall incorporate material by reference when the effect will cut down on bulk without impeding agency and public review of the action. Action proponents shall cite the incorporated material in the statement and briefly describe its content. Action proponents shall not incorporate any material by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. In addition, action proponents shall not incorporate by reference any material based on proprietary data.

l. **Incomplete or Unavailable Information.** For the purposes of this section, "reasonably foreseeable" includes impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason. When the action proponent is evaluating significant adverse effects on the human environment in an EIS and there is incomplete or unavailable information, the action proponent shall always make clear that such information is lacking. For such situations, the action proponent can take the following actions:

(1) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency will include the information in the EIS.

(2) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known (i.e., the means for obtaining it are beyond the state-of-the-art), the action proponent will include within the EIS:

(a) A statement that such information is incomplete or unavailable.

(b) A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment.

(c) A summary of existing credible scientific evidence that is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment.

(d) An evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

5-5.9 Record of Decision. The ROD, as described in paragraph 5-3.16, is the decision made by SECNAV or his/her designee, which completes the EIS process. CNO (N45) arranges for publication of the ROD in the Federal Register. The action proponent mails the ROD to the appropriate agencies, organizations, and individuals.

5-5.10 Tiering and Programmatic EISs. CEQ regulations encourage the use of tiering whenever appropriate to eliminate repetitive discussions of the issues and to focus on the actual issues ripe for discussion at each level of the environmental review. Action proponents accomplish tiering through the preparation of a broad programmatic EIS that discusses the impacts of a wide-ranging or long-term stepped program followed by narrower statements or EAs concentrating solely on issues specific to the analysis subsequently prepared. Action proponents should consider tiering appropriate when it helps the lead agency to focus on issues that are ripe for decision and excludes from consideration issues that are already decided or not yet ripe. Action proponents shall conduct a sequence of statements or analyses to make this determination.

a. The following are examples in which tiering can be accomplished:

(1) From a broad program, plan, or policy EIS (not necessarily site specific) to a subordinate/smaller scope program, plan, or policy statement or analysis (usually site specific). For example, a national program providing for mineral exploration on military-held lands with a subsequent analysis tiered for each installation impacted, or the initiation of a new training apparatus where the use of the apparatus itself may impact the environment with subsequent-tiered analysis at each site proposed for locating such training.

(2) From an EIS on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). For example: the planning for the use of long-term staged construction for the establishment of

a new installation to homeport and operate a class of vessels with a subsequent tiered analysis as each stage is programmed and proposed; the planning for the construction of a communication network involving the establishment of sending and receiving apparatus at various geographic locations with a subsequent tiered analysis for each location cited; or a proposal for the homeporting of a new vessel to operate off the east coast of the U.S. with a subsequent tiered analysis of the establishment of the homeport at a preferred specific east coast location.

b. Preparation of the Programmatic EIS. In addition to the discussion required by these regulations for inclusion in the EIS, the action proponent will include the following in the programmatic EIS:

(1) A description of the subsequent stages or sites that may ultimately be proposed (in as much detail as presently possible).

(2) The implementing factors of the program that are known at the time of the impact statement preparation.

(3) The environmental impacts that will result from establishment of the overall program itself and that will be similar for subsequent stages or sites as further implementation plans are proposed.

(4) The appropriate mitigation measures that will similarly be proposed for subsequent stages or sites.

c. Preparation of a Tiered Analysis. The action proponent will also use an EIS as the analytical document for stage or site specified analysis subsequent to the programmatic EIS when the subsequent tier itself may have a significant impact on the quality of the human environment, or when otherwise requiring an impact statement. Otherwise, the action proponent will document the tiered analysis with an EA to assess fully the need for further documentation or whether a FONSI would be appropriate. In addition to the discussion required by these regulations for inclusion in EISs and EAs, action proponents are required to accomplish the following in each subsequent-tiered analysis:

(1) Summarize the program-wide issues discussed in the programmatic statement and incorporate discussions from the programmatic statement by reference.

(2) Concentrate on the issues specific to the subsequent action.

(3) State where the earlier document is available.

d. Processing Programmatic Environmental Documentation. Action proponents will prepare, circulate, and file with the EPA Programmatic EISs and all the subsequent tiered impact statements or EAs in the same fashion as required of any other EIS.

5-5.11 Processing Supplemental EISs. Action proponents will prepare supplements to either DEISs or FEISs if there are substantial changes made in the proposed action that are relevant to environmental concerns or significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. Action proponents will usually prepare, circulate, and file such supplements in the same fashion as a DEIS or FEIS. Scoping, however, is not required.

5-5.12 Processing EISs Originated by Other Federal Agencies. Other Federal agencies originating EISs shall be processed as follows:

a. The Federal agency originating the impact statement submits the EIS to ASN (I&E).

b. ASN(I&E) refers the EIS to CNO (N45) for review.

c. CNO (N45), after independent review, and after referring the EIS to the command or activity with the expertise for detailed review and return comments, advises ASN(I&E) of the concurrence/nonconcurrence with the statement for the Navy.

5-6 Procedures for Conducting Public Hearings Under NEPA. Action proponents may conduct public meetings and hearings to fulfill the public involvement requirements of NEPA. The format of the meetings (open house or town hall) should be tailored to the type of meeting to be held. The action proponent should provide, as appropriate, comment cards, stenographers, and other means to record public comments. Poster stations may be used to facilitate public understanding of a proposed action.

5-6.1 Guidelines and Standards. The action proponent, in coordination with CNO (N45), will determine whether to hold a public hearing. Public hearings are appropriate in the following situations:

a. Where the proposed action by the agency will have a direct or peculiar environmental impact on the people living in a particular geographic area.

b. Where public organizations or members of the public possess expertise concerning the environmental impact of the action that may not otherwise be available.

c. Where no overriding consideration of national security or time makes it illegal or impractical to involve such organizations or members of the public in the consideration of a proposed action in which there is evidence of wide public interest.

d. When another agency with jurisdiction over the action submits a request for a hearing and supports its reasons why a hearing will be helpful.

e. Where the proposed action may affect a minority or low-income population.

5-6.2 Preparation. In preparation for a hearing, the action proponent shall:

a. Allow the two purposes to dictate the format for conducting public hearings: First, the hearing is intended to provide interested members of the general public with relevant information. Second, the hearing affords members of the public an opportunity to present their views of the proposed action.

b. If the proposed action makes a hearing appropriate, advise the public of the proposed hearing, via the Federal Register, at least 15 days before the scheduled hearing. (The Federal Register notice is in addition to publication in local newspapers.) Per E.O. 12898, notify, wherever practicable and appropriate, in local foreign language newspapers. The action proponent shall include the following in the notification:

(1) The Navy point of contact with mailing address, who is designated to receive all written comments or answer questions.

(2) A request for speakers to submit, in writing, their intention to participate.

(3) Any limitations on the length of oral statements.

(4) A suggestion that technical statements or statements of considerable length be submitted in writing.

(5) A summary of the proposed action.

(6) The findings contained in the DEIS.

(7) The office(s) or location(s) where the DEIS is available for examination.

(8) A request that any individual(s) with special needs (i.e., accessibility or transportation, foreign language interpretation, etc.) notify the identified point of contact conducting the hearing.

(9) The date by which comments must be received.

c. The action proponent shall forward copies of the DEIS to the appropriate State, regional, and metropolitan clearinghouses (unless the governor of the State involved has designated some other point for receipt of the information) at the same time that the statement is sent to CEQ, EPA, and other Federal agencies. The action proponent shall make the DEIS available to the public at the same time as the EPA Notice of Availability is published in the Federal Register, but in no case less than 15 days before public hearings, using local outlets such as libraries, county commissioner's offices, etc., whenever possible. Whenever practicable and appropriate, the action proponent shall translate document summaries into languages other than English.

d. Hold the hearing at a time and place and in an area readily accessible to civilian organizations and individuals interested in the proposed action. Hearings are generally preferable in a civilian facility such as a high school auditorium on a weekday evening when such groups are able to attend.

e. Select a hearing officer who is able to achieve both purposes described above in paragraph 5-6.2.a. Select one hearing officer of appropriate seniority (preferably military) that is thoroughly familiar with the proposed action and of suitable temperament to preside at a public meeting (possibly with the news media in attendance). Other personnel who are familiar with the proposed action, or some phase of it, may also provide assistance. Use these personnel in the presentation phase of the hearing to explain details or specialized portions of the proposed action. A script should be followed to ensure consistency. Non-English interpreters should be present, as appropriate.

f. Prepare a verbatim written record of the hearing and may use an experienced court reporter or stenographer to prepare the record. The hearing officer may make a tape recording of the hearing and append to the record as exhibits, all written material submitted to the hearing officer during the hearing or prior to the record being completed. The hearing officer shall also add to the record a list of persons attending the hearing, the organizations or interests they represent, and their addresses. Mail a copy of the hearing to persons who have indicated that they desire one, subject to the cost of reproduction.

5-6.3 Format. The following format provides a general guideline for the conduct of a hearing. Hearing officers should tailor the format for each hearing as the circumstances dictate to meet the objectives of the hearing. The objectives are to provide information to the public and to record the opinions of interested persons for later evaluation in conjunction with the proposed action.

a. A record of the names of hearing attendees should be kept. A record of attendance is of assistance in preparing the record, in recognizing individuals who desire to make a statement, and in mailing written answers to persons who desire them. The hearing officer may compile this record by having all people who attended the hearing complete an individual card indicating their name, address, and organization represented, if any, and whether they intend to make a statement at the hearing. The hearing officer may use an appropriate number of attendants to distribute and collect the cards and to separate cards of those who desire to make a statement from those who do not. The hearing officer may then use the cards as an orderly system for calling upon individuals who desire to make statements. Additionally, hearing officers shall ask those individuals responding to the announcement and requesting an opportunity to speak to provide copies of any remarks for hearing proceedings.

b. The hearing officer should first introduce himself/herself and any assistants and welcome any prominent attendees. He/she should next make a brief statement as to the purpose of the hearing, and state the general ground rules for conduct. The hearing officer can simplify this process by distributing written copies of this information to the attendees and/or making them available at the attendance desk. The hearing officer should make clear that he/she is not going to
decide the project's continuation, modification or abandonment.

c. The hearing officer should fully explain what the proposed action entails, including information on alternative courses of action. He/she may call upon one or more assistants to explain any particular phase of the program.

d. The hearing officer should only answer questions that seek clarification of the action and should not attempt to respond to those opposing it. He/she should include all questions asked in the record of the hearing.

e. The action proponent must give persons attending the hearing the opportunity to present oral and/or written statements. The hearing officer should ensure that he/she has the name and address of each person submitting an oral or written statement. He/she should permit the attendees to submit written statements during the hearing and for a reasonable time following the hearing. If the hearing officer is going to allow oral statements, this should be publicized in the public notice of the hearing, indicating a reasonable length of time for them (3 to 5 minutes). The agency should allow individuals who desire to make a written or oral statement, but did not indicate so on the card submitted when they entered the meeting, the opportunity to do so after all other scheduled statements are complete.

f. When it is time to adjourn the meeting, the hearing officer should thank the attendees and adjourn the meeting. The hearing officer may decide that attendance will warrant an additional day, perhaps at another time and location. If so, the hearing officer should announce the intent, but not normally agree to publish again the entire procedure in the Federal Register, etc. At the conclusion of the meeting, the hearing officer should not express any opinion on the merits of the proposals or comments presented by anyone at the hearing.

5-7 Responsibilities

5-7.1 General. Although SECNAV has the ultimate decision-making authority, responsibility for compliance with NEPA, as with all environmental responsibilities, rests within the entire Navy chain of command in the same manner as responsibility for developing and, ultimately, implementing the proposed action.

5-7.2 DCNO Environmental Readiness Division, N45 shall:

(a) Implement Navy policy regarding NEPA compliance and take action when necessary or appropriate to ensure compliance.

(b) Serve as CNO lead in all NEPA and E.O. 12114 documents. Coordinate with all appropriate CNO codes to ensure that these documents are consistent with Navy operational policy.

(c) Advise commands of the requirement for submitting environmental planning documents. When requested, furnish commands necessary information (i.e., list of potentially interested national organizations for scoping process of EISs).

(d) Provide review of documents submitted for CNO decision, including EAs and EISs. Make decisions on whether FONSI is appropriate for EAs submitted for CNO review, or if an EIS is required.

(e) As appropriate, elevate environmental planning matters that involve controversial issues or that may affect environmental policies or their implementation to the attention of ASN (I&E) and where appropriate to ASN for Research, Development, and Acquisition (RD&A) for coordination and determination.

(f) Conduct an annual audit of selected EAs approved by those designated commands with FONSI signature authority.

(g) Represent Navy to CEQ, the DOD, other Armed Services, and other Federal agencies as authorized by ASN (I&E) concerned with environmental matters.

(h) Coordinate with CHINFO for public release of EAs, EISs, FONSIs, RODs, and corresponding press statements and query responses.

(i) Coordinate with JAG to place required notices in the Federal Register.

(j) Coordinate with commands to decide feasibility of public hearings under NEPA process.

(k) Provide assistance for actions initiated by private persons, State or local agencies, and other non-Navy/DOD entities for which Navy involvement may be reasonably foreseen.

(l) Identify major decision points wherein environmental effects should be considered as associated with naval actions.

5-7.3 BSOs, Regional Commanders, COs of shore Activities, Training and Operations Planners, Weapons Systems Acquisition Program Managers, and Science and Technology Program Managers shall:

(a) Ensure that all appropriate instructions including those requiring written justification for projects or programs, collectively or separately, involving Research, Development, Test and Evaluation (RDT&E), MILCON, Operations and Maintenance, Navy (O&MN), Navy Working Capital Fund (NWCF), urgent minor construction, land acquisitions, natural resources management, weapons and support systems and special projects are included in the requirements for funding and scheduling for environmental documentation, as necessary.

(b) Review potential environmental impacts associated with a proposed action at the initial planning stage, such as during the facility study in the instance of MILCON projects, and at each following significant step or decision in the development of a program or project as warranted. The intent of NEPA is to encourage participation of Federal- and State-involved agencies and affected citizens in the assessment procedure, as appropriate. The lack of such coordination has been a significant point raised in subsequent litigation as well as causing a gap in information supplied for established review procedures. Accordingly, action proponents shall encourage early contact with those effected. If implementing NEPA, they shall, in most instances, establish a dialogue. BSOs and commanding officers shall sufficiently detail and document the dialogue to identify significant impacts and environmental controversy.

(c) Assess the environmental effects of current and proposed actions under the criteria of this chapter and send appropriate documentation to CNO (N45) via the chain of command.

(d) Participate in the formulation of, and ensure commitment to, FONSI/ROD conclusions and any mitigation and monitoring requirements established.

(e) Individual commands are responsible for ensuring that navy environmental planners within their command obtain the training identified in appendix N. The purpose of this training is to develop and maintain individual expertise and proficiency.

(f) Encourage by all means possible a sense of environmental responsibility and awareness among personnel to implement most effectively the spirit of NEPA. All personnel who engage in any activity or combination of activities that significantly affect the quality of the human environment shall be aware of NEPA responsibility. Only through alertness, foresight, and notification through the chain of command shall they realize NEPA goals.

5-7.4 The Area Environmental Coordinator shall:

(a) Endorse all Navy mission/operational environmental planning occurring within their designated area of responsibility (AOR).

(b) Ensure that all environmental planning documents and compliance actions occurring within their AOR are coordinated with the RECs, as appropriate.

(c) Forward At-Sea Policy Consistency Determinations required in compliance with reference (f) to CNO (N45) for all environmental planning documents and compliance actions within its AOR.

5-7.5 The Regional Environmental Coordinator shall:

(a) Participate in the preparation of EAs and EISs for proposed actions that affect resources under their control or issues of concern in the region.

(b) Endorse EAs and EISs involving actions that affect resources under their control.

5-7.6 Commands with Delegated FONSI Signature Authority shall comply with the conditions and authorities of appendix N (paragraph 3.3e and 3.3f) to maintain delegated FONSI signature authority.

5-8 Special Coordination Requirements. Communication and coordination are primary factors in a successful NEPA process and are the responsibility of all concerned. Command counsel and public affairs offices shall be integral parts of a concerted coordination effort. There are, however, several types of actions that require special coordination by action proponents early in the NEPA process:

Under E.O. 12344, statutorily prescribed by Public Law 98-525 (42 U.S. Code (U.S.C) 7558, note), the Director, Naval Nuclear Propulsion (N00N) is responsible for prescribing and enforcing environmental standards and regulations for the control of radiation and radioactivity associated with naval nuclear propulsion activities, including safety and health of workers, operators, and the general public. Accordingly, the Director or designee, in coordination with CNO (N45) or designee, is responsible for developing, approving, and issuing EAs and FONSIs for actions within the purview of CNO (N00N), including obtaining the concurrence of other affected Navy commands as appropriate. ASN (I&E) or designee shall obtain concurrence/approval on any decision to prepare an EIS or on any ROD.

5-9 Cooperating Agencies. Cooperating agencies must be identified early in the environmental planning process. Consideration must be given to Federal, State, Tribal, and local government agencies that have jurisdiction by law and special expertise with respect to all reasonable alternatives or significant environmental, social, or economic impacts associated with the proposed action that requires NEPA analysis. Factors that the Navy action proponent should consider when extending an invitation to another agency to enter into a cooperating agency status include whether such agencies are interested and appear capable of assuming the responsibilities of becoming a cooperating agency.

a. Responsibilities for Inviting and Coordinating with Cooperating Agencies.

(1) CNO (N45) will be responsible for inviting and coordinating with cooperating agencies at the headquarters level.

(2) The action proponent will be responsible for inviting and coordination with cooperating agencies at the regional or district level agencies and State, Local, and Tribal governments.

b. Establishing Appropriate Cooperating Agency Relationships. In extending cooperating agency status to another agency, Navy action proponents should set time limits, identify milestones, assign responsibilities for analysis and documentation, specify the scope and detail of the cooperating agency's contribution, and establish other appropriate ground-rules addressing issues such as availability of pre-decisional information. In appropriate cases, Navy action proponents should consider documenting their expectations, roles and responsibilities (e.g., Memorandum of Agreement or correspondence). Establishing such a relationship neither creates a requirement nor constitutes a presumption that a lead

agency provides financial assistance to a cooperating agency.

c. Reporting Cooperating Agencies to CNO (N45). To measure progress in addressing the issue of cooperating agency status, CEQ requires submission of annual reports on all environmental impact statements (EISs) and environmental assessments (EAs). Completed reporting forms on cooperating agencies for environmental planning documents should be submitted by Echelon II commands annually by a date as determined by CNO (N45).

5-10 Environmental Planning Library. The CNO (N45) Environmental Library website contains a growing library of environmental planning documents prepared for Navy actions worldwide; and a database of environmental planning related policy documents, memos, letters, guidance, etc., as well as any other reference documents.

a. The library and database portion of the website is accessible only to individuals with a navy.mil address and an assigned password. A password account may be established by sending an e-mail request to envlibrary@ene.com.

b. The website also has the capability for uploading completed environmental planning documents for incorporation into the library.

(1) Designated individuals at each command with delegated FONSI signature authority may upload completed environmental planning documents directly to the library. Uploaded documents should include: the final environmental planning documents and signed decision documents.

(2) Uploaded environmental planning documents should be in the most recent version of Adobe Acrobat (.PDF) format. If the electronic file for the environmental planning document (EA or EIS) file is larger than 20MB, it should be split up into logical sections or chapters. If less than 20 MB, a single electronic document file should be uploaded. Supporting documents (decision documents, signed legal and technical sufficiency documents, and all endorsement letters) should be uploaded as individual files.

(3) Each Echelon II command may designate two individuals to upload environmental planning documents to the library. E-mail requests for passwords enabling access to the document upload feature of the CNO Environmental Planning Library should also be addressed to envlibrary@ene.com. The e-mail should indicate the command for which these individuals will be acting.

CHAPTER 6

PROCEDURES FOR IMPLEMENTING THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)

6-1 Scope

This chapter provides EPCRA policies and procedures applicable to all Navy shore installation operations in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction.

This chapter implements the EPCRA requirements of E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, which was signed in January 2007 (reference (a)). The Navy shall comply with EPCRA requirements consistent with E.O. 13423. This chapter shall not impose any requirements directly upon ships. Cognizant shore installations shall account in their reporting requirements for hazardous materials transferred to and from Navy ships.

6-1.1 References. Relevant references are:

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management; January 2007;

(b) 40 CFR 355, Emergency Planning and Notification;

(c) 29 CFR 1910.1200, OSHA Hazard Communication Standard;

(d) 40 CFR 370, Hazardous Chemical Reporting: Community Right-to-Know;

(e) 49 CFR 173.2, Shippers - General Requirements for Shipments and Packaging;

(f) 40 CFR 261, Identification and Listing of Hazardous Waste;

(g) 40 CFR 302, Designation, Reportable Quantities, and Notification;

(h) 40 CFR 372, Toxic Chemical Release Reporting: Community Right-to-Know;

(i) OPNAVINST 5100.23F, Navy Occupational Safety and Health (NAVOSH) Program Manual; 15 July 2002.

6-2 Legislation

6-2.1 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA provides funding and enforcement authority for the clean up of waste disposal sites and for reporting of and responding to hazardous substance spills. CERCLA establishes a comprehensive response program for past hazardous waste installations, and the planning and response framework for hazardous substance releases.

6-2.2 Emergency Planning and Community Right-to-Know Act. This is Title III of the Superfund Amendments and Reauthorization Act (SARA) that encourages and supports emergency planning and provides timely and comprehensive information to the public about the hazards associated with chemicals present at facilities and toxic chemical releases. Most notably, specific sections of EPCRA require immediate notification of releases of extremely hazardous substances defined under EPCRA and hazardous substances defined under CERCLA to State and local emergency response planners. Additionally, EPCRA requires State and local coordination in planning response actions to chemical emergencies. The Act requires the submission and public disclosure of information on chemical inventories and releases.

6-2.3 Occupational Safety and Health Act (OSHA). OSHA directs employers to establish and maintain comprehensive and effective occupational safety and health programs through the OSHA of 1990.

6-3 Terms and Definitions

6-3.1 Agency. An executive agency of the Federal government. Military departments fall under DOD.

6-3.2 Article. A manufactured item formed to a specific shape or design during manufacture and has end use functions dependent in whole or in part upon its shape or design during end use and which does not release, or otherwise result in exposure to, a toxic chemical under normal conditions of use.

6-3.3 Authorized Use List. The list of all hazardous materials, which are approved for use, necessary to support the requirements of a command, facility, or installation.

6-3.4 Covered Facility. All Navy installations that meet one or more of the threshold reporting requirements under any section of EPCRA.

6-3.5 Depot-Level Maintenance. Material maintenance requiring major overhaul or a complete rebuilding of parts, assemblies, subassemblies and end items, including the manufacture of parts, modification, testing, and reclamation. Depot maintenance serves to support lower categories of maintenance by providing technical assistance, sometimes beyond their responsibility. Depot maintenance provides stock of serviceable equipment because it has more extensive facilities available for repair than are available in lower maintenance installations. Depot maintenance includes all aspects of software maintenance.

6-3.6 Extremely Hazardous Substance. Any substance listed in appendix A or B of reference (b).

6-3.7 Facility. All buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites, owned or operated by the same person, otherwise known as the "host" or the "fenceline owner." For the purposes of Section 304 of EPCRA, the term includes motor vehicles, rolling stock, and aircraft.

6-3.8 Hazardous Chemical. A chemical that is a physical or health hazard as defined in references (c) and (d).

6-3.9 Hazardous Material. Any material that is regulated as HM per reference (e), requires a material safety data sheet per reference (c), or, which during end use, treatment, handling, packaging, storage, transportation, or disposal, meets, has components which meet, or has the potential to meet the definition of HM as defined by reference (f) subparts A, B, C, and D. In general, any material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a hazard to human health or the environment. Included in this definition are all EHSs, hazardous chemicals (HCs), hazardous substances, and toxic chemicals.

Any other hazard-specific guidance (instructions or directives) takes precedence over this instruction for control purposes of HM. Such materials include: ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials are hazardous and exposure to personnel may occur during manufacture, storage, use, and demilitarization of these items.

6-3.10 Hazardous Substance. Any substance listed in Table 302.4 of reference (g).

6-3.11 Intermediate-Level Maintenance. Material maintenance that is the responsibility of, and performed by, designated maintenance installations in support of using organizations. The intermediate maintenance mission is to enhance and sustain the combat readiness and mission capability of supported installations providing quality and timely material support at the nearest location with the lowest practical resource expenditure. Intermediate-level maintenance includes: limited repair of commodity-oriented components and end-items; job shop, bay, and production line operations for special mission requirements; repair of printed circuit boards, software maintenance, and fabrication or manufacture of repair parts assemblies, components, jigs and fixtures, when approved by higher levels.

6-3.12 Material Safety Data Sheet. OSHA Form 174 or an equivalent form containing identical data elements used by manufacturers of chemical products to communicate to users the chemical, physical, and hazardous properties of their products.

6-3.13 Organization-Level Maintenance. Maintenance normally performed by an operating unit on a day-to-day basis in support of its own operations. The organization-level maintenance mission is to maintain assigned equipment in a full mission-capable status while continually improving the process. Group organizational-level maintenance falls under the categories of “inspections,” “servicing,” “handling,” and “preventive maintenance."

6-3.14 Persistent Bioaccumulative and Toxic (PBT). Under Section 313, EPA has established a subset of the toxic chemical list for those chemicals identified as being PBT chemicals in the environment after being released. PBTs have assigned threshold levels that range from 0.1 grams to 100 pounds per year and the *de minimis* exemption may not be applied. PBTs and their respective threshold levels for Section 313 are identified in the toxic chemical list in reference (h).

6-3.15 Release. Under EPCRA, the term "release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any HC, EHS, toxic chemical, or CERCLA HS.

6-3.16 Reportable Quantity (RQ). The specified amount in pounds of any EHS or HS, which when released in a 24-hour period in excess of or equal to that amount to the environment, requires reporting under EPCRA Section 304. Appendices A and B of reference (b) and Table 302.4 of reference (g) list RQs.

6-3.17 Threshold Planning Quantity (TPQ). The established amount in pounds of an EHS, which when present on-site at a facility at any one time in quantities equal to or greater than the TPQ, requires notification under EPCRA Section 302. Appendices A and B of reference (b) list TPQs.

6-3.18 Toxic Chemical (TC). Any substance listed in reference (h).

6-3.19 Toxics Release Inventory Data Delivery System (TRI-DDS). A reporting tool that supports compliance with EPCRA Section 313 requirements from munitions and range activities. It is a web-based electronic database that provides the necessary information to calculate TC amounts for comparison with reporting threshold levels and to estimate releases associated with munitions and range activities.

6-4 Requirements

6-4.1 EPCRA Policy for Federal Agencies. The primary purpose of emergency planning and release notifications is to protect public health, safety and the environment, and to establish and coordinate the nation's chemical emergency planning activities.

a. **Section 302** is to inform emergency planners about the presence of EHSs. A facility that has, on-site, any EHS, including those in munitions and munitions related items, in a quantity equal to or in excess of its applicable TPQ, shall provide a one-time notification to the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) (or equivalent for your jurisdiction) that the facility is subject to the emergency planning requirements of EPCRA. Include the facility name, facility point of contact (that will serve as the Facility Emergency Coordinator per Section 303), an alternative point of contact, and phone numbers. Thereafter, if any information in the original notification is no longer current (and needs to be updated), the facility shall amend the original notification to the SERC and LEPC (or equivalent for your jurisdiction) to include the additional information within 60 days of receiving the new information or the EHS. If no notification has been required to date (because a TPQ for an EHS was not met or exceeded), then an EHS becomes present at the facility in excess of its TPQ for the first time, or the EHS list is revised and the facility has present an EHS in excess of the TPQ, the facility shall submit the Section 302 notification within 60 days of determining reporting is required based on the new information.

b. **Section 303** requires a covered facility to provide any emergency planning information requested by the LEPC (or equivalent for its jurisdiction), to the extent practical, while taking into consideration national security issues. As a minimum, a facility subject to EPCRA reporting

requirements will appoint a facility representative, the Facility Emergency Coordinator, to actively serve on the LEPC (or equivalent for its jurisdiction).

c. **Section 304** protects the public in the event of EHS or HS releases through the establishment and formation of local and state emergency response capabilities. A facility where an EHS or HS is produced, used, or stored shall provide an immediate verbal and as soon as practicable written follow-up notice of any EHS or HS released over a 24-hour period into any environmental media that meets or exceeds the established RQ. Notify all SERCs and all LEPCs (or equivalent for its jurisdiction) for areas likely to be affected by the release. This notice does not relieve the facility of any notification requirements covered under other environmental regulations.

Notification to the SERC or LEPC (or equivalent for its jurisdiction) is not required for releases that result in exposure to personnel solely within the boundaries of the facility, regardless of whether the RQ for the substance was met or exceeded. Notification to the SERC or LEPC (or equivalent for its jurisdiction) is also not required for releases exempted per 40 CFR 355.40.

d. **Section 311** is to increase emergency planner and community awareness of chemical hazards. A facility with any HC requiring an MSDS under OSHA present on-site at any one time in an amount equal to or greater than 10,000 pounds, or equal to or greater than 500 pounds for an EHS or the applicable TPQ (whichever is less), shall provide a one-time submission of copies of those MSDSs or a list of the HCs grouped by hazard category to the SERC, LEPC (or equivalent for its jurisdiction), and the local fire department with jurisdiction over the facility. Facilities should contact the local agency to identify their preference for data submission. Thereafter, should an HC not previously reported become present in amounts equal to or over established thresholds or, should significant new information be discovered concerning the HCs for which a submission was previously made (e.g., new hazard information), the facility shall provide a new or revised submission within 3 months.

Should the SERC, LEPC (or equivalent for its jurisdiction), or local fire department with jurisdiction over the facility request an MSDS not previously submitted, the facility shall submit the requested MSDS within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

e. **Section 312** provides comprehensive information about the identity and amounts of stored HCs and makes the information available to the public, emergency planners, and responders. A facility with any HC requiring an MSDS under OSHA present on-site at any one time in an amount equal to or greater than 10,000 pounds, or equal to or greater than 500 pounds for an EHS or the applicable TPQ (whichever is less), shall submit an annual Emergency and Hazardous Chemical Inventory Form (Tier I or Tier II) for all HCs that met or exceeded the threshold. The annual submission is due on 1 March for the previous calendar year.

Should the SERC, LEPC (or equivalent for its jurisdiction), or local fire department with jurisdiction over the facility request a Tier II form not previously submitted, the facility shall submit the requested form within 30 days of receipt of the request. The minimum threshold for reporting in response to a written request for submission is zero, provided the request includes a written statement of need.

f. **Section 313** is to establish a facility-wide inventory of TC releases to all environmental media, to support State and local planning efforts and to inform the public about routine releases of TCs to the environment. A facility that has 10 or more full-time employees and manufactures or processes any listed TC in excess of 25,000 pounds in a calendar year, or that otherwise uses any listed TC in a quantity over 10,000 pounds in a calendar year, or that manufactures, processes, or otherwise uses a PBT in excess of the PBT-specific threshold in a calendar year given in reference (h) is required to submit individual release data, a Form R, for each reportable TC.

The annual submission deadline for the Form R is 1 July covering releases for the previous calendar year. Form Rs shall be submitted by the reporting installation to EPA and the State. Beginning with reporting year 2005 (reports due 1 July 2006), EPA will only accept electronic submissions of Form R. States may still receive hard copy submittals if they are not able to accept electronic submittals.

6-5 Navy Policy

Navy policy is to comply with all requirements of EPCRA. All Navy installations are required to follow DOD and Navy-specific guidance when implementing the EPCRA reporting requirements. Where DOD and Navy guidance differs from EPCRA guidance provided by EPA, Navy installations must follow DOD and Navy guidance.

The Navy shall act to use the data generated through EPCRA data gathering and reporting information to prevent pollution by reducing HM use and decreasing the release of TCs into the environment to the minimum amounts achievable. Navy facilities shall use EPCRA data to provide input and updates to facility Pollution Prevention Plans as discussed in chapter 4.

6-5.1 Compliance with Federal EPCRA Requirements. All Navy shore installations in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction shall use the following procedures in complying with EPCRA requirements:

a. All installations shall define the facility fenceline and operations within that fenceline that shall be considered part of the facility and included in EPCRA efforts. Installations shall update Interservice Support Agreements (ISAs), as well as any other Host-Tenant agreements, to reflect the data collection requirements of the tenants to the host.

(1) Class I property lines most appropriately define the facility fenceline with the fenceline owner responsible for all DOD tenants. The fenceline owner, otherwise known as the "host" command, shall file the necessary reports for the entire facility for each section of EPCRA requiring a report. All threshold calculations will include combined totals from within the fenceline. Release calculations for Section 313 will account for all non-exempt releases within the fenceline, reported according to guidance for reporting of range activities on a separate Form R.

Navy installations shall not report actions of non-DOD Federal agencies.

In addition, if there is property within the fenceline that is leased to any non-DOD entities, including commercial entities (e.g., privatization efforts or temporary leases), and there is only a real-estate interest

with no other value gained other than the real estate value, then these activities also shall not be reported by the Navy installation.

(2) Navy tenants of non-DOD host installations are independently responsible for meeting the Navy EPCRA reporting requirements.

(3) Ships at sea and water ranges are not considered a facility and, therefore, are not subject to EPCRA.

(4) The owner of geographically separated portions of an installation may treat each establishment it operates as a separate facility. Independent owners of contiguous or adjacent sites are individually responsible for complying with EPCRA requirements.For example, a Navy base and an Army base that share a fenceline report as two separate facilities under EPCRA.

(5) Regionalized areas may apply the definition of facility. For regionalized areas where components are adjacent and contiguous, components should be combined into a single regionalized facility for threshold calculations and reported under the name of the regionalized base. For regionalized areas where components are not adjacent and contiguous (i.e., geographically separated), components should be considered as separate facilities for threshold calculations under EPCRA. Where reporting is triggered, the name of the component should be reported as "Regionalized Base Name – Component Name."

(6) Where a range is not adjacent or contiguous to any other DOD property, the range itself is the facility for purposes of EPCRA and Section 313. All assessments, including employee work hour and TC thresholds, will be assessed for the range alone.

Where a range is a water range (i.e., a water body that is not within the facility fenceline), it does not meet the definition of facility under EPCRA. As a result, water ranges are not subject to any part of EPCRA, including Section 313.

Up to and including reporting year 2006 (reports due in 2007), all ranges (including small arms ranges) on and adjacent to an installation are to be considered collectively as one facility (i.e., a range complex) and separate from the rest of the installation. All assessments, including employee work hour and TC thresholds, will be assessed using the aggregate range complex separate from the rest of the installation.

Beginning with reporting year 2007 (reports due in 2008), Navy installations shall not separate contiguous operational ranges from the rest of the installation for EPCRA Section 313 and shall not seek a separate TRI facility identification number for ranges.

b. Private contract operations on DOD facilities are to be accounted for in the DOD facility calculations for purposes of EPCRA.

c. GOCO facilities are legally required to comply with all provisions of EPCRA to the extent that their operations meet threshold and other requirements of the statute and implementing regulations.

The Navy encourages GOCO facilities to support Navy efforts in meeting any additional reporting requirements.

d. Any EHS, HC, or TC stored or used aboard a ship while a ship is in port do not become part of the shore facility's threshold calculations and are not reported on any report by the shore facility even if reporting is triggered. Material maintained under the ship's custody is not subject to any EPCRA reporting requirements.

e. Navy installations shall refer to Navy and DOD guidance when complying with EPCRA. Navy installations may also refer to EPA EPCRA policy; however, should EPA and DOD/Navy policy conflict, DOD and Navy policy take precedence. If a conflict between DOD and EPA EPCRA policy causes a discrepancy to arise during an EPCRA inspection, the Navy installation shall refer the matter through its chain of command to headquarters and the appropriate DOD REC.

f. Each Navy installation shall meet the reporting deadline requirements of EPCRA regulations.

g. Navy installations crossing state and local boundaries should report to all applicable state and local jurisdictions absent an agreement with all applicable state and local jurisdictions to the contrary.

h. Prior to the submission of any reports to the SERC, LEPC (or equivalent for your jurisdiction), or non-Navy fire departments, EPA, or the State, installations shall review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the installation shall develop alternative procedures for protecting the installation and off-site personnel.

i. Installations shall ensure documentation is in place to support EPCRA reporting efforts, including the decision not to report. Installations should have documentation and calculations for threshold and release decisions available to support any inquiries. Installations shall maintain support documentation for a minimum of 5 years, unless a cross governing regulation (e.g., RCRA requires the installation to retain the records for a longer period.

j. Navy installations shall fully cooperate with EPA Headquarters and Regional personnel conducting EPCRA inspections and reviews. EPA EPCRA inspections and reviews may be part of other media-specific or multi-media inspections.

However, EPA does not have the authority to penalize (e.g., fine) Navy installations for EPCRA noncompliance; but EPA may issue Notices of Noncompliance or Violation for EPCRA violations (e.g., a failure to report TC releases, a failure to maintain TC release records). DOD shall respond to EPCRA Notices of Noncompliance or Violation.

k. EPCRA does not require Navy installations to comply with state and local right-to-know requirements. Navy installations are encouraged to comply with state and local right-to-know requirements to the extent that it is not overly burdensome to do so. Navy installations cannot pay state and local right-to-know fees. Navy installations shall forward all state and local right-to-know fee invoices and reimbursement requests to their legal office for review.

6-5.2 For purposes of **Section 302** emergency planning, all installations shall determine whether they meet or exceed threshold requirements for any EHS present at the installations. Each Navy installation that exceeds a threshold is subject to the reporting requirements of EPCRA for emergency planning and for providing information to support emergency planning. Host commands shall calculate thresholds using the entire facility.

a. The installation may apply any of the exemptions available in reference (b) and should document where and when they are applied.

b. Installations shall include EHS contained in munitions and munitions-related items present on site. Munitions and munitions-related items containing EHS must be included in all facility calculations for threshold requirements and will report as required.

c. Each installation that meets or exceeds a TPQ for an EHS shall notify the SERC and the LEPC (or equivalent for its jurisdiction) and provide a facility emergency point of contact (i.e., Facility Emergency Coordinator), an alternative point of contact, and telephone numbers.

(1) If no notification has been made under Section 302 (because a threshold was not exceeded) and an EHS later becomes present at the facility in excess of its TPQ, or if the EHS list is revised and the facility has present an EHS in excess of the TPQ for the first time, the installations shall submit an original notification to the SERC and LEPC (or equivalent for its jurisdiction) within 60 days.

(2) If a notification has been made under Section 302 and the information provided in the most recent notification has changed (e.g., the identity of the Facility Emergency Coordinator has changed), the installations shall submit an updated notification letter to the SERC and LEPC (or equivalent for its jurisdiction) with the updated information within 60 days of receiving the updated information.

d. Each covered facility shall request to participate in local emergency planning functions and appoint a facility representative to actively serve on the LEPC (or equivalent for its jurisdiction). To the extent practicable, each covered facility shall provide any emergency planning information requested by the LEPC (or equivalent for its jurisdiction), while taking into consideration national security issues.

6-5.3 For **Section 304** emergency release notification requirements, each installations that releases an EHS or HS, including those from munitions and munitions-related items, in an amount equal to or in excess of the RQ in a 24-hour period for that substance into any environmental media shall immediately notify the SERCs and LEPCs (or equivalent for its jurisdiction) for all areas likely to be effected by the release of that substance. The installation shall also notify the cognizant BSO of the release in message form as soon as practicable after the release has occurred.

a. The installation shall submit a written follow-up notification of the release and actions taken as soon as practicable after the release. To expedite the notification process, the installation shall prepare and use a standard form and approval chain in the event of a reportable release.

b. The installation is not required to notify the SERC or LEPC (or equivalent for your jurisdiction) of releases that result in exposure to personnel solely within the boundaries of the facility regardless of whether the RQ for that substance was met or exceeded.

c. The installation may apply any of the exemptions available in reference (b) and should document where and when they are applied.

d. Each Navy installation reporting a release of a CERCLA HS under EPCRA Section 304 may also have reporting responsibilities under CERCLA Section 103 (i.e., notification to the National Response Center).

6-5.4 For **Section 311** community awareness, all installations shall determine if they meet or exceed threshold requirements for all HCs that are present on site that require an MSDS. This section includes those HCs associated with munitions and munitions-related items. Munitions and munitions related items are subject if they are stored in bulk form; however, stored munitions end items are considered to be "a solid in any manufactured item" and therefore, the chemicals contained in munitions end items are not included in the threshold calculation or reporting in this section. Each Navy installation that exceeds the threshold is subject to the reporting requirements of EPCRA for community right-to-know provisions. Host commands shall calculate thresholds using the entire facility.

If the quantity of an HC is present at any one time in amounts equal to or greater than 10,000 pounds, it is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 pounds or its TPQ, whichever is less, it is reportable.

a. For each reportable HC, installations shall provide a one-time submission of a copy of the MSDS or a list of reportable HCs, grouped by hazard category, to the SERC, LEPC (or equivalent for your jurisdiction), and the fire department with jurisdiction over the facility. Installations should contact local agencies to identify their preferred method of data submission. A hard copy MSDS obtained from the Hazardous Material Information Resource System (HMIRS) is sufficient; see reference (i) for information on HMIRS.

b. If an installation submits a list, it shall contain the following information:

(1) A list of the HCs for which an MSDS is required under OSHA regulations, grouped by hazard category. Only include those chemicals (either in mixtures or in the pure form) that meet or exceed threshold levels.

(2) The HC listed under all applicable hazard categories.

(3) The chemical and common name of each HC as provided on the MSDS.

c. Navy installations shall comply with EPCRA Section 311 reporting requirements. State and local regulators cannot waive Navy installation EPCRA reporting requirements by allowing Section 312 annual hazardous chemical inventory reporting to substitute for Section 311 MSDS or list reporting.

d. Navy installations should make the Section 311 submission to the fire department that would routinely be the first alerted during an emergency. This would generally be the Navy fire

department located on the installation but may also be a non-Navy fire department separate from the facility. Where a Navy installation fire department exclusively serves the installation, the installation fire department is considered the local fire department and shall receive the Section 311 submission.

e. Should the SERC, LEPC (or equivalent for your jurisdiction), or local fire department with jurisdiction over the facility request an MSDS not previously submitted, the installation shall submit the requested MSDS within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

f. Should an HC become present over established thresholds or should significant new information concerning the HCs for which a submission was previously made become available, the installation shall provide a new or revised submission within 3 months after discovery of this new information.

6-5.5 Under **Section 312** to provide comprehensive information about the identity and amounts of chemical hazards, installations meeting or exceeding HC threshold requirements shall submit Emergency and Hazardous Chemical Inventory Forms for those HCs to the SERC, LEPC (or equivalent for their jurisdiction), and the local fire department with jurisdiction over the facility by 1 March, annually, that cover the previous calendar year's inventory. Host commands shall calculate threshold using the entire facility.

If the quantity of an HC is present at any one time in amounts equal to or greater than 10,000 pounds, it is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 pounds or its TPQ, whichever is less, it is reportable.

Installations may submit either Tier I or Tier II information; however, they are not required to comply with requests to use any form other than the Federal Tier I or Tier II forms. Most SERCs and LEPCs prefer the Tier II or a state developed form. This section includes those HCs associated with munitions and munitions-related items. Munitions and munitions related items are subject if they are stored in bulk form; however, stored munitions end items are considered to be “a solid in any manufactured item” and therefore, the chemicals contained in munitions end items are not included in the threshold calculation or reporting in this section.

a. Some states have adopted their own right-to-know provisions that may include lower thresholds or state-developed reporting forms. Navy installations are only required to comply with the Federal program; however, Navy installations are encouraged to comply with state programs if it is not overly burdensome to do so, to the extent that resources allow, and provided such compliance does not interfere with command mission accomplishment or other legal obligations. For example, Navy installations may substitute state and local Tier II inventory forms provided all the information reported from the EPA Tier II inventory form is included within state forms and the state form does not include extensive data elements not included in the EPA Tier II form.

b. Navy installations may file Section 312 inventory forms electronically using the EPA’s Tier2 Submit (or other EPA software), state-specific software, or other electronic means (e.g., a web portal) where available.

c. The Standard Industrial Classification (SIC) code for Navy installations is "9711." No other or additional SIC codes shall be reported. If or when EPA begins use of the North American Industry Classification System (NAICS) code to replace SIC codes, Navy installations shall report "928110." No other or additional NAICS codes shall be reported.

d. The Navy installation commander is not required to sign the Tier II, or state-equivalent, reporting form, for Section 312. Any responsible management official may sign the report.

e. Navy installations should make the Section 312 submission to the fire department that would routinely be the first alerted during an emergency. This would generally be the Navy fire department located on the installation but may also be a non-Navy fire department separate from the facility. Where a Navy installation fire department exclusively serves the installation, the installation fire department is considered the local fire department and shall receive the Section 312 submission.

f. The SERC and the LEPC (or equivalent for their jurisdiction) have the authority to request a Tier II submission for HCs present at the facility below threshold levels if the requester provides a written statement of need. Should the SERC, LEPC (or equivalent for their jurisdiction), or local fire department with jurisdiction over the facility request a Tier II form not previously submitted, the installation shall submit the requested form within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

6-5.6 For **Section 313** to establish a facility-wide inventory of TC releases, all installations shall determine if they meet reporting requirements for Toxic Release Inventory (TRI) reporting, and, if so, submit EPA Form R. Host commands shall ensure thresholds are calculated using the entire facility.

a. Base the TRI reporting requirements on the following criteria:

(1) The facility has 10 or more full-time employees; and

(2) The facility manufactured (defined to include imported) or processed a TC in quantities in excess of 25,000 pounds over the course of a calendar year; or

(3) The facility otherwise used a TC in quantities in excess of 10,000 pounds over the course of a calendar year; or

(4) Where the TC is a PBT, the PBT-specific thresholds and other considerations shall apply as provided in reference (h).

These thresholds are TC and activity-specific, and do not include storage or the amount present at any one time.

The manufacturing threshold must include all TCs (including PBTs) created at the facility, regardless of whether they are created intentionally (e.g., as a product) or unintentionally (e.g., coincidentally manufactured as a byproduct of treatment or product of combustion). Beginning with reporting year 2002 (reports due in 2003), TCs (including PBTs) created as a result of exempt activities (e.g., burning fuel for personal comfort) will also be considered manufactured and must be included in a threshold determination.

b. The manufacture, process or otherwise use of TCs to produce munitions-related items is covered under this section. The creation of TCs as a result of using munitions (e.g., products of combustion) is considered manufacturing and is covered by this section. The demilitarization of munitions and munitions-related items, including disassembly, dismantling, recycling, recovery, reclamation, and reuse, is considered a processing activity and is covered under this section. The demilitarization activities including open burning and open detonation (OB/OD), incineration, chemical neutralization and other methods of final treatment that alter the chemical composition of the munitions and its components are considered otherwise use activities and are covered under this section. All munitions treated on-site shall be counted. Applicable exemptions in reference (h) as clarified by DOD and Navy guidance may be applied to munitions activities.

Beginning with reporting year 1998 (reports due in 1999), munitions manufacturing activities were covered under this section. Beginning with reporting year 1999 (reports due in 2000), all other munitions activities, such as demilitarization, were covered under this section.

c. Beginning with reporting year 2001 (reports due in 2002), the manufacture or otherwise use of TCs as part of range activities is covered under this section. The processing threshold activity does not apply to any activities performed on ranges. Munitions used in training (e.g., live fire exercises, target practice, aerial bombing, obscurant and smoke training, burning of unused propellant, etc.) and destruction of munitions on a range (e.g., range clearance or sweep operations) are examples of covered activities. TCs in munitions items expended on a range for any activity are considered otherwise used. TCs created as a result of range activities are considered manufactured. Applicable exemptions in reference (g) as clarified by DOD and Navy guidance may be applied to range activities.

Up to and including reporting year 2006 (reports due in 2007), all ranges (including small arms ranges) on and adjacent to an installation are to be considered collectively as one facility (i.e., a range complex) and separate from the rest of the installation. All assessments, including employee work hour and TC thresholds, will be assessed using the aggregate range complex separate from the rest of the facility.

Employee threshold calculations for ranges shall account for time spent physically on the range by personnel operating, maintaining, or managing the range. This includes range operators/personnel, Explosive Ordnance Disposal (EOD) sweep and clearance personnel, target and maintenance crews, but not personnel using the range. The employee threshold calculation shall also account for time spent by personnel not physically located on the range, but in direct support of range operations. This includes time spent by schedulers and controllers in direct support of range operations.

d. Beginning with reporting year 2007 (reports due in 2008), a number of new policy items take effect.

(1) Navy installations shall not separate contiguous operational ranges from the rest of the installation for EPCRA Section 313 and shall not seek a separate TRI facility identification number for ranges.

(2) The EPCRA definition of facility shall be utilized when assessing threshold activities conducted on ranges. The EPCRA definition of "facility" includes "all buildings, equipment, structures, and other stationary items…" Although this definition is expansive, many operational ranges are areas with few or no structures. Some operational ranges may contain stationary targets, an observation control tower, or a temporary ammunition storage magazine; however, these buildings or structures do not "manufacture, process, or otherwise use" TRI TCs and would not be subject to EPCRA Section 313 threshold quantity calculations. In contrast, military training activities on indoor ranges or at or from other fixed, constructed equipment or structures, would "manufacture, process, or otherwise use" TRI TCs and would be included in EPCRA Section 313 threshold quantity calculations. Where it is not practical to aggregate individual facilities on a range to determine applicability or to calculate threshold quantities, a Service may view an entire operational range as a "facility" in determining threshold quantities.

Navy installations will continue to view an entire operational range as a "facility", regardless of the presence of buildings, equipment, structures, or other stationary items, and determine EPCRA Section 313 threshold calculations based on all "manufacture, process, or otherwise use" of TRI TCs on the range.

(3) Where a range (or multiple ranges) is part of a Navy installation and reporting is required (i.e., a Form R must be submitted), two Form Rs shall be prepared and submitted such that operational range activities are reported separately (i.e., on a separate Form R) from the installation proper. One Form R shall be submitted for the installation proper accounting only for releases from the installation proper and a second Form R shall be submitted for the range (or ranges) accounting only for releases from the range. On the Form Rs, both the installation proper and the range would report the same TRI FID number. In addition, each facility would check "(b) Part of a Facility" and "(c) a Federal facility" in Section 4.2 of Form R to indicate that they are two parts of a single facility.

(4) Employee threshold calculations for ranges shall account only for time spent physically on the range by personnel operating, maintaining, or managing the range. This includes range operators/personnel, EOD sweep and clearance personnel, target and maintenance crews, but not personnel using the range. This assessment does not include personnel physically located off-range. For example, the employee threshold calculation shall not account for time spent by schedulers and controllers not physically located on the range. Where a range is adjacent or contiguous to an installations, the calculation from the range is to be combined with the total installation calculation to determine whether the threshold is met. Where a range is geographically separate, the calculation is for the range only as its own facility.

e. Navy installations shall use the TRI-DDS reporting tool for calculating TC threshold and release data from munitions and range activities.

f. To calculate threshold quantities, Navy installations shall assume that all military munitions used in munitions or range activities will function as intended (i.e., the dud rate is zero) and all energetics will detonate or burn as designed.

g. Navy installations shall use the EPA's reporting software to report Form R electronically to EPA. Navy installations shall not use the alternative threshold certification statement option, Form A.

h. Navy installations will make every attempt to submit Form Rs to EPA covering GOCO information as required in this chapter. The installations shall provide U.S. Navy GOCO information on

a separate government-submitted Form R. The government Form R submission shall list U.S. DOD Navy as the "parent company" under section 5.1 of the form. If the Navy is unable to obtain GOCO information or Form Rs, the Navy installations shall, at a minimum, provide the contractor's name, technical contact, and facility location to CNO (N45).

By entering only the government submitted form to the automated EPA database, EPA will avoid database double counting of these releases.

i. TCs stored or used aboard ship while a ship is in port do not become part of the shore installation's threshold calculations and are not reported on a Form R by the shore installation if reporting is triggered. Material maintained under ship's custody is not subject to reporting requirements. The transfer of a TC to or from a Navy ship is not considered to be a manufacture, process, or otherwise use of a TC and, therefore, shall not be used by an installation to calculate threshold requirements. If the TC has triggered the reporting requirement based on activities at the shore installation, then the installation shall include transfers to ships as off-site transfers in the Form R release calculations. Consider floating dry-docks as part of the shore installation and report them accordingly.

j. EPCRA Section 313 regulations provide certain exemptions that are intended to relieve facilities from the burden of making threshold and release calculations based on small or ancillary uses of listed TCs. Five primary categories exist under the exemptions, including *de minimis*, article, use, laboratory, and property ownership. In general, the use exemptions do not apply to TCs manufactured or processed. In addition, the *de minimis* exemption may not be applied to PBTs.

Beginning with reporting year 2002 (reports due in 2003), the coincidental manufacture of TCs as a result of an exempt use will be considered manufactured and must be included in threshold calculations. Examples of exempt activities that coincidentally manufacture TC that must be included in threshold calculations include burning of fuels for personal comfort heating (byproducts of combustion) and sanitary wastewater treatment.

TC that are coincidentally manufactured from non-exempt activities, such as burning fuel in non-motor vehicles, waste treatment, and byproducts of munitions and range activities (per applicability dates), have always been subject to Section 313 and included in threshold determinations and release estimates.

The exemptions apply to Navy installations in the following manner:

(1) In general, when a mixture contains a non-PBT TC at a concentration of less than 1 percent by weight, or less than 0.1 percent by weight if the TC is an OSHA-defined carcinogen, the Navy installation is not required to consider the quantity of the TC when making a threshold quantity determination or calculating the amount of a release to be reported. This *de minimis* exemption only applies to mixtures as received and cannot be applied to a concentration of chemicals in diluted waste streams or to TCs that are manufactured.

NOTE:

The *de minimis* exemption does not apply to PBT TCs, and any concentration of a PBT chemical must be considered in threshold quantity calculations and release reports.

(2) A DOD installation may exempt from threshold quantity determinations and release reporting TCs present in an article when the article is present at a facility. An “article” is a manufactured item that is formed to a specific shape or design during manufacture, that has end-use function dependent in whole or in part upon its shape or design during end-use, and that does not release a TC under normal conditions of the processing or otherwise use of that item at the facility. The article exemption does not apply to article manufacture, and TCs processed into articles produced at a facility must also be considered in threshold quantity calculations and release reports. If a release of a TC occurs as a result of the processing or use of a manufactured item at a facility, that item does not meet the definition of article.

Some components of military munitions items that are expended at the point of fire and do not travel down range can be considered articles. Items such as casings, clips, and pins are examples of articles small arms ammunition are articles stored in facilities on DOD installations, and the TCs (e.g., copper) contained in them are exempt from threshold quantity determinations and release reporting. However, if the installation shreds or crushes an article and changes its shape and design, then the resulting scrap metal can no longer be considered an article, and the TCs contained in the metal must be considered in threshold quantity calculations and release reports.

(3) The structural component category exempts TCs that are structural components of the facility or that are used to ensure or improve structural or functional integrity. The installation can apply this exemption to listed TCs found in material that is part of the facility's structure (i.e., copper in copper piping used for the plumbing in the facility). The installation does not have to account for releases resulting from passive degradation that naturally occurs in structural components of a facility.

Maintenance and repair activities performed by facility maintenance to the facility infrastructure are also consistent with the "structural component" exemption. Include painting to maintain the physical integrity or function of the facility in the exemption. The exemption also covers small amounts of material passively abraded or corroded from pipes and other facility equipment. Include in the facility infrastructure, but do not limit to: buildings, roads, runways, fencelines, and utilities.

(4) The routine janitorial and grounds maintenance category exempts the use of TCs contained in products for routine janitorial and facility grounds maintenance. The routine maintenance exemption covers janitorial or other custodial maintenance and all other installation grounds maintenance for activities using substances such as cleaning supplies, fertilizers, pesticides, fungicides, herbicides, rodenticides, and insecticides similar in type and concentration to consumer products. For example, installations do not have to report the use of TCs for lawn maintenance, building maintenance, and grounds maintenance.

(5) The personal use category exempts the personal use of listed TCs in products used by employees or other persons at the facility. This exemption also covers activities associated with facility-operated cafeterias, commissaries, DOD Exchanges, medical facilities or facilities associated with morale, welfare, and recreation (MWR). "Personal use" products include foods, drugs, cosmetics, office supplies, and other personal items, including TCs in fuel and any other materials related to personal automobiles. The personal use exemption also covers TCs used strictly for reasons of personal comfort, necessity, or other such purposes, for example, heating and air conditioning units or lighting fixtures.

Navy policy exempts activities associated with hospitals and other base medical facilities from toxic release inventory threshold and release calculations as such activities are exempted under the personal use exemption of the EPCRA regulations.

The personal use exemption also applies to non-military weapons training and other non-military munitions use on operational ranges and recreational ranges (e.g., local law enforcement qualification testing, Rod and Gun Club events).

(6) The motor vehicle maintenance exemption exempts TCs contained in products used for the purpose of maintaining motor vehicles (e.g., ships, aircraft, cars) operated by a facility. Installations are exempt from reporting the use of TCs associated with the maintenance of motor vehicles, such as staff cars, base maintenance and support vehicles, and privately owned vehicles used on the installation. Large combined fleets of motor vehicles maintained at one central location are not exempt.

Installations are not exempt from reporting the TCs used at the Intermediate and Depot Level for the maintenance of the tactical vehicles, aircraft (including missiles), and ships. Shore installations are not exempt from reporting TCs used by shore based maintenance in repairing and painting ships that are in port or in dry-dock. TCs used on board ship by ship's company for organizational level maintenance are exempt. Maintenance below Intermediate and Depot Level (e.g., Organizational Level) maintenance is exempt. For example, field or organizational level units are exempt from reporting TCs used in the maintenance of vehicles outside the Intermediate and Depot Level maintenance shop. Similarly, personnel maintaining aircraft and vehicles under field conditions and personnel maintaining ships at sea are exempt from reporting their use of TCs.

(7) The motor vehicle maintenance exemption applied for fuels exempts TCs associated with the transfer of fuel from non-stationary sources of fuel, for example tanker trucks. The fueling of vehicles from stationary sources of fuel and bulk fuel storage, including movable bulk storage tanks, is exempt from threshold and release calculations. Specifically, refueling of motor vehicles owned or under operational or custodial control of a Navy installation remains exempt under the motor vehicles maintenance exemption. Similarly, releases from the fuel transfer and fueling activities from both mobile and stationary sources remain exempt when the fuel is used for Navy installation motor vehicle refueling.

Beginning with reporting year 2002 (reports due in 2003), Navy installations cannot claim the motor vehicle maintenance exemption for refueling of motor vehicles that are not under the operational or custodial control of the Navy installation (i.e., transient vehicles). Transient motor vehicles are motor vehicles, including ships and aircraft, that only stop at a Navy installation for fuel or rest and have no other mission at the Navy installation. Therefore, fueling of these transient vehicles should be included in the otherwise use threshold and release calculations for TCs in these fuels. In addition, other products provided to transient motor vehicles are considered otherwise used and must be included in threshold and release calculations.

Emissions from all motor vehicles (transient and non-transient) are exempt. Motor vehicles include base and military and civilian motorized vehicles such as cars, trucks, cranes, forklifts, aircraft, ships, and locomotives.

(8) The intake water/air category exempts facilities from reporting TCs present in process water or non-contact cooling water as drawn from the environment or from municipal sources. The exemption also covers TCs present in air used either as compressed air or as part of combustion.

(9) The laboratory use exemption applies to those listed TCs manufactured, processed, or otherwise used in a laboratory for quality control (QC), R&D, and other laboratory activities. The manufacture, process, or otherwise use of TCs for the purpose of testing munitions, weapons systems or qualifying munitions by personnel as part of the testing process is considered part of this exemption. This exemption should be applied as narrowly as possible. It is not intended as a blanket exemption for any facility that has the title "laboratory" in its name. To qualify, the listed TCs must be directly used in, or produced by, a laboratory activity at a Navy installation. The manufacture, processing, or other use must occur under the supervision of a technically qualified individual. Generally, consider bench-scale activities exempt. Activities that do not directly support R&D, sampling and analysis or quality assurance (QA) and QC are not exempt. Specialty chemical production and pilot plant scale activities do not qualify for the laboratory activities exemption. Navy installations shall also consider the laboratory exemption to apply to the cleaning of equipment within a laboratory, as well as to the standards and test samples that are necessary to set up and calibrate laboratory equipment.

The laboratory exemption applies to certain activities that occur on ranges. In many cases, DOD ranges are the only laboratories suitable for munitions or weapons RDT&E. DOD conducts RDT&E activities on DOD ranges under the direct supervision of technically qualified individuals. Therefore, range activities related to RDT&E of new or existing munitions, weapons systems, and platforms are exempt from threshold determinations and release reporting under this exemption.

(10) The property owner exemption excludes property owners from all Section 313 reporting responsibilities where there is only a real-estate interest with no other value gained other than the real estate value. This exemption includes leases to any non-DOD entities, including commercial entities (e.g., privatization efforts or temporary leases).

k. Installations shall follow these guidelines when complying with Section 313:

(1) Installations shall ensure documentation is in place to support EPCRA reporting efforts, including the decision to not report. Installations should have documentation and calculations for threshold and release decisions available to support any inquires. Installations shall maintain support documentation for a minimum of 5 years, unless a cross governing regulation (e.g., RCRA) requires the installation to retain the records for a longer period.

This documentation is required for ALL installations that are subject to EPCRA and is NOT limited only to those installations that must submit a report.

(2) Installations shall submit a separate and complete electronic Form R to the EPA and the State for each TC meeting threshold requirements. Navy installations shall not use the Form A. The Form R shall cover not only the triggering activity but all non-exempt uses of the TC at the facility. The annual submission is due by 1 July covering the previous calendar year releases. Installations are responsible for submitting Form Rs to EPA and the State in advance of the reporting deadline. In addition, installations shall submit an electronic copy of all Form Rs to the cognizant BSO or regional

office who shall forward the electronic form to CNO (N45) by 1 August for accurate measurement of the total annual releases and off-site transfers of reported TCs by Navy installations.

(3) The SIC code for Navy installations is "9711." No other or additional SIC codes shall be reported. If or when EPA begins use of the NAICS code to replace SIC codes, Navy installations shall report "928110." No other or additional NAICS codes shall be reported.

(4) Navy installations shall not use range codes to report release estimates on the Form R. Numeric values shall be entered.

(5) The Navy installation commander shall sign the Form R report(s), unless the installation commander delegates this authority, in writing, to a subordinate.

(6) Navy installations shall submit revised Form R report(s) to EPA, the state, and its BSO when necessary to correct errors or omissions in a prior year's reporting. Revised Form Rs shall not be submitted where a Navy installation is following DOD and Navy guidance that differs from EPA guidance.

(7) Navy installations shall cooperate fully with EPA regional personnel conducting EPCRA compliance reviews and inspections. installations should be prepared to provide, in a timely manner, information related to the calculation and preparation of all EPCRA reports. If information requested is not available or questioned by EPA personnel, installations shall explain in writing and should reference Navy guidance as applicable. If Navy policy or guidance is questioned, installations shall refer EPA personnel to CNO (N45). Installations shall not take any action inconsistent with Navy policy without approval from CNO (N45).

(8) The Navy's policy is to make Form R's readily available to the public upon request without requiring Freedom of Information Act requests.

m. Prior to the release of any reports to the SERC or LEPC (or equivalent for your jurisdiction), non-Navy fire departments, EPA, or the State, installations shall review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the installation shall develop alternative procedures for protecting the installation and off-site personnel.

n. Chapter 12 describes Navy policy and planning in relation to an accidental release of HS.

6-6 Responsibilities

6-6.1 CNO (N45) shall:

(a) Develop and implement Navy EPCRA policy.

(b) Develop detailed guidance for use by installations in the implementation of EPCRA requirements.

(c) Act as the assessment sponsor for accomplishing implementation of EPCRA and pollution prevention efforts at Navy installations.

(d) Provide BSO or regionally submitted electronic Form R reports, status reports and updates to DOD annually.

6-6.2 BSOs shall:

(a) Program, budget, and allocate funds for all identified installation EPCRA requirements.

(b) Assist in developing and maintaining a centralized list of authorized HM or the approved, less hazardous substitutes. Ensure that installations under their cognizance use only those HMs that appear on the HM AUL in support of reducing EPCRA reporting requirements.

(c) Develop and implement HM elimination/substitution processes for all systems and operations under their cognizance to support the reduction of EPCRA reporting.

(d) Develop processes that ensure that the least hazardous, technically acceptable materials are incorporated into the installation AUL to improve EPCRA reporting efforts (see chapter 4 for details).

(e) Notify CNO (N45) of any deficiencies cited by EPA inspectors during facility EPCRA reviews and inspections to provide appropriate lessons learned and required improvements to current policy and programs.

(f) Compile and review all installation Form Rs and forward electronic copies to CNO (N45) annually by 1 August for accurate measurement of releases and off-site transfers of all TCs by Navy installations.

(g) Compile and review facility information on actual number of installations meeting reporting requirements under all sections of EPCRA.

6-6.3 COMNAVFACENGCOM shall:

(a) Support EPCRA initiatives as tasked by CNO (N45).

(b) Assist CNO (N45) in managing and analyzing EPCRA data.

(c) Provide technical assistance to shore installations to implement EPCRA policy.

6-6.4 COMNAVSUPSYSCOM shall:

(a) Provide support, as requested, to identify EPCRA-listed chemicals in supplied materials.

(b) Develop, implement, and maintain a Navy-wide system for acquiring only authorized HM, integrating command and shore installation HM AULs to support reduced EPCRA reporting.

(c) Provide guidance to, and coordinate efforts of the Navy-wide HM substitution efforts.

(d) Establish methods to reduce or minimize the entry of new HM into the supply system. Prior to the introduction of new HM into the system, a valid requirement for the HM must exist; a complete MSDS shall be locally available; and a review shall confirm that existing non-hazardous or less hazardous substitutes are not available to support reduced EPCRA reporting (see chapter 4 for details).

6-6.5 NETC shall incorporate EPCRA guidance and policies into Navy training. Appropriate training courses shall include pollution prevention and source reduction initiatives as applicable to EPCRA requirements.

6-6.6 Regional Commanders and Commanding Officers of shore installations shall refer to paragraph 6-2 for specific requirements and shall:

(a) Define the facility fenceline, including all tenants, to support EPCRA reporting requirements. Revise and update ISAs to support these requirements.

(b) Calculate all thresholds using the entire facility inventory and meet all reporting requirements according to EPCRA for that facility.

(c) Review all publicly available data to prevent sensitive or classified information from being released. Sign all required EPCRA reporting forms, including Tier I or Tier II reports and Form R reports as the validating official or designate in writing alternate validating official.

(d) Honor public requests for EPCRA information in a timely and informative manner. Ensure the public affairs office is onboard and aware of information.

(e) Use data provided from EPCRA data collection and reporting in updating the installation comprehensive Pollution Prevention Plan (see chapter 4 for details).

(f) Notify BSO and regional environmental coordinator upon receiving notice of EPA's intent to inspect for EPCRA compliance and of final results. Fully cooperate with EPA personnel to support EPCRA reviews and inspections.

(g) Develop and implement a local HM AUL using an inventory that identifies and quantifies HM, including whether the material is an EHS, HS, or TC.

(h) Establish and implement procedures to control, track, and reduce the variety and quantities of HM in use, in storage or stock, or disposed of as HW, to support reduced EPCRA reporting.

(i) Identify to the BSO funding needed to support all EPCRA requirements.

6-6.7 RECs shall:

(a) Coordinate with regulators, facilities, and CNO.

(b) Disseminate policy and guidance information to facilities.

(c) Support regional requests for public information on EPCRA information.

CHAPTER 7

CLEAN AIR ASHORE

7-1 Scope

This chapter applies to air emissions from stationary and mobile sources at all shore facilities within the United States, Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Commonwealth of the Northern Marianas Islands. Chapter 21 provides Navy policy with respect to installations in foreign countries.

Refer to Chapter 8 for management of ozone depleting substances, Chapter 22 for the control of air emissions from ships and Chapter 30 for radon management.

7-1.1 References. Relevant references are:

(a) 40 CFR Parts 50-97 and 1039-1068, EPA Air Programs Regulations;

(b) 10 CFR Part 490 Alternative Fuel Transportation Program;

(c) 29 CFR 1910.119, Process Safety Management of Hazardous Chemicals;

(d) Navy Title V Operating Permits Program Summary and Policy Guidance of 20 December 1995 (NOTAL);

(e) 41 CFR Subchapter H, Parts 41-47 GSA Disposal Regulations;

(f) 48 CFR Chapter 1, Federal Acquisition Regulation;

(g) DODD 4170.10 of 8 August 1991, Energy Management Policy; (NOTAL);

(h) DODD 5410.12 of 22 December 1987, Economic Adjustment Assistance to Defense-Impacted Communities; (NOTAL);

(i) DOD Base Redevelopment and Realignment Manual (BRRM), DOD 4165.66-M of March 1, 2006; (NOTAL).

7-2 Legislation

7-2.1 Clean Air Act, as Amended. The purpose of the 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..." To achieve this goal, the CAA established two strategies for setting standards: (1) National Ambient Air Quality Standards (NAAQS) for six criteria pollutants; and (2) national emission standards for individual sources of hazardous air pollutants (HAPs). In addition, the CAA requires regulation of mobile sources of air emissions and a permit program for stationary sources. Refer to reference (a) for complete details of these requirements.

Achieving CAA standards is the responsibility of the States which must develop State Implementation Plans (SIPs) that outline to EPA how each State will achieve and maintain the standards. SIPs implement CAA programs such as the Title V operating permit, new source performance standards (NSPS), new source review (NSR), and national emission standards for hazardous air pollutants (NESHAPs) at the State and local level. States may require pollution control and prevention measures which are more stringent than those mandated by EPA, but may not allow measures which are less stringent. Federal agencies must comply with the requirements of Federal, State, interstate, and local air pollution control regulations, in the same manner and to the same extent as any nongovernmental entity.

The 1990 Amendments to the CAA introduced sweeping changes to the legislation. In order to improve air quality nationwide, the 1990 Amendments mandate the implementation of more stringent pollution control and prevention measures which include: reclassification of nonattainment areas, regulation of mobile sources, regulation of 189 HAPs, regulation of sulfur dioxide (SO_2) and oxides of nitrogen (NO_x) for acid deposition control, implementation of an extensive operating permit program, and strengthening of the powers that allow EPA and State agencies to better enforce the provisions of the CAA.

7-2.2 Emergency Planning and Community Right to Know Act of 1986. This Act, also known as Title III of the Superfund Amendments and Reauthorization Act, addresses the release of hazardous substances to the environment. EPCRA calls for reporting releases of certain extremely hazardous substances to the environment. Certain chemicals subject to the HAPs and risk management provisions of CAA Section 112 are also subject to Title III. See Chapters 6 and 15 for detailed requirements.

7-2.3 The Energy Policy Act, as Amended. This Act seeks to enhance the long-term energy security of the nation by reducing dependency on imported oil and providing for improved energy efficiency. EPACT establishes a Federal leadership strategy designed to encourage automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and vehicles. Under the Energy Policy Act, 75% of light-duty vehicle (LDV) acquisitions in covered fleets must be alternative fuel vehicles (AFVs) and these vehicles must be operated using alternative fuels unless a waiver is granted.

7-3 Terms and Definitions

7-3.1 Acid Rain. The acidic precipitation formed by the atmospheric chemical transformation of SO_2 and NO_X emissions.

7-3.2 Air Pollution Emergency Episodes. Air pollution emergency episodes exist when the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of individuals.

7-3.3 Aircraft Engine. Aircraft engine means a propulsion engine which is installed in or which is manufactured for installation in an aircraft.

7-3.4 Alternative Fuels. Motor vehicle emission regulations (40 CFR 86.000-2) define “alternative fuels” as any fuel other than gasoline and diesel fuels, such as methanol, ethanol, and gaseous fuels. EPACT regulations (reference (b)) define alternative fuels to include: methanol, denatured ethanol and other alcohols; mixtures containing 85 percent or more alcohol with the balance consisting of gasoline or other such fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived fuels; fuels (other than alcohol)

derived from biological materials (including neat biodiesel); electricity; and other substantially non-petroleum based fuels.

7-3.5 Area Source. An area source is any stationary source that is not a major source. The term does not include motor vehicles or nonroad vehicles subject to regulation under Title II of the CAA.

7-3.6 Attainment Area. An area that meets the National Ambient Air Quality Standards.

7-3.7 Best Available Control Measures (BACM). Emission control measures that achieve the greatest possible reduction in the emission of particulate matter.

7-3.8 Best Available Control Technology (BACT). Emission control technology to be applied to new sources located in areas that are in attainment of the NAAQS for the pollutants emitted from the new source. States are to apply BACT on a case-by-case basis, taking into account economic considerations. BACT must be at least as stringent as the NSPS for similar facilities.

7-3.9 Clean Fuel Vehicle. Any vehicle in a class or category of vehicles which has been certified to meet the clean-fuel vehicle standards applicable under Title II of the CAA for that class or category.

7-3.10 Clean Alternative Fuels. Any fuel (including methanol, ethanol, fuel blends containing 85 percent or more alcohol, reformulated gasoline, diesel, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity) used in a clean-fuel vehicle that meets the requirements and emission standards of the CAA.

7-3.11 Commercial Motor Vehicles, Equipment, or Vessels. Vehicles, equipment and vessels which are substantially similar to commercial products that are available for sale to the general public.

7-3.12 Control Techniques Guidelines (CTG). Documents published by EPA designed to assist the States/localities in selecting the most appropriate technologies to apply for the control of major sources of air pollution.

7-3.13 Federal Implementation Plan. A Federally-imposed air quality plan which supersedes a SIP due to a State's failure to develop an adequate plan to achieve and maintain the NAAQS.

7-3.14 Lowest Achievable Emission Rate (LAER). Rate of emissions that reflects the most stringent emission limitation contained in the implementation plan of any State for such class or category of source, or the most stringent emission limitation achieved in practice by such class or category of source, whichever is more stringent. The application of LAER shall not permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable NSPS.

7-3.15 Maintenance Area. An area which has attained the NAAQS for a particular pollutant and has been redesignated to attainment. These areas must submit and implement a maintenance plan in accordance with section 175A of the CAA, to ensure continued attainment.

7-3.16 Major Source. Any stationary source, or group of stationary sources located within a contiguous area and under common control, which emits, or has the potential to emit, air pollutants in excess of specified threshold levels. The threshold amounts vary according to the attainment classification of the

area in which the source is located, the pollutant(s) emitted, and the applicable section of the CAA. The term does not include motor vehicles or nonroad vehicles subject to regulation under Title II of the CAA. Unless otherwise specified, the major source threshold is 100 tons per year (tpy).

7-3.17 Marine Engine. An engine that is installed or intended to be installed on a marine vessel. This definition does not include portable auxiliary engines for which the fueling, cooling and exhaust systems are not integral parts of the vessel.

7-3.18 Maximum Achievable Control Technology (MACT). Emissions control technology that achieves the maximum emission reduction as determined using criteria consistent with Section 112(d)(3) of the CAA. MACT is applicable only to those pollutants listed as HAPs under Section 112 of the CAA.

7-3.19 Motor Vehicle. Any self-propelled vehicle designed for transporting persons or property on a street or highway.

7-3.20 National Ambient Air Quality Standards. Air quality standards established by EPA for six criteria pollutants in order to provide an adequate margin of safety in protecting the general health and welfare of the public. Criteria pollutants include: ozone (O_3), carbon monoxide (CO), particulate matter (PM) regulated as PM-10 (10 microns or smaller) and PM2.5 (2.5 microns or smaller), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb).

7-3.21 National Emissions Standards for Hazardous Air Pollutants. Standards established for categories of stationary sources that emit one or more of the HAPs listed under CAA section 112.

7-3.22 National Security Exempt Engine. An engine being used in an application which is exempted from emission standards for national security reasons as defined by national security exemption provisions in EPA or State motor vehicle or nonroad engine rules. For example, an engine used in an armored personnel carrier is exempted under 40 CFR 89.908.

7-3.23 New Source Performance Standards. National emission standards that limit the amount of pollution allowed from new or modified sources. These standards are specific for each type of source such as boilers or petroleum storage tanks.

7-3.24 New Source Review. Federal permit program for reviewing new sources and modifications to existing sources prior to construction. The program is referred to as NSR for major stationary sources in nonattainment areas, prevention of significant deterioration (PSD) for major stationary sources in attainment areas, and minor NSR for non-major projects in all areas. NSR programs are typically implemented by the States.

7-3.25 Nonattainment Area. An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS for one or more of the criteria pollutants.

7-3.26 Nonroad Engine. Any internal combustion engine: (i) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or (ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or (iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and

capable of being carried or moved from one location to another. Indicators of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. Nonroad engines do not include engines in highway vehicles, marine vessels or stationary engines.

7-3.27 Nonroad Vehicle. A vehicle powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.

7-3.28 Offsets. Emission reductions obtained from one source in order to compensate for increased emissions from another.

7-3.29 Oxygenated Gasoline. Gasoline which is blended with additives in order to increase the oxygen content.

7-3.30 Ozone (O_3). The major constituent of "smog," ozone is formed when volatile organic compounds (VOCs) and NO_x react in sunlight. The atmosphere has two distinct layers of ozone. For air quality purposes, interest rests in the formation and transport of ground level ozone. At ground level, ozone has been shown to adversely affect the respiratory system and has proven to be the primary criteria pollutant causing regions to be declared in nonattainment of the NAAQS. At altitudes above 7 miles, stratospheric ozone plays a vital role in blocking out dangerous ultraviolet radiation. Recent evidence of a decline in stratospheric ozone levels has resulted in a world-wide call for the banning of ozone depleting substances (see Chapter 8).

7-3.31 Ozone Depleting Substances (ODSs). Any chemical listed as a Class I or Class II substance in Section 602 of the CAA (see Chapter 8, Tables 8-1 and 8-2 for a list of Class I and Class II substances).

7-3.32 Particulate Matter. A criteria air pollutant that includes dust, soot, and other small, solid materials that are released into and are transported by the air. PM-10 is that portion of the total suspended particulate matter with an aerodynamic diameter of 10 microns or less. PM2.5 is that portion of the particulate matter with an aerodynamic diameter of 2.5 microns or less.

7-3.33 Prevention of Significant Deterioration Program. Federal permit program for reviewing new major stationary sources and modifications to existing major stationary sources located in attainment areas prior to construction. The program is typically implemented by the States.

7-3.34 Reasonably Available Control Technology (RACT). Emission control technology that achieves the lowest possible emissions level given technological and economic considerations. RACT is usually applied to existing stationary sources in nonattainment areas and often involves the installation of new control equipment on older sources.

7-3.35 Reformulated Gasoline. Gasoline which has undergone special distillation processes in order to meet performance requirements for NO_x emissions, oxygen content, benzene, heavy metals, VOCs, and toxic air pollutants.

7-3.36 State Implementation Plan. A plan developed by each State to implement, maintain, and enforce the NAAQS and other CAA goals within that State. While States have the primary responsibility for implementing the CAA, EPA maintains strong oversight in this process.

7-3.37 Stationary Source. Any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle. Uninstalled engines may be considered part of a stationary source when operated in a test cell/stand.

7-3.38 Synthetic minor source. A major source that accepts Federally enforceable limits on its potential to emit to below the major source threshold. These limits generally are in the form of operational or production limits. Recordkeeping and reporting of emissions are typically required to demonstrate compliance.

7-3.39 Title V Operating Permit. A Federally enforceable document issued by the States (or in certain situations by EPA) to major sources and certain area sources of air pollution that defines emission standards, operational procedures, and all obligations of the source under the CAA.

7-3.40 Unclassifiable Area. An area that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for the pollutant.

7-3.41 Unleaded Gasoline. Gasoline which is produced without the use of any lead additive and which contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon.

7-3.42 Volatile Organic Compounds. Any compound of carbon that participates in atmospheric photochemical reactions unless specifically excluded in 40 CFR 51.100. Some of the carbon compounds excluded from the definition of VOC are: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methane, ethane, methyl formate, methylene chloride, 1,1,1-trichloroethane, acetone, and perchloroethylene. Some ODSs and other refrigerant substitutes are also excluded. Refer to a current version of 40 CFR 51.100 for a complete list of exclusions.

7-4 Requirements

7-4.1 Regulatory Scheme. EPA designates all areas in the country as unclassifiable, attainment, nonattainment, or maintenance with respect to the NAAQS for each criteria pollutant.
Certain regulatory requirements are fundamental and apply to all areas, regardless of their attainment status, while other more specific and stringent requirements apply only to nonattainment and maintenance areas. For help in determining attainment designations, contact the State or local air pollution control office, or the appropriate EPA Regional Office.

7-4.2 General Requirements

a. **Enforcement/Citizen Suit Provisions.**

(1) **Waiver of Sovereign Immunity.** The broad waiver of Federal sovereign immunity in CAA Section 118(a) subjects Federal facilities to all Federal, interstate, State, and local air pollution requirements, to the same extent as any nongovernmental entity. States or local air districts generally enforce these CAA requirements; however, EPA also has enforcement authority for most CAA violations. Methods of enforcement include compliance orders, field citations, administrative assessment of civil penalties, civil judicial enforcement, and criminal enforcement. The CAA provides for penalties of up to $32,500 per day for each violation.

(2) **State Civil Penalties.** Although installations are subject to CAA penalties assessed by EPA, the applicability of State and local air district penalties is not clear due to conflicting court opinions. In U.S. v. Tennessee Air Pollution Control Board, No. 97-5715 (6th Circuit Court of Appeals, 22 July 1999), the Federal Appeals Court found that CAA Section 118(a) waives Federal sovereign immunity for punitive civil fines and penalties assessed by a State government. In City of Jacksonville v. Department of the Navy, No. 01-00368-CV-J-20-HTS (11th Circuit Court of Appeals, 28 October 2003), the Federal Appeals Court found no waiver of Federal sovereign immunity. Because of the conflict in court opinions, all penalty assessments should be coordinated in accordance with the provisions of Appendix B of this instruction and the additional policy provisions of this chapter.

(3) **Citizen Suits.** Civil actions may be brought against any person (including the United States) for present or past (if repeated) CAA violations of an emission standard, limitation, or order issued by EPA or a State. In addition, actions may be brought against any person who constructs without a required permit.

7-4.3 Provisions For Stationary Sources. In addition to compliance with the general requirements outlined above, the following additional standards apply to stationary sources only.

a. **Title V Operating Permits.** Title V of the CAA created an operating permit program which the States must develop and implement per EPA regulations establishing minimum requirements for State programs. Although the States are responsible for implementing and enforcing the permit program, EPA retains significant authority to oversee State implementation. EPA must review and approve State permit programs, review proposed permits, veto improper permits and, if a State fails to adopt or implement an approved program, EPA will develop and implement a Federal permit program. The Title V permit program attempts to clarify, in a single document, all the requirements applicable to a source, including requirements from the SIP, the acid rain program, and the air toxics program. The Title V permit program also includes a requirement for payment of permit fees to finance the State operating permit programs. After the effective date of any permit program approved under Title V, it is unlawful to violate any requirement of such a permit, or to operate a source subject to the permit program, except in compliance with a Title V permit. The program applies to all stationary sources of air pollution that are subject to Federal regulation under the CAA, including those operated on Federal facilities. Taking restrictions to become a synthetic minor source usually allows the activity to avoid many of the requirements of a major source.

(1) **Responsible Official.** The responsible official assumes responsibility for the accuracy and completeness of permit applications and could be subject to criminal sanctions if the application is deficient. The responsible official will also have to certify ongoing compliance with all permit provisions once the permit is issued. The responsible official could be either the CO of the installation or the Navy Regional Commander having responsibility for the overall operation of the principal geographic unit of the Navy where the installation is located.

(2) **Permit Application.** Applications must be "timely" and "complete." An application is "timely" if it is submitted within 1 year of either the date of State program approval or of commencing operations for sources required to obtain preconstruction permits under major source NSR. States must establish specific criteria to define a "complete" permit application.

An "application shield" is created if a timely and complete application is filed, allowing the source to operate without a permit pending the State's action on the permit.

(3) **Certification.** A responsible official must certify permit applications as to their truth, accuracy and completeness after making reasonable inquiry. The certification must include the compliance status of the facility, and the method used to determine the compliance status.

b. **Hazardous Air Pollutants.** Section 112 of the CAA lists an initial 189 pollutants as hazardous and subject to regulation and details Federal requirements for the control of HAPs. EPA revises the list as necessary.

(1) **Source Categories.** EPA must maintain a list of the major and area sources, grouped into categories and subcategories, that emit significant quantities of HAP or that must be regulated to meet a specific provision of the CAA. EPA must issue regulations establishing emission standards for the source categories and subcategories.

(2) **Major Source Thresholds.** For HAPs, the thresholds are 10 tons per year (tpy) or more of any HAP or 25 tpy or more of any combination of HAPs.

(3) **Emission Standards.** EPA must initially establish technology-based emission standards that achieve the maximum degree of emissions reduction possible for new and existing sources in the appropriate category while giving consideration to cost, non-air quality health and environmental impacts, and energy requirements. Measures to achieve the desired emissions standards include: implementation of process changes; material substitutions; and measures to treat or control emissions, generally through the application of MACT. Eight years after each MACT standard is issued, EPA must assess the remaining or residual risk. If the risk is too high, EPA must issue additional emission standards.

(a) **Aerospace and Marine Coatings.** As required by the CAA, EPA issued NESHAPs and CTGs to control emissions from aerospace manufacturing and rework and shipbuilding and ship repair operations. Activities and facilities related to coating of aircraft and ships are commonly found at most Navy installations. The rules establish MACT and BACT requirements for aircraft and ship activities such as cleaning, painting, de-painting, maskant application, and waste handling. Generally, installations will achieve the necessary emission reductions through the use of compliant materials or control devices. Other requirements include testing, recordkeeping, and reporting protocols. Implementation of these rules may incur substantial cost and labor impacts.

(b) **Other HAP Source Categories.** In addition to aerospace and marine coatings, 40 CFR 61 and 63 contain standards that are applicable to major and/or area sources found at Navy installations. Some of the source categories that are regulated under the NESHAPs include Chromium Electroplating and Anodizing, Dry Cleaning, and Halogenated Solvent Cleaners. Other NESHAPs also apply to Navy operations. All have specific applicability thresholds as well as compliance requirements.

(4) **Accidental Releases/Risk Management Plans.** Owners and operators of stationary sources that manufacture, process, use, handle or store EPA-regulated substances which exceed specified thresholds are required by CAA Section 112(r) to identify hazards from releases of such substances and to design and maintain a safe facility to prevent releases and minimize the consequences of any accidental releases. Facilities that exceed the threshold limits must submit Risk Management Plans (RMPs) to EPA. Facilities are responsible for updating their RMPs at least once every five years, or sooner if updates and re-submissions are required per 40 CFR 68.190(b) or corrections are required per 40 CFR 68.195. If a

stationary source is no longer subject to this part, the owner or operator shall submit a de-registration to EPA within six months indicating that the stationary source is no longer covered.

(5) **Solid Waste Combustion.** Section 129 of the CAA directs EPA to establish NSPS and Emission Guidelines for solid waste incineration units pursuant to Section 111 of the CAA for units combusting municipal solid waste, hospital, medical and infectious waste, commercial or industrial solid waste, and other unspecified categories of solid waste. Section 129 of the CAA also requires training and certification of operators of solid waste incineration unit and high-capacity fossil fuel fired plants.

7-4.4 Additional Provisions for Attainment Areas. The CAA mandates the implementation of emission limits and other measures for prevention of significant deterioration of air quality in those areas designated as being in attainment of the NAAQS. Facilities located in attainment areas must obtain a permit before any new construction or modification of a major source begins. The PSD permit application must include BACT review and selection; a growth-related impact analysis; ambient air quality analysis; and other information relative to preserving air quality.

7-4.5 Additional Provisions for Nonattainment and Maintenance Areas. The CAA mandates that the SIP contain emission limitations and control measures for the modification and construction of major stationary sources (NSR) to assure that the NAAQS are achieved within the appropriate schedules and timetables. Installations located in nonattainment areas must obtain a NSR permit before any new construction or modifications of a major source begins and have to comply with applicable emission offset requirements. Permit application must include the review and selection of the appropriate RACT.

a. **General Conformity Rule.** Section 176(c) of the CAA prohibits Federal agencies from engaging in, supporting, providing financial assistance for, licensing, permitting, or approving any activity that does not conform to an applicable SIP or FIP. EPA issued criteria and procedures for determining conformity, found in reference (a). Federal agencies must make a determination that a Federal action conforms to the SIP or FIP before proceeding with the action. Conformity determinations will typically be done as part of the NEPA analysis and documentation procedures for the planned action (See NEPA Procedures in Chapter 5 and guidance on General Conformity in Appendix F).

b. **Ozone.** EPA has replaced the previous 1-hour ozone NAAQS with a new 8-hour ozone NAAQS of 0.085 parts per million (ppm), which became effective on 15 June 2004. The 0.12 ppm 1-hour NAAQS no longer applies. The requirements listed below are based on the new 8-hour ozone NAAQS implementation rule.

Regarding conformity, as of 15 June 2005, one year after the effective date of the 8-hour ozone designations, the general conformity requirements apply to actions in 8-hour ozone nonattainment and maintenance areas. Conformity analysis is no longer required for the 1-hour NAAQS.

(1) **Subpart 1 Nonattainment Areas.** States with areas classified as Subpart 1 areas for O_3 must institute the following provisions:

- The application of NSR requirements to major NO_x sources.
- The completion of an emissions inventory from all sources, to be updated every 3 years.

– An offset program that requires each new or modified major source of VOCs or NO_x to be offset by the ratio of at least 1 to 1.

(2) **Marginal Ozone Nonattainment Areas.** States with areas classified as marginal nonattainment for O_3 must institute the following provisions:

– The application of NSR requirements to major NO_x sources.

– The completion of an emissions inventory from all sources, to be updated every 3 years.

– The application of RACT requirements that were in effect prior to enactment of the CAA.

– A construction and operating permit program for new and modified sources.

– An emissions statement for stationary sources of VOCs and NO_x.

– An offset program that requires each new or modified major source of VOCs or NO_x to be offset by the ratio of 1.1 to 1. In marginal nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 100 tpy or more of VOCs or NO_x.

(3) **Moderate Ozone Nonattainment Areas.** In addition to meeting the requirements of marginal areas, States with moderate ozone nonattainment areas must also:

– Show reasonable further progress (RFP) toward attainment through a 15 percent reduction in VOCs from the baseline by 2008. The 2002 inventory is the baseline inventory for the RFP requirement for areas designated nonattainment in 2004. However, EPA is allowing States the option of justifying the use of an alternative baseline year. Areas that are classified as moderate under the 8-hour standard that have already implemented their 15 percent plans under their 1-hour ozone SIPs would be considered to have met the statutory 15 percent requirement.

– Apply RACT to all major stationary VOC and NOx sources.

– Require Stage II vapor recovery systems for all facilities that distribute more than 10,000 gallons of gasoline per month or 50,000 gallons per month for independent small business marketers. Requirements for installation and operation of Stage II controls are effective for new facilities (built after enactment of the CAA) within 6 months after a rule requiring Stage II controls is adopted in the State where the facility is located; within 1 year after adoption for existing facilities with 100,000 gallons or greater capacity (average monthly sales for 2 years prior to rule adoption date); or within 2 years for all other facilities.

– Initiate a basic vehicle Inspection/Maintenance (I/M) program.

– Have an offset program requiring each new or modified major source of VOCs or NO_x. to be offset by the ratio of 1.15 to 1.

In moderate nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 100 tpy or more of VOCs or NO_x.

(4) **Serious Ozone Nonattainment Areas.** In addition to meeting the requirements of moderate nonattainment areas, States with serious ozone nonattainment areas must also:

- Operate an enhanced ambient monitoring program for NO_x, O_3, and VOCs.
- Demonstrate that required provisions will lead to attainment through the use of computer modeling.
- Show reasonable further progress toward attainment through a 15 percent reduction in VOCs from the baseline by 2008, plus an additional 3 percent per year averaged over each consecutive 3 year period until attainment.
- Institute an enhanced vehicle I/M program to be enforced through denial of vehicle registration.
- Establish a clean-fuel fleet program in those areas having a 1980 census population of 250,000 or more.
- Have an offset program requiring each new or modified major source of VOCs or NO_x to be offset by the ratio of at least to 1.2 to 1.

In serious nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 50 tpy or more of VOCs or NO_x.

(5) **Severe Ozone Nonattainment Areas.** In addition to meeting the requirements of serious nonattainment areas, States with severe ozone nonattainment areas must also:

- Identify and adopt enforceable transportation control measures to offset growth in vehicle miles traveled. A 1995 amendment to the CAA made it optional for States with severe ozone nonattainment areas to require employers to implement programs to reduce work-related vehicle trips and miles traveled by employees if the State implements one or more alternative methods that will achieve equivalent emission reductions. However, although States are no longer required to include trip reduction requirements for employers in their SIPs, some may choose to do so.
- Have an offset program requiring each new or modified major source of VOCs or NO_x. to be offset by the ratio of at least 1.3 to 1.
- Submit a plan detailing enforcement provisions to EPA.

In severe nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 25 tpy or more of VOCs or NO_X.

(6) **Extreme Ozone Nonattainment Areas.** In addition to meeting the requirements of severe nonattainment areas, States with extreme ozone nonattainment areas must also:

- Have an offset program requiring each new or modified major source of VOCs or NO_x to be offset by the ratio of at least 1.5 to 1. An increase in emissions at a major source is not considered to be a modification subject to the 1.5 to 1 offset requirement if the owner/operator of the source elects to offset the increased emissions by a reduction in emissions from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1.

- Develop a plan requiring existing, new, or modified electric utility and industrial and commercial boilers emitting more than 25 tpy NO_x to burn natural gas, methanol, ethanol or other clean fuel as their primary fuel or use advanced technology to control NO_X emissions.

In extreme nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 10 tpy or more of VOCs or NO_X.

c. **Carbon Monoxide**

(1) **Moderate CO Nonattainment Areas.** Moderate CO nonattainment areas have a design value between 9.1 and 16.4 ppm. States with moderate CO nonattainment areas must:

- Submit an accurate inventory of all emission sources and update the inventory every 3 years until attainment of the NAAQS is achieved.

- Provide and update annually a forecast of vehicle miles traveled if the design value is 12.7 ppm or greater.

- Institute a vehicle I/M program with requirements equivalent to those for marginal ozone nonattainment areas, except that the program applies to CO. For those areas with a design value greater than 12.7 ppm, the requirements are the same as the enhanced I/M program required of serious ozone nonattainment areas, except that the program applies to CO.

- Institute a clean-fuel fleet program as is required in serious or above ozone nonattainment areas if the design value is 16 ppm or greater.

- Demonstrate attainment of the CO standard if the design value is greater than 12.7 ppm. Such a demonstration must incorporate specific annual emission reductions necessary to achieve attainment.

- Require the use of oxygenated fuel during high CO portions of the year in those areas with a design value of 9.5 ppm or above.

(2) **Serious CO Nonattainment Areas.** Serious CO nonattainment areas have a design value of 16.5 ppm and above. In addition to all the requirements of moderate CO nonattainment areas with a design value of 12.7 ppm or higher, States with serious CO nonattainment areas must also:

- Require the same transportation control measures that apply to severe ozone nonattainment areas, except that CO is targeted.

- Implement an economic incentive program to encourage emissions reductions of 5 percent per year until attainment if compliance with the NAAQS is not attained by the specified attainment date.

In those serious nonattainment areas where stationary sources are believed to contribute substantially to ambient CO levels, a major source is any stationary source which emits, or has the potential to emit, 50 tpy of CO.

(3) **Multi-State CO Nonattainment Areas.** A multi-State CO area exists if a CO nonattainment area is part of more than one State. In such an interstate situation, the affected States must coordinate the revision and implementation of the CO SIPs as they apply to the affected areas.

d. **Particulate Matter.** In October 2006, EPA completed a review of the PM NAAQS and revised both the coarse PM-10 standard and the PM2.5 standard. As the revised standards are implemented, the PM-10 and PM2.5 nonattainment areas may change, but in the interim the designations previously established and the requirements outlined below still apply.

(1) **PM-10.** Areas designated as nonattainment for PM-10 are initially classified as moderate nonattainment areas; any area that fails to attain by the specified attainment date is reclassified as serious. In addition, if EPA makes a determination that moderate nonattainment areas are unable to practicably achieve the NAAQS by the specified attainment date, they will be reclassified as serious nonattainment areas.

(a) **Moderate PM-10 Nonattainment Areas.** States with areas designated as moderate nonattainment must achieve attainment as quickly as possible but no later than 6 years after being classified as nonattainment. Extensions of attainment dates are possible if implementation requirements have been met and performance standards have been achieved. Provisions to achieve attainment include:

- A construction and operating permit program for new and modified stationary PM-10 sources.

- A demonstration (including air quality modeling) that the plan will provide for attainment by the applicable attainment date or a demonstration that attainment by such date is impracticable.

- The use of reasonably available control measures (RACM), including RACT, within 4 years of an area being classified as moderate PM-10 nonattainment.

(b) **Serious PM-10 Nonattainment Areas.** In serious nonattainment areas, a major source of PM-10 is defined as one which emits, or has the potential to emit, 70 tons per year of PM-10. All of the requirements that apply to moderate PM-10 nonattainment areas also apply to serious nonattainment

areas. In addition to the provisions required for moderate areas the State shall submit to EPA the following provisions to achieve attainment:

- A demonstration (including air quality modeling) that the plan will provide for attainment by the applicable attainment date or, for any area for which the State is seeking an extension of the original attainment date, a demonstration that attainment by such date is impracticable.

- Provisions to assure that BACM will be implemented no later than 4 years after the date the area is classified (or reclassified) as a serious area.

(2) **PM2.5.** Nonattainment area designations under the new PM2.5 NAAQS became effective in April 2005. Conformity requirements apply in PM2.5 nonattainment and maintenance areas as of April 2006, one year after the effective date of the designations. In April 2007, EPA issued the final implementation rule that outlines the provisions States must include in their SIPs to attain the NAAQS.

7-4.6 Provisions For Mobile Sources

a. **Aircraft Engines.** Emissions from aircraft engines are regulated by 40 CFR 87, Control of Air Pollution from Aircraft and Aircraft Engines. The regulation only applies to engines on an aircraft that has a valid airworthiness certificate or equivalent foreign airworthiness certificate. Except for some commercial aircraft owned by the military, military aircraft do not normally have airworthiness certificates and therefore are exempt from the regulatory standard. No State or local air quality region may adopt or attempt to enforce any standard respecting emission of any air pollutant from any aircraft or engine unless such standard is identical to an applicable standard developed by EPA and the Secretary of Transportation. Emissions from aircraft engines may be regulated as a stationary source only if the engine is operated while not installed in an aircraft (for example, while being operated in an engine test cell /stand).

b. **Marine Engines.** Marine Engines are regulated under 40 CFR 91 (Spark-Ignition Engines), and 40 CFR 94 (Compression-Ignition Engines). Both regulations include a National Security Exemption for engines that are intended for use in certain combat and combat-related applications. Emissions from marine engines may be regulated as a stationary source only if the engine is operated while not installed in a vessel (for example, while being operated in an engine test cell/stand).

c. **Nonroad Engines.** Nonroad Engines are regulated under 40 CFR 90 and 40 CFR 1048 (Spark-Ignition Engines), and 40 CFR 89 and 1039 (Compression-Ignition Engines). Each of these regulations includes a National Security Exemption for engines, intended for use in certain combat and combat-related applications.

d. **Vehicle Inspection and Maintenance.** Vehicle emissions testing is required in certain nonattainment areas. Federal installations in these areas must demonstrate compliance with State I/M programs for all motor vehicles operated on the installation even if the vehicle is not registered in that State, so long as the State's program is not discriminatory toward Federal agencies or Federally-owned or Federal employee-owned vehicles. This requirement applies to all employee, military, contractor and Federally-owned/leased vehicles operated more than 60 days per year on the installation.

Military tactical vehicles are exempt from the I/M program.

e. **Fuels**

(1) **Leaded Gasoline.** The CAA prohibits the use of gasoline containing lead or lead additives in motor vehicles.

(2) **Oxygenated Gasoline.** States that include all or part of an area designated nonattainment for CO and having a design value of 9.5 ppm or higher must include in their SIP a provision for the sale and dispensing of oxygenated gasoline in metropolitan areas within the nonattainment area. This provision is in effect during high CO portions of the year as determined by EPA. EPA may waive the requirement for oxygenated fuel if a State can satisfactorily demonstrate that imposition of such a provision interferes with the attainment of any other NAAQS.

(3) **Reformulated Gasoline.** Areas classified as severe and extreme ozone nonattainment areas with a 1980 population in excess of 250,000 are required to implement the use of reformulated gasoline. Any other area (regardless of its population) that is classified under 40 CFR part 81, subpart C as a marginal, moderate, serious, or severe ozone nonattainment area may be included as a reformulated gasoline covered area on petition of the Governor of the State in which the area is located.

(4) **Gasoline.** Depending on local conditions, a number of oxygen content, formulation, and sulfur content regulatory requirements exist for gasoline, as well as gasoline vapor recovery requirements (Stage I and Stage II) to prevent venting of gasoline vapors during transportation, storage, transfer, and dispensing. Installations shall not sell, offer for sale, supply, offer for supply, dispense, transport, or introduce into commerce gasoline represented to be unleaded gasoline unless such gasoline meets the local requirements for unleaded gasoline. Each gasoline pump from which unleaded gasoline is dispensed into motor vehicles shall be equipped with a nozzle required under 40 CFR 80.22. Each gasoline pump stand from which oxygenated gasoline is dispensed at a retail outlet shall be affixed with a label in accordance with 40 CFR 80.35.

(5) **Diesel Fuel Sulfur Content.** EPA has established a minimum cetane index of 40 and is phasing in regulations that will reduce diesel fuel sulfur content. As of June 2006, the allowable diesel fuel sulfur content for highway vehicles has been reduced from 0.05 percent (500 ppm) by weight to 15 ppm. The diesel fuel sulfur content for nonroad equipment, marine vessels, and locomotives will be reduced from 0.5 percent (5000 ppm) by weight to 500 ppm starting in June 2007 and to 15 ppm starting in June 2010.

Activities which dispense diesel fuel to nontactical vehicle and equipment fleets are required to comply with diesel fuel standards.

As low sulfur and ultra-low sulfur regulations become effective, use of military specific fuels, such as JP-5, JP-8, and F-76, in nontactical and nondeployable equipment could be a violation of Federal law depending on the sulfur content and cetane index of the specific batch of fuel being used.

f. **Clean Fuel Fleet/Vehicles.** The CAA's clean-fuel vehicle requirements, apply to owners/operators of a "covered fleet" (a Navy owned or operated centrally fueled fleet of 10 or more vehicles) located in a "covered area." A covered area is one designated as serious, severe or extreme for O_3 or serious for CO, with a 1980 Census population of 250,000 or more. The CAA requires that at least 70 percent of new light-duty fleet vehicles acquired by a covered fleet operator when operating in a covered

area be clean-fuel vehicles. For heavy-duty trucks above 8,500 lbs. and up to 26,000 lbs. gross vehicle weight rating, that percentage shall be at least 50 percent.

The CAA mandates that any Federal facility that dispenses clean alternative fuels to Federal fleet vehicles must offer the fuel for sale to the public during reasonable business hours, subject to national security concerns and the commercial availability of such fuels in the vicinity of the facility.

7-4.7 Miscellaneous Provisions

a. **Federal Implementation Plans.** Section 110(c) of the CAA requires EPA to issue a FIP where a State has failed to make a required SIP submission, where the SIP submission does not satisfy the minimum criteria, or where a SIP submission has been disapproved in whole or in part and the State has not corrected the deficiency in a timely manner. Typically EPA disapproves a SIP because it does not contain sufficiently strict requirements to demonstrate attainment. A FIP will generally contain requirements that apply to more types of sources and that control emissions in a more stringent manner than did the SIP.

b. **Emission Reduction Credits (ERCs).** Sections 110(a)(2)(A) and 172(c)(6) of the CAA authorize States, or their local air quality districts (AQDs), to establish, by regulation, a trading system for ERCs. ERCs are created when equipment that emits pollutants is removed from service or emissions from equipment remaining in service are reduced, provided that the emission reductions would not otherwise be required by the CAA or a current SIP, and the owner applies under the AQD regulations for credit for the reduction. Each ERC constitutes permission from the AQD to emit a stated amount of a specific air pollutant. Following validation by the AQD, ERCs may be transferred by sale, lease or other disposal method, for use by other emission sources within the same air quality district.

c. **Exemptions for Certain Territories.** Upon petition by the Governor of Guam, American Samoa, the U.S. Virgin Islands, or the Commonwealth of the Northern Marianas Islands, the Administrator of EPA may exempt any person or source in such territory from any CAA requirement other than those provisions concerning hazardous air pollutants or implementation plans for the achievement of the NAAQS. EPA may grant such exemptions based on the finding that compliance is not feasible or is unreasonable due to unique geographical, meteorological, or economic factors.

d. **Federal Contractor Restrictions.** No Federal agency may enter into a contract with any person convicted of a criminal offense under the CAA. This restriction applies to the procurement of goods, materials, and services to perform such contract at any facility which gave rise to such conviction if such facility is owned, leased, or supervised by such person.

e. **Acid Rain.** In order to reduce the detrimental environmental effects of acid rain, the CAA mandates large-scale reductions in the emissions of SO_2 and NO_x through an innovative market-based approach aimed at electric utility plants. The goal of Title IV is to reduce SO_2 emissions by 10 million tons past 1980 emission levels and to reduce NO_x emissions by 2 million tons past 1980 levels by the year 2000.

f. **Training.** Every person who prepares or supervises the preparation of air emissions inventories, air emissions permit requests and air emissions reports must receive environmental overview training as specified in Chapter 28, specific comprehensive training in their assigned subject matter, and must be familiar with the provisions of this chapter. In addition, the CAA requires explicit training in many areas, including:

- Chemical Process Safety Management. The CAA requires the issuance of a chemical process safety standard to protect employees from the dangers associated with accidental releases of highly hazardous chemicals in the workplace. The safety standard requires employers to: train employees in operating procedures; emphasize hazards and safe practices; ensure contractors and contract employees are provided with appropriate information and training; and train and educate employees and contractors in emergency response in a manner as comprehensive and effective as that required by SARA. The standard and a list of highly hazardous chemicals can be found in reference (c).

- Solid Waste Incineration. Section 129 (d) of the CAA requires the training and certification of operators of solid waste incineration units and high-capacity fossil fuel fired plants. It is unlawful to operate any such unit unless each person with control over processes affecting emissions from the unit has satisfactorily completed a training program which meets EPA requirements.

7-5 Navy Policy

7-5.1 Stationary Sources

a. **Title V Permits.** Policy guidance on Navy compliance with the CAA Title V Operating Permits Program is provided in reference (d).

b. **Fuel Standards.** Navy commands shall comply with Navy and applicable Federal, State, and local regulatory fuel composition requirements applicable to solid, liquid, and gaseous fuels for stationary fuel-burning equipment.

c. **Shipbuilding NESHAP.** Navy facilities that are major sources of HAPS and use marine coatings in excess of 264 gallons per year shall comply with 40 CFR 63 Subpart II. Navy vessels that dock at these facilities or at commercial facilities shall comply with the Navy policy in section 22-4.3.2 of Chapter 22. Navy activities required to comply with 40 CFR 63 Subpart II shall compile records of certification of the as-supplied VOC content of each batch of coating on a monthly basis and maintain those records for a minimum of 5 years. These facilities shall obtain from homeport and visiting ships information on marine coating usage while in port required for recordkeeping and reporting under 40 CFR 63 Subpart II.

(1) Navy supply activities including Fleet Industrial Supply Centers (FISC) shall implement procedures ensuring that all marine coatings have batch VOC certificates complying with the requirements of 40 CFR 63 Subpart II prior to issue of marine coatings to affected sources. VOC certificates may be obtained by any of the following means:

- Directly from the vendor/manufacturer;

- From the NAVSUP Ship-NESHAP batch certification database; or,

- Locally prepared by an activity qualified to perform VOC content analysis in accordance with EPA Method 24.

(2) BSOs shall direct Navy shore activities that are covered under 40 CFR 63 Subpart II to acquire from EPA's regional offices recordkeeping waivers for marine coating performed by ship's force when in port on ships that are in operational status.

7-5.2 Mobile Sources

a. **Procurement Of Nontactical Vehicles, Equipment, and Vessels.** Navy commands in charge of procuring nontactical or non-deployable commercial vehicles, equipment, and vessels that are not covered under a national security exemption shall ensure that these will comply with applicable Federal and State standards and regulations in effect at the location where the equipment will be placed into service.

b. **Procurement of Tactical Vehicles, Equipment and Vessels.** Navy commands in charge of procuring tactical or deployable vehicles, equipment, and vessels which are covered under a national security exemption shall ensure that the appropriate demilitarization (DEMIL) code is assigned to prevent their sale to the public as a serviceable engine.

c. **Tampering with Emission Controls.** Navy personnel shall not remove or render inoperative any device, or element of design, which is installed in a government motor vehicle or engine to comply with air quality regulations.

d. **Fuel Standards.** Navy commands shall comply with Navy and regulatory requirements for composition of fuels used in all motor vehicles, equipment, and vessels. To prevent misfueling, installations shall enforce appropriate controls to ensure that any fuel that does not meet low sulfur requirements and is solely intended for use in tactical vehicle fleets, equipment, and vessels covered under a national security exemption is not dispensed to commercial motor vehicles, equipment, or vessels that are not covered under a national security exemption.

e. **Vehicle Inspection and Maintenance.** Navy commands shall comply with State and local area vehicle emission I/M program requirements for fleet vehicles and all other vehicles operated on an installation, so long as the State's program is not discriminatory toward Federal agencies or Federally-owned or Federal employee-owned vehicles. Commands shall furnish proof of compliance to the appropriate regulatory authority when required. Commands are authorized to develop I/M procedures for their fleet vehicles as a part of normal preventive maintenance programs.

f. **Introduction of Alternative Fuel Vehicles.** Per the requirements of EPACT, the Navy shall introduce light-duty AFVs into administrative vehicle fleets. Department of Navy Environmental Policy Memorandum 98-05 and Chief of Naval Operations (CNO) memo N462C2/317-99 require all new nontactical light-duty vehicle acquisitions to be capable of operating on alternative fuel unless they receive a waiver from CNO.

2002 National Defense Authorization Act specifies that for installations not subject to EPACT (i.e., outside the metropolitan statistical areas), acquisitions of light duty trucks shall be hybrids.

In addition, Title VII, Subtitle F, Sec 782 of EPACT requires Federal agencies operating vehicle fleets to acquire fuel cell vehicles and hydrogen energy systems to meet applicable energy savings goals

no later than 1 January 2010. Department of Energy (DOE) will pay incremental costs, and will exempt an agency if an efficient and reliable vehicle cannot be found.

As of 1 June 2005, Department of Navy Environmental Policy Memorandum 05-01 requires that, unless specifically exempted by the CNO, all agency diesel vehicles must operate on biodiesel where the Defense Energy Support Center can deliver the fuel, adequate fuel tanks are available, and biodiesel fuel is allowable and practicable considering Federal, state, and local requirements.

Executive Order 13423 requires that relative to the baselines for fiscal year 2005, the Navy must: (i) reduce their vehicle fleet's total consumption of petroleum products by 2 percent annually through the end of fiscal year 2015, (ii) increase the total fuel consumption that is non-petroleum-based by 10 percent annually, and (iii) use plug-in hybrid (PIH) vehicles when PIH vehicles are commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles.

In addition to acquisition of AFVs, the Navy and other Federal fleets must work toward installation of the appropriate alternative fuel infrastructure. To support the use of alternative fuel in AFVs, the Navy shall, to the maximum extent practicable, arrange for fueling at commercial facilities that offer alternative fuels for sale to the public. When placing AFVs at their facilities, preference shall be given to locations that have, or will soon have, access to alternative fueling stations.

The Navy shall work with other Federal agencies to maintain compatibility and inter-operability of AFVs and refueling sites. The Navy will select implementation sites to minimize cost, maximize inter-Federal cooperative efforts and develop infrastructure. The Navy should team with State, local, and private entities to support the expansion and use of public access alternative fuel refueling stations. This effort shall include evaluating streamlining regulatory and permitting requirements associated with locating, constructing, and operating such refueling stations.

The Navy prefers original equipment manufacturer AFVs to AFV conversions. Vehicles converted shall meet, as a minimum, California Air Resources Board (or equivalent) certification requirements. AFVs must also meet the definition of a clean fuel vehicle to comply with the CAA requirements applicable to a covered fleet.

The Navy is required to provide data to both the Office of Management and Budget (OMB) and DOE to demonstrate compliance with EPACT and Executive Order 13423. An annual report is due to DOE no later than December 31 of each year, starting with the FY 2007 data and each year thereafter. This includes data to demonstrate compliance with the requirement to reduce petroleum use by 2 percent annually, through 2015, and the requirement to annually increase the use of alternative fuels by 10 percent, both relative to the 2005 baseline year. Semi-annual compliance scorecards are submitted to OMB.

The ASN (I&E) has the lead for oversight of DON implementation of AFV programs.

7-5.3 Air Pollution Emergency Episodes. Where required, Navy shore facilities shall have an air pollution emergency episode contingency plan identifying all actions that can reasonably be taken without compromising essential services and mission responsibilities.

7-5.4 General Conformity. Appendix F of this manual contains Navy guidance for conducting conformity reviews.

7-5.5 Penalty Assessments. Navy activities shall report all notices of violation and penalty assessments, and consult with counsel as appropriate, in accordance with the requirements of Appendix B of this instruction. In addition, due to the conflict in court opinions on State and local CAA penalties, activities shall report all assessments of civil or administrative penalties by State or local air districts to the REC and refer them up through the BSO's chain of command and the Office of General Counsel chain of command to the Office of the Assistant General Counsel (Installations and Environment) (OAGC(I&E)) for guidance before paying any penalties. In some cases, settlement and payment of State and local CAA penalties may be possible, but any such settlements must be coordinated with Navy Litigation Office and the Department of Justice.

7-5.6 Emission Reduction Credits. ERCs shall be acquired and disposed of under references (e), (f), (g), (h), and (i) as if they were personal property.

a. For bases that are being closed or realigned under the Base Closure and Realignment Act of 1988 (Public Law 100-526) and the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510) process or any subsequent base closure law, ERCs shall be utilized and disposed of per section 4.6 of reference (i).

b. For operating installations, ERCs will be utilized and disposed of in the following manner:

– ERCs generated from a change in operations, removal from service of equipment, or any other action that results in emissions reductions may be banked for:

  - Future use by that same installation
  - Transfer to another Navy installation within the same AQD or another AQD that will accept transfer of the credits
  - Transfer to any DOD installation within the same AQD or another AQD that will accept transfer of the credits; or
  - Transfer to any other Federal agency within the same AQD or another AQD that will accept transfer of the credits.

– ERCs may be transferred between military services under 10 USC Section 2571, with or without compensation.

– ERCs determined to be surplus to the Federal government shall be reported for screening and disposal using the existing personal property disposal mechanisms.

– Installations requiring ERCs shall either:

  - Purchase ERCs from other sources; or
  - Obtain offsets from on-installation sources.

No ERCs may be disposed of or traded to non-Navy facilities unless such action has been coordinated with the appropriate REC.

7-5.7 Airborne Radionuclide Emissions. Reference (a) regulates airborne radionuclide emissions into the environment. Within the Navy, the Naval Nuclear Propulsion Program Directorate is responsible for all aspects of compliance with Subpart I pertaining to nuclear propulsion. The Navy Radiation Safety Committee is responsible for compliance with Subpart I with respect to airborne radionuclide emissions from all other Navy sources under reference (a), Part 61.

7-6 Responsibilities

7-6.1 CNO (N45) shall:

(a) Coordinate the overall implementation of CAA requirements.

(b) Coordinate the review of proposed and final CAA regulations.

(c) Issue policy and guidance as needed.

(d) Coordinate the review of fines and penalties with OAGC(I&E).

7-6.2 BSOs shall:

(a) Ensure that activities under their command comply with current Federal, State, interstate, and local air pollution control requirements.

(b) Include requests for resources to meet air pollution control requirements in Program Objectives Memorandum (POM)/budget submissions.

7-6.3 COMNAVFACENGCOM shall:

(a) Revise technical documents and manuals to reflect design, operation, monitoring, and testing parameters required by emission and performance standards and permit requirements for shore facilities.

(b) Provide technical assistance to shore commands, as requested, to:

- Determine permit and variance requirements, obtain data, and complete applications.
- Determine and implement requirements for mobile source controls.

(c) Develop and provide to activity commanding officers required air applications/permits for preconstruction review/construction of MILCON-funded air projects and pay related fees from the funds appropriated and budgeted for the projects. Such projects include initial source testing for startup of facilities and initial operating permits.

(d) Maintain Navy-wide information on location and physical characteristics of Navy stationary sources, including key features of variances and delay compliance orders (DCOs).

(e) Identify compliance requirements for new construction by coordination of all new projects or modifications with appropriate State/local and/or EPA regional offices and the affected facility.

(f) Identify appropriate emission offsets, where required for new construction, and prepare and coordinate projects to implement offset requirements.

(g) Provide Navy-wide coordination and technical support for compliance with the CAA Title II requirements applicable to the Navy's vehicle fleets.

(h) Assist Navy vehicle fleets in I/M testing.

7-6.4 Navy System Commands shall:

(a) Ensure that when procuring and/or leasing nontactical or non-deployable commercial vehicles, equipment, and vessels which are not covered under a national security exemption these will comply with applicable Federal and State standards and regulations in effect at the location where the equipment will be placed into service.

(b) Ensure that when procuring tactical or deployable vehicles, equipment, and vessels which are covered under a national security exemption the appropriate DEMIL code is assigned to prevent their sale to the public as a serviceable engine.

(c) Ensure that when procuring tactical or deployable vehicles, equipment, and vessels these are appropriately covered under a national security exemption.

7-6.5 RECs shall:

(a) Coordinate input and comments on all applicable CAA requirements in their area of responsibility.

(b) Coordinate ERC trading among Navy facilities.

(c) Notify CNO (N45) of any significant or precedent-setting State or local regulatory actions with the potential to impact Navy operations.

(d) Perform the functions of Navy air pollution episode coordinator within air quality control regions, or portions thereof, under their jurisdiction. Air pollution episode coordinators shall ensure that air episode plans and actions are consistent in degree and timing for all Navy activities in the affected episode area and are also as consistent as possible with plans and actions of other Federal activities and State and local air pollution control authorities.

7-6.6 COs of shore activities shall:

(a) Identify and submit environmental compliance projects, per Chapter 1, required to bring air sources into compliance.

(b) Assure CAA general conformity rule requirements are satisfied for all Navy actions on the installation.

(c) Sign all permits and compliance statements for operations conducted on the installation unless multi-installation permits are to be signed by a higher authority. Develop specific host/tenant agreements to ensure tenants will comply with all CAA requirements.

(d) Sign applications for permits related to demolition, preconstruction, and construction phases of projects unless multi-installation permit applications are to be signed by a higher authority. Develop applications and pay related fees for non-MILCON projects. Similarly, sign applications and pay related fees associated with operating permits and variances to temporarily operate sources out of compliance with emission limitations.

(e) Budget sufficient resources to maintain and demonstrate compliance, including all routine air monitoring and scheduled sampling or testing.

(f) Notify State and local authorities, to conform with permit requirements, of all instances of noncompliance.

(g) Report all notices of violation and penalty assessments, and consult with counsel as appropriate, in accordance with the requirements of Appendix B of this instruction. In addition, due to the conflict in court opinions on State and local CAA penalties, activities shall report all assessments of civil or administrative penalties by State or local air districts to the REC and refer them up through the BSO's chain of command and the Office of General Counsel chain of command to the Office of the Assistant General Counsel (Installations and Environment) (OAGC(I&E)) for guidance before paying any penalties.

(h) Survey emission sources to identify potential reductions.

(i) Report potential ERC sources to the REC.

(j) Submit, via the chain of command, to CNO (N45) all instances in which compliance with fuel standards is impractical.

(k) Maintain current records of physical, operational, and emission characteristics of air sources, including the potential to emit and actual emissions of sources as required by applicable Federal, State and local regulations.

(l) Ensure the development of air episode plans as required, and provide copies of plans to the REC.

(m) Cooperate with the Navy air pollution episode coordinator, EPA, and State and local air pollution control authorities in the execution of air episode plans while in episode areas.

(n) Ensure that motor vehicles and other mobile sources comply with applicable emission standards and other requirements.

(o) Develop and implement transportation control measures as required by the SIP.

(p) Where applicable, furnish to the appropriate regulatory authority proof of compliance with all State and local motor vehicle I/M requirements for all vehicles operated on the installation.

(q) Ensure that systems and adequate procedures are in place to ensure compliance with regulatory requirements for composition of fuels used in commercial motor vehicles, equipment, and vessels.

(r) Implement and maintain proper adjustments in stationary heating and power plant operations, including those owned/operated by public work centers (PWCs), to reduce total emissions. Substantial fuel savings can also result from proper combustion operations and combustion air monitoring.

(s) Ensure personnel are properly trained as required by the CAA.

CHAPTER 8

MANAGEMENT OF OZONE DEPLETING SUBSTANCES

8-1 Scope

This chapter implements DOD and SECNAV policy concerning the management of ozone depleting substances (ODSs); incorporates the necessary changes to the U.S. Navy ODS Program under the requirements of the CAA Amendments of 1990, the accelerated production phase-out schedules for Class I ODSs (31 December 1993 for Halons, 31 December 1995 for most other Class I ODSs), and E.O. 13423 of January 24, 2007 regarding acquisition and the reduction and elimination of toxic and hazardous materials; and details specific restrictions and uses of ODSs within the Navy. OPNAVINST 5090.2A, "Management of Ozone Depleting Substances," dated 14 July 1994, was canceled.

The requirements of this chapter apply to all Navy ships, aircraft, shore activities (including non-appropriated fund activities), and GOCO facilities worldwide except as follows:

– **Naval Nuclear Propulsion Program.** E.O. 12344 and P.L. 98-525 (42 USC 7158, note) establish the responsibilities and authorities of the Director of Naval Nuclear Propulsion Program (CNO (N00N)) in the Office of the Chief of Naval Operations (who is also Deputy Commander Nuclear Propulsion Directorate (SEA 08) in the Naval Sea Systems Command) over all facilities and activities that comprise the Program, a joint DOE/Navy organization. These responsibilities and authorities include all technical and logistical matters related to naval nuclear propulsion. Nothing in this policy supersedes or changes these responsibilities and authorities. Accordingly, the provisions of this policy do not apply to facilities and activities covered under E.O. 12344 and P.L. No. 98-525.

– **Medical Devices.** This policy does not apply to essential uses of Class I and Class II ODSs for medical devices as defined in 40 CFR 82 §7671 (8) and approved for use as specified in 40 CFR 82 §7671c (d) (2) and 40 CFR 82 §7671d (d) (1) by the Commissioner of the Food and Drug Administration and the Administrator of EPA.

– **Small Appliances.** Policies for conversion and/or replacement of existing equipment do not apply to small appliances, defined as appliances that do not normally require routine maintenance of the sealed refrigerant system and contain a refrigerant charge of 5 pounds or less. Examples include refrigerators and freezers designed for home use, dehumidifiers, room air conditioners (including window air conditioners), ice makers, vending machines and water coolers at shore activities and installed in surface ships and submarines.

– **Laboratory and Analytical Uses.** This policy does not apply to essential uses of ODSs in very small quantities for laboratory and analytical purposes. As defined in Appendix G to Subpart A of reference (a), laboratory and analytical uses include: equipment calibration; use as extraction solvents, diluents, or carriers for chemical analysis; biochemical research; inert solvents for chemical reactions, as a carrier or laboratory chemical and other critical analytical and laboratory purposes. Pursuant to Decision XI/15 of the Parties to the Montreal Protocol (NOTAL), effective January 1, 2002, use of Class I ODS for testing of oil and grease and total petroleum hydrocarbons in water; testing of tar in road-paving materials; and forensic finger printing are not considered essential under the global laboratory exemption.

– **BRAC Activities.** Section 8-5.9.c does not apply to Base Realignment and Closure (BRAC) facilities scheduled for closure. Section 8-5.13.a does not apply to Class I ODSs to be transferred per BRAC procedures.

8-1.1 References. Relevant references are:

(a) 40 CFR Part 82, EPA Regulations on the Protection of Stratospheric Ozone;

(b) SECNAV memorandum of 28 May 1993: "Elimination of Class I Ozone Depleting Substances in Department of the Navy Contracts;" (NOTAL);

(c) Navy Marine Corps Acquisition Regulations Supplement (NMCARS) to the Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 5223.8;

(d) Navy ODS Advisory 96-01 (series);

(e) CNO ltr Ser N451I/7U530491 of 24 Dec 1997 Subj: POLICY ON CONVERSION OF HALON 1301 SYSTEMS;

(f) BUMEDINST 6270.8 (series), Procedures for Obtaining Health Hazard Assessments Pertaining to Operational Use of Hazardous Materials; (NOTAL);

(g) OPNAVINST 5100.23 (series), NAVOSH Program Manual; (NOTAL).

8-2 Legislation

8-2.1 Clean Air Act, as amended. In November of 1990, the United States Congress passed implementing national legislation for stratospheric ozone protection as Title VI of the 1990 Clean Air Act Amendments.

8-2.2 Montreal Protocol on Substances that Deplete the Ozone Layer. The presence of chlorofluorocarbons (CFCs), halons, other chlorinated hydrocarbons (carbon tetrachloride, methyl chloroform), hydrochlorofluorocarbons (HCFCs), etc., in the stratosphere is linked to the depletion of the earth's ozone layer that protects life and vegetation from damaging ultraviolet light. These materials are collectively referred to as ODSs. In response to the threat ODSs present to the environment, more than 185 nations, including the United States, have ratified an international agreement, known as the Montreal Protocol, limiting ODS production. In 1990, due to increasing evidence of continued harm to the ozone layer, the Protocol was amended to provide for the eventual elimination of most ODSs. In November 1992, in a meeting in Copenhagen, parties to the Montreal Protocol agreed to accelerate the production phase-out schedules of CFCs to 31 December 1995 and halons to 31 December 1993.

8-2.3 DOD Authorization Act of 1993 (P.L. 102-484). The DOD authorization of funds for 1993 that restricts the purchase of Class I ODSs. The law requires that no class I ODS contracts can be issued unless an Authorized Technical Representative (ATR) determines that no suitable substitute is available for an application and a Senior Acquisition Official (SAO) approves the procurement. A suitable substitute is defined as a non-ODS alternative chemical or process which has been determined to

be technically and economically feasible for use. Substitutes must be also be approved under the EPA's Significant New Alternatives Policy (SNAP) Program for the intended use/application. Suitable substitutes have been identified for virtually every ODS application for new acquisitions.

8-3 Terms and Definitions

8-3.1 Mission Critical Application. Uses of ODSs as determined by CNO and defined in paragraph 8-5.7.a.

8-3.2 ODSs. Any chemical listed as a Class I or Class II substance as defined by the CAA and 40 CFR 82. Tables 8.1 and 8.2 list Class I and Class II ODSs. Class I ODSs most prevalent in Navy applications include CFC-11, CFC-12, CFC-113, CFC-114, Halon 1211, Halon 1301, methyl chloroform (1,1,1 trichloroethane), and carbon tetrachloride. Class II ODSs most prevalent in Navy applications include HCFC-22, HCFC-123, and HCFC-141b. CFCs and HCFCs are commonly referred to as Freons. While production of Class I ODS has ceased, production phase-outs of Class II ODS will phase in over the next several years. Table 8.3 provides a brief summary of Class II phase-outs.

8-3.3 ODS Reserve. Supply of selected Class I ODSs to support mission critical applications as defined in paragraph 8-5.7.a. The DOD ODS Reserve is located at Defense Supply Center, Richmond, Virginia (DSCR)

8-3.4 Reclaiming. The process of returning a used or contaminated ODS to near original specifications, by means which may include distillation. A reclaimer must perform chemical analysis of the ODS to determine that the appropriate product specifications are met.

8-3.5 Recovery. The removal and containment (or capture) of any ODS in any condition from a system without testing or processing.

8-3.6 Recycling. The reduction of contaminants in a used ODS by oil separation and single or multiple passes through devices that reduce moisture, acidity, and particulate matter.

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CLASS I CHEMICAL AGENTS		**ODP[1]**
Group I (CFC - chlorofluorocarbon)		
CFC-11	Trichlorofluoromethane	1.0
CFC-12	Dichlorodifluoromethane	1.0
CFC-113	Trichlorotrifluoroethane	0.8
CFC-114	Dichlorotetrafluoroethane	1.0
CFC-115	Monochloropentafluoroethane	0.6
CFC-500[2]	Dichlorodifluoromethane-difluoroethane	0.7
CFC-502[3]	Monochlorodifluoromethane-monochloropentafluoroethane	0.3
Group II		
Halon-1211	Bromochlorodifluoromethane	3.0
Halon-1301	Bromotrifluoromethane	10.0
Halon-2402	Dibromotetrafluoroethane	6.0
Group III (CFC - chlorofluorocarbon)		
CFC-13	Chlorotrifluoromethane	1.0
CFC-111	Pentachlorofluoroethane	1.0
CFC-112	Tetrachlorodifluoroethane	1.0
CFC-211	Heptachlorofluoropropane	1.0
CFC-212	Hexachlorodifluoropropane	1.0
CFC-213	Pentachlorotrifluoropropane	1.0
CFC-214	Tetrachlorotetrafluoropropane	1.0
CFC-215	Trichloropentafluoropropane	1.0
CFC-216	Dichlorohexafluoropropane	1.0
CFC-217	Monochloroheptafluoropropane	1.0
CFC-503[4]	Trifluoromethane-trichlorotrifluoroethane	0.6
Group IV		
Carbon Tetrachloride	Tetrachloromethane	1.1
Group V		
Methyl Chloroform	1,1,1-Trichloroethane	0.1
Group VI		
Methyl Bromide	Bromomethane	0.7

Table 8.1

CLASS I CHEMICAL AGENTS	**ODP[1]**
Group VII	
$CHFBr_2$	1.0
CHF_2Br (HBFC-22B1)	0.74
CH_2FBr	0.73
C_2HFBr_4	0.3-0.8
$C_2HF_2Br_3$	0.5-1.8
$C_2HF_3Br_2$	0.4-1.6
C_2HF_4Br	0.7-1.2
$C_2H_2FBr_3$	0.1-1.1
$C_2H_2F_2Br_2$	0.2-1.5
$C_2H_2F_3Br$	0.7-1.6
$C_2H_3FBr_2$	0.1-1.7
$C_2H_3F_2Br$	0.2-1.1
C_2H_4FBr	0.07-0.1
C_3HFBr_6	0.3-1.5
$C_3HF_2Br_5$	0.2-1.9
$C_3HF_3Br_4$	0.3-1.8
$C_3HF_4Br_3$	0.5-2.2
$C_3HF_5Br_2$	0.9-2.0
C_3HF_6Br	0.7-3.3
$C_3H_2FBr_5$	0.1-1.9
$C_3H_2F_2Br_4$	0.2-2.1
$C_3H_2F_3Br_3$	0.2-5.6
$C_3H_2F_4Br_2$	0.3-7.5
$C_3H_2F_5Br$	0.9-1.4
$C_3H_3FBr_4$	0.08-1.9
$C_3H_3F_2Br_3$	0.1-3.1
$C_3H_3F_3Br_2$	0.1-2.5
$C_3H_3F_4Br$	0.3-4.4
$C_3H_4FBr_3$	0.03-0.3
$C_3H_4F_2Br_2$	0.1-1.0
$C_3H_4F_3Br$	0.07-0.8
$C_3H_5FBr_2$	0.04-0.4
$C_3H_5F_2Br$	0.07-0.8
C_3H_6FB	0.02-0.7
Group VIII	
CH_2BrCl (Chlorobromomethane)	0.12

NOTE:

1. Ozone Depletion Potential as stated in 40 CFR 82.
2. Azeotropic mixture of CFC-12 and Hydrofluorocarbon (HFC)-152a.
3. Azeotropic mixture of CFC-115 and HCFC-22.
4. Azeotropic mixture of CFC-113 and HFC-23.

Table 8.1 Continued

CLEAN AIR ACT SECTION 602 and 40 CFR 82

CLASS II CHEMICAL AGENTS (HCFC - hydrochlorofluorocarbon)		**ODP**[1]
HCFC-21	Dichlorofluoromethane	0.04
HCFC-22	Monochlorodifluoromethane	0.055
HCFC-31	Monochlorofluoromethane	0.02
HCFC-121	Tetrachlorofluoroethane	0.01-0.04
HCFC-122	Trichlorodifluoroethane	0.02-0.08
HCFC-123	Dichlorotrifluoroethane	0.02
HCFC-124	Monochlorotetrafluoroethane	0.022
HCFC-131	Trichlorofluoroethane	0.007-0.05
HCFC-132	Dichlorodifluoroethane	0.008-0.05
HCFC-133	Monochlorotrifluoroethane	0.02-0.06
HCFC-141b	Dichlorofluoroethane	0.11
HCFC-142b	Monochlorodifluoroethane	0.065
HCFC-221	Hexachlorofluoropropane	0.015-0.07
HCFC-222	Pentachlorodifluoropropane	0.01-0.09
HCFC-223	Tetrachlorotrifluoropropane	0.01-0.08
HCFC-224	Trichlorotetrafluoropropane	0.01-0.09
HCFC-225ca	Dichloropentafluoropropane	0.025
HCFC-225cb	Dichloropentafluoropropane	0.033
HCFC-226	Monochlorohexafluoropropane	0.02-0.10
HCFC-231	Pentachlorofluoropropane	0.05-0.09
HCFC-232	Tetrachlorodifluoropropane	0.008-0.10
HCFC-233	Trichlorotrifluoropropane	0.007-0.23
HCFC-234	Dichlorotetrafluoropropane	0.01-0.28
HCFC-235	Monochloropentafluoropropane	0.03-0.52
HCFC-241	Tetrachlorofluoropropane	0.004-0.09
HCFC-242	Trichlorodifluoropropane	0.005-0.13
HCFC-243	Dichlorotrifluoropropane	0.007-0.12
HCFC-244	Monochlorotetrafluoropropane	0.009-0.14
HCFC-251	Trichlorofluoropropane	0.001-0.01
HCFC-252	Dichlorodifluoropropane	0.005-0.04
HCFC-253	Monochlorotrifluoropropane	0.003-0.03
HCFC-261	Dichlorofluoropropane	0.002-0.02
HCFC-262	Monochlorodifluoropropane	0.002-0.02
HCFC-271	Monochlorofluoropropane	0.001-0.03

NOTE:
1. Ozone Depletion Potential (ODP) as stated in 40 CFR 82.

Table 8.2

Class II ODS Phaseout Schedule

Under the Montreal Protocol, the United States is obligated to limit HCFC consumption to a specific level and to reduce it in a step-wise fashion. The first phaseout milestone was in 1996 when HCFC consumption levels were capped. The United States must comply with the reduction/phaseout schedules in the tables below.

Date	Class II ODS Production Reduction from 1996 base level
01 January 2004	35%
01 January 2010	65%
01 January 2015	90%
01 January 2020	99.5%
01 January 2030	100% (all Class II ODS Production must cease)

To meet these production caps in the United States, EPA implemented the following restrictions via regulations published in 40 CFR 82:

Date	Affected Substances	Restriction
Jan 1, 2003	HCFC-141b	Ban on production and consumption*, except for specified exemptions.
Jan 1, 2010	HCFC-142b, HCFC-22	Ban on production and consumption of virgin chemical unless used as feedstock or refrigerant in appliances manufactured prior to Jan 1, 2010.
Jan 1, 2015	All Other HCFCs	Ban on production, consumption, and use* of virgin chemical unless used as feedstock or refrigerant in appliances manufactured prior to Jan 1, 2020.
Jan 1, 2020	HCFC-142b, HCFC-22	Ban on remaining production and consumption, except for specified exemptions.
Jan 1, 2030	All Other HCFCs	Ban on remaining production and consumption, except for specified exemptions.

* Under the Montreal Protocol, “consumption” means production plus imports minus exports of Controlled Substances, not “use” of the ODS. Although the use of Class II ODSs is allowed after production ceases in many cases, supportability of a system using the Class II ODS is at risk because the material may not be available. Note that there is a Class II ODS “use” ban for non-refrigerant applications beginning in 2015.

Table 8.3

8-4 Requirements

8-4.1 General. The following legislative requirements apply to shore facilities within the US and US territories. Overseas facilities should refer to applicable FGSs or Chapter 21 of this instruction. Refer to chapter 22 for shipboard requirements.

a. Production of CFCs, carbon tetrachloride, methyl chloroform was prohibited as of 31 December 1995; production of halons was prohibited as of 31 December 1993.

b. Only technicians trained and certified per the requirements of reference (a) who use approved recovery and recycling equipment may repair or service motor vehicle air conditioners.

c. Only technicians trained and certified per the requirements of reference (a) who use approved recovery and recycling equipment may repair, service, maintain or dispose of appliances and industrial process refrigeration and air conditioning.

d. Only technicians trained regarding halon emissions reduction as specified by reference (a) may test, maintain, service, repair or dispose of halon-containing equipment.

e. It is unlawful to knowingly release any Class I or Class II ODS refrigerant or halon into the atmosphere during the service, repair, or disposal of appliances, industrial process refrigeration and air conditioning equipment and halon-containing equipment.

f. Activities must reduce the use and emissions of ODSs to the lowest achievable level.

g. Activities must meet labeling requirements for ODSs.

h. Owners or operators of appliances normally containing more than 50 pounds of refrigerant must monitor leakage rates and repair leaks as specified by reference (a). This requirement does not apply to military equipment designed and used solely by the military as defined in Section 8-5.7.

i. Owners/operators of air conditioning and refrigeration equipment, owners of recovery and recycling equipment, disposers, technician certification programs, equipment certification programs, wholesalers, and reclaimers must meet recordkeeping requirements as specified in reference (a).

8-5 Navy Policy

8-5.1 General. In recent years, the Navy has been involved in research and development of alternative substances and systems, and recovery and recycling equipment that decrease the Navy's dependence on ODSs. Due to the large quantities of ODSs used and the numerous applications of these ODSs, Navy personnel should carefully evaluate each situation to determine the proper course of action needed to phase out ODS usage. In all military applications, such as fire protection and shipboard chilled water air conditioning and refrigeration systems, it is essential to recycle, conserve, and properly manage these ODSs to ensure adequate availability of ODSs until suitable alternatives can be tested, qualified, and implemented. It is important that the Navy continue to reduce the use of ODSs and eliminate emissions for compliance with the requirements of the CAA.

To satisfy these objectives, this chapter provides policy on ODS procurement, recovery, use, recycling, material management, emission, substitution, and research, development, testing and evaluation.

8-5.2 Acquisition. Acquisition of ODSs shall be per the National Defense Authorization Act of Fiscal Year 1993; E.O. 13423 of January 24, 2007; reference (b); reference (c); all implementing procurement regulations; and the requirements of this instruction. Class I ODSs for mission critical applications shall be procured from the ODS Reserve per section 8-5.8 and not by contracting action. If an acquisition program wishes to use contractor logistics support to supply Class I ODS, then in addition to obtaining an SAO approval under the National Defense Authorization Act of Fiscal Year 1993, a waiver request per section 8-5.14 must also be submitted to CNO (N45).

8-5.3 ODS Inventory Reporting. Annual inventory reporting as previously required in version B of this instruction is no longer required.

8-5.4 Procurement of Recycled or Reclaimed ODSs. If ODS procurement is necessary, Navy activities shall procure recycled or reclaimed ODSs whenever possible.

8-5.5 Conservation Practices. Activities shall implement conservation practices to the extent practical for all ODS applications, including performing regular system leak checks, improving supply management, and recycling and reclaiming Class I and Class II ODSs.

8-5.6 Review of Navy Practices. Activities shall review and modify all operational, training and testing practices to reduce and eliminate emissions of ODSs to the maximum extent possible.

8-5.7 Mission Critical Applications. The use of Class I ODSs shall continue for mission critical applications so as to not jeopardize or degrade the safety or operational requirements of the Navy until such time as the cognizant System Command develops and approves, and Echelon 2 Commands implement the use of safe alternative substances or systems or until existing hardware is retired from service.

a. **Navy mission critical applications are:**

– CFC-11, CFC-12, CFC-114, and CFC-500 used in legacy ship chilled water air conditioning, ships stores and cargo refrigeration, and legacy aircraft environmental control systems. CFCs used in shore-based training applications where weapon system equipment is stationed at a shore facility responsible for training of personnel in the handling, operation, and maintenance of that equipment.

– Halon 1211 used in flight line fire protection and ship and shore-based crash, fire, and rescue vehicles. Limited use of Halon 1211 for landing craft, air cushion (LCAC).

– Halon 1301 used in legacy shipboard room flooding fire suppression applications.

– Halon 1301 used in legacy aircraft explosion suppression and fire protection applications and limited use of Halon 1301 in new design suppression and fire protection applications

where suitable alternatives are not yet available. COMNAVAIRSYSCOM has identified several alternatives to Halon 1301 for use in the majority of new design aircraft.

– CFC-113 used in support of oxygen system cleaning and gyroscope cleaning applications. Use of CFC-113 in these applications shall cease no later than 1 January 2015 unless a waiver is granted by CNO (N45).

– Shore-based heating, ventilation, air conditioning and refrigeration (HVAC&R) equipment and fire protection systems as approved by CNO (N45).

– Use of Class I ODS in new design/construction ships, with the exception of Halon 1301 use in remaining DDG 51 Class new construction ships, is no longer considered mission critical as COMNAVSEASYSCOM has identified and approved non-ODS alternatives for these applications.

8-5.8 Use of ODS Reserve

a. CNO (N45) shall control access to the ODS Reserve. The ODS Reserve shall be used only to support mission critical applications as described in paragraph 8-5.7 when no alternative is available or when interim support is required during retrofit or implementation of alternatives. Requisition of ODS Reserve material for non-mission critical applications is not authorized. CNO (N45) shall control access to the Reserve with an authorized users' list. Defense Logistics Agency (DLA) established procedures for deposits to and requisitions from the Reserve. Navy distributes these procedures in reference (d). CNO (N45), COMNAVSEASYSCOM, COMNAVAIRSYSCOM and COMSC shall monitor requisitions. Activities shall submit requests for waivers to this policy to CNO (N45) via the chain of command as described in paragraph 8-5.14.

b. Activities shall not requisition ODSs from the Reserve for non-mission critical applications such as shore-based Heating, Ventilation, Air conditioning & Refrigeration (HVAC&R) equipment, or shore-based fire protection systems except as approved by CNO (N45) in paragraph 8-5.14.

8-5.9 Non-mission Critical Applications

a. **New Equipment.** All shore-based, non-mission critical HVAC&R equipment for which procurement was initiated after 14 July 1994 shall use an EPA SNAP Program-approved refrigerant with an ODP of 0.055 or less and an ODP of zero when possible. HVAC&R equipment using SNAP Program-approved refrigerants with ODP values of 0.055 or less, but greater than zero, are allowed when the use of refrigerants with ODP of zero prevents compliance with federal energy efficiency requirements for the procurement of HVAC&R equipment, results in higher life cycle cost, or does not meet other performance criteria (size, reliability/maintenance, logistics, etc.) New HVAC&R equipment (both mission critical and non-mission critical) may not contain Class II substances if the expected life cycle of the equipment extends 5 years beyond the production phaseout date of the specific Class II substance used. (For example: activities may not procure new HCFC-22 equipment with life cycles extending beyond 2025.) OCONUS activities should consult applicable FGSs to determine if earlier HCFC production and/or use phaseouts are applicable. Installation of shore-based Halon 1301 fire protection systems and procurement of non-mission critical portable halon fire extinguishers is prohibited.

b. **Acquisition.** Per the National Defense Authorization Act of Fiscal Year 1993, use of Class I ODS in contracts is prohibited unless an ATR certifies that no suitable alternative is available and a SAO approves the procurement.

(1) The cognizant command shall designate an ATR who will conduct a technical review and certify that there are no suitable substitutes available.

(2) A flag officer or member of the Senior Executive Service (SES) designated by the requiring command to be the SAO for the procurement shall approve the contract following the technical certification. The SAO is the person who actually authorizes the purchase and should be in the chain of command of the activity that owns or has cognizance over the equipment or facility requiring the use of a Class I ODS.

c. **ODS Conversion Plan.** Commanding Officers ashore should have developed and implemented an ODS conversion plan to ensure existing non-mission critical HVAC&R equipment containing Class I ODS was replaced or converted to an EPA SNAP approved alternative with an ODP of 0.055 or less no later than 31 December 2000, unless a waiver has been received from the CNO (N45). This phase out requirement does not apply to small appliances or to air conditioning equipment with 5 tons or less cooling capacity (60,000 British Thermal Units (BTU)). Serviceable refrigerant from the above replacements and conversions will be recovered, recycled, reclaimed, and reused. Refrigerant recovered, recycled, and reclaimed may be stored and reused locally in order to service existing HVAC&R equipment to ensure an orderly transition to non-Class I ODS refrigerants. This operational supply will be managed at the activity level and excess will be deposited into the Navy portion of the ODS Reserve.

CNO (N45) has issued revised guidance that eliminates the deadline for removal of shore facility Halon 1301 systems, formerly contained in this instruction. Unless waived by CNO, OPNAVINST 5090.1B previously required the removal of Halon 1301 systems at Navy shore facilities no later than 31 December 2000. The new policy, contained in reference (e), states:

"The Navy ODS program is focused on making decisions that ensure operational readiness and minimize environmental impacts during the production phase-outs of ODSs. Halon 1301 in non-mission critical, shore-based installed systems is not released to the atmosphere unless there is a catastrophic failure or a fire."

Since removal of installed systems can sometimes lead to the unintentional and unnecessary release of Halon to the atmosphere, in some cases it may be desirable to leave an installed Halon system in place. However, should a discharge occur as a result of a fire or accident, in no case will the system be refilled with Halon 1301.

Many facility spaces that are currently protected with Halon 1301 can be adequately protected with existing water sprinkler systems. If an accidental discharge or fire should occur in this situation, there will be no need to replace the Halon 1301 in the system or to replace the system with an alternative agent.

Some facility spaces currently protected by Halon 1301 cannot be adequately protected with water sprinkler systems alone. If an accidental discharge or fire should occur in one of these spaces, the system should not be refilled with Halon 1301. It should be retrofitted or replaced with an alternative agent.

Facilities with existing systems that are discharged in the event of a fire or accidentally shall follow guidelines in the NAVFAC ODS Conversion Guide to determine if water sprinklers provide adequate protection or if retrofit with an alternative agent is required.

All excess Halon should continue to be recovered and returned to the DOD ODS Reserve using procedures contained in reference (d).

ODS conversion plans shall be referred to or incorporated in facility pollution prevention plans as described in section 4-5.4. CNO (N45) will not fund execution of ODS conversion plans for Defense WCF/Navy WCF-funded equipment.

Plans should contain at a minimum:

- Inventory of Class I & II ODS equipment/applications.
- Description of alternatives that will be implemented.
- Schedule for conversion/replacement.
- Estimated costs for plan implementation.
- Plans for recovery/recycling/reuse of existing stocks of ODSs to support shore-based equipment during plan execution.
- Plans for leak monitoring.
- Plan for supporting training requirements.

d. **Shore-based HVAC&R Equipment**

(1) **Applicability.** The requirements of paragraph 8-5.9.c apply to HVAC&R equipment in the following categories:

- Refrigeration equipment with more than 5 pounds of refrigerant installed (i.e., all refrigeration equipment that is not a small, hermetically sealed appliance).
- Air conditioning equipment with more than 5 tons cooling capacity (60,000 BTU).

The requirements of paragraph 8-5.9.c do not apply to motor vehicle air conditioners.

(2) **Recovered Refrigerant.** Activities shall recover, recycle, and reuse serviceable refrigerant from replacements and conversions. Refrigerant recovered and recycled may be stored and used locally in order to service existing Class I ODS Air Conditioning and Refrigeration (AC&R) equipment. Activities shall manage this supply and deposit it in the Navy portion of the ODS Reserve per paragraph 8-5.8.a when it is no longer needed to support local applications.

e. **Shore-Based Halon 1301 Systems**

(1) **General.** The requirements of paragraph 8-5.9.c apply to all non-mission critical installed Halon 1301 systems.

(2) **Recovered Halon 1301.** Activities shall recover and deposit excess Halon 1301 in the Navy portion of the ODS Reserve per paragraph 8-5.8.a.

f. **Portable Halon Fire Extinguishers.** As of 1 January 1996, activities were required to remove and locally redistribute all non-mission critical halon portable fire extinguishers to support mission critical requirements or turn them in to the Navy portion of the ODS Reserve per paragraph 8-5.8.a.

g. **ODS Solvents.** Class I ODS solvents were phased out of production on 31 December 1995. Existing supplies are limited. Class II ODS solvents are scheduled for production and use phaseout no later than 1 January 2015. If an activity identifies an ODS solvent application for which it does not know of an alternative, the activity shall consult with the cognizant engineering authority. If no alternative has been identified, the activity shall forward this information via the chain of command to its cognizant Echelon 2 command. The cognizant Echelon 2 command is responsible for developing a plan of action to test and qualify an alternative. Mission critical Class I solvent applications as described in paragraph 8-5.7.a with no identified alternatives shall be supported by the ODS Reserve until alternatives are implemented. New supplies of material should not be procured.

(1) **Existing Supplies of ODS Solvents.** Existing stocks of ODS solvents may be used to provide interim support during the transition to non-ODS alternatives. Activities shall turn in unopened containers of Class I ODS solvents that are not required for interim support to the ODS Reserve per paragraph 8-5.8.a. Class II ODS solvents should be used only when a non-ODS alternative is not available and qualified for use. Activities shall cease all ODS solvent use (Class I and Class II) no later than 1 January 2015 unless a waiver has been granted by CNO (N45).

h. **Shipboard Galley Equipment.** Class I ODS refrigerants used in shipboard galley equipment were phased out of production on 31 December 1995. Existing supplies are limited. Ships shall replace existing equipment with new units through attrition using alternative refrigerants per paragraph 8-5.9.i and NAVSEA catalog S6161-Q5-CAT-010. CNO (N45) authorized ships to use material from the ODS Reserve per paragraph 8-5.8.a to support galley equipment until the year 2010. After that date, ships shall meet any remaining material requirements through local sources per paragraph 8-5.9.b.

i. **Alternative Selection**

(1) **Criteria.** Navy activities shall select alternatives that are EPA SNAP-approved with an ODP of zero when possible, except as noted in paragraph 8-5.9.a. If no EPA SNAP-approved alternative with an ODP of zero exists, activities shall adopt alternatives with an ODP of 0.055 or less. Alternatives shall meet performance requirements and be commercially available.

(2) **Health and Safety issues.** Activities shall contact their local industrial hygienist or occupational safety and health personnel to ensure proper identification of occupational safety and health hazards associated with ODS alternatives. Activities shall ensure recommended health and safety hazard

control measures are properly in place prior to implementing alternatives. Reference (f) details specific procedures for obtaining health hazard assessments pertaining to operational use of hazardous materials.

8-5.10 Refrigerants Handling

a. **Maintenance.** Navy personnel, in the course of maintaining, servicing, repairing, or disposing of any equipment (including small appliances) or systems containing Class I or Class II ODSs and/or substitutes for these refrigerants, such as hydrofluorocarbons and perfluorocarbons, shall not knowingly vent or otherwise knowingly release any refrigerant in a manner which permits the substance to enter the environment. These restrictions do not apply to *de minimis* releases associated with good faith attempts to recapture and recycle or safely dispose of refrigerants.

b. **Refrigerant Recovery**

(1) Activities shall use EPA-approved refrigerant recovery equipment for all commercial off-the-shelf equipment. Overseas facilities shall use EPA-approved refrigerant recovery equipment if available. If EPA-approved equipment is not available then locally-available recovery equipment that achieves performance comparable to EPA-approved recovery equipment shall be used. For equipment designed and used solely by the military (military-unique systems), recovery equipment shall be designed, to the extent practical, to achieve performance comparable to that required of commercial equipment by the EPA. In shipboard operations, personnel shall recover ODSs prior to performing maintenance on air conditioning and refrigeration systems per paragraph 22-4.2.2.f.

(2) New and converted HVAC&R equipment shall include refrigerant isolation valves and service apertures to facilitate recovery and recycling procedures per reference (a).

(3) Per reference (a), activities owning recycling and recovery equipment shall certify to the appropriate EPA regional office that they have acquired such equipment and that they are complying with reference (a). Overseas activities are not required to submit this certification.

c. **Refrigerant Technician Certification.** All Navy military and civilian refrigerant technicians shall be certified per reference (a). Training priority should be granted to technicians servicing equipment within the U.S., then to technicians overseas. Technicians may require additional State or local certifications if they are more stringent than Federal certification. Technician certification requirements do not apply to foreign nationals working on U.S. Navy equipment overseas.

d. **Motor Vehicle Technician Certification.** All Navy military and civilian motor vehicle technicians performing service and repair on motor vehicle air conditioners shall be certified as specified by reference (a). Certification requirements do not apply to foreign nationals working on U.S. Navy vehicles overseas.

e. **Refrigerants as Hazardous Material.** ODS refrigerants are considered hazardous material (HM) and are subject to the requirements of this chapter as well as to the CAA and reference (g). However, used Class I and Class II ODS refrigerants that are recycled for future use are not considered hazardous waste under Federal laws. Where they are more restrictive, however, State and local ODS regulations apply.

8-5.11 Intentional Releases of Halon. Navy personnel shall not intentionally release halon during the service, maintenance, repair, or disposal of any firefighting equipment. Technicians who test, maintain, service, repair or dispose of halon-containing equipment shall be trained regarding halon emissions reduction as specified by reference (a).

8-5.12 Emerging Technology/Alternatives. Navy activities having any information regarding new emerging technologies and alternatives for the elimination of ODSs should contact their BSO or COMNAVSEASYSCOM for incorporation into the CFC/Halon section of the Navy Shipboard Environmental Information Clearinghouse. In addition, activities may request information on ODS alternatives by contacting the clearinghouse through COMNAVSEASYSCOM.

8-5.13 Disposal of ODSs

a. **Sale of ODSs.** No Navy activity shall sell or otherwise transfer any Class I ODS outside the Navy without written permission from CNO (N45). Contract specifications and contractual actions shall not include the transfer of Class I ODSs to contractors. Activities shall deposit excess Class I ODSs into the Navy portion of the DOD ODS Reserve per paragraph 8-5.8.a.

b. **Turn-in of Equipment to Defense Reutilization and Marketing Service (DRMS).** Activities transferring HVAC&R equipment to DRMS for reuse shall label the equipment to indicate that it contains an ODS. Activities transferring HVAC&R equipment to DRMS for disposal as scrap shall recover the ODS prior to disposal. Additional information on HVAC&R equipment disposal can be found in the Defense Material Disposition Manual, DOD 4160.21 (series).

8-5.14 Waivers. Requests for waivers to the provisions of this chapter shall be submitted to CNO (N45) via the chain of command. For such waivers, an activity must demonstrate that the application of the requirements of this chapter is impractical or results in the expenditure of resources that are not commensurate with the resultant reduction in the potential for unintentional release of ODSs to the environment. Statutory requirements shall not be waived.

a. **Content.** At a minimum, waiver requests should contain the following:

- ODS involved
- Number of units affected
- Quantity of ODS involved
- Associated costs
- Statement of environmental impact (i.e., annual leakage, average annual discharge of material, etc.)
- Safety and occupational health impact
- Operational impact

– Plan for meeting requirement

– Additional information as appropriate.

b. **Review and Approval Process.** CNO (N45) will review waivers on a case-by-case basis and provide responses by letter via the chain of command. All approved waivers will be granted for a finite time period.

8-6 Responsibilities

8-6.1 CNO (N45) shall:

(a) Annually review, in conjunction with the Heads of Warfare Branches (CNO (N85, N86, N87 N88)) and Director of Test & Evaluation and Technology Requirements (CNO (N091)), the adequacy of ODS programs and resources.

(b) Review all requests for waivers to the requirements of this chapter and issue determinations as appropriate.

(c) Review and approve the authorized users list for the ODS Reserve.

(d) Compile BSO data on ODS Reserve requirements and identify any shortfalls.

(e) Coordinate activities of Echelon 2 commands to ensure an orderly transition from ODSs to suitable alternatives.

8-6.2 BSOs shall:

(a) Implement the policies and procedures of this chapter.

(b) Identify funding in their POM process for elimination, recycling, and substitution of ODSs. Coordinate R&D requirements with CNO (N45) to avoid redundant efforts. Coordinate all funding requirements with CNO (N45) and forward directly to the appropriate resource sponsor.

(c) Ensure activities execute funds to meet deadlines for elimination of ODS equipment as described in section 8-5.9.

(d) Revise preventive and corrective maintenance procedures, for which they are the cognizant activity, to incorporate the use of ODS recovery and recycling units.

(e) Revise military specifications and manuals, for which they are the cognizant activity, to reduce or eliminate references to the use of ODSs.

(f) Participate in ODS consortiums, conferences, and technology transfer to ensure the Navy's interests are identified and satisfied.

(g) Review all requests from subordinate activities for waivers to the requirements of this chapter and forward recommendations to CNO (N45).

8-6.3 COMNAVSEASYSCOM shall:

(a) Serve as the lead technical Echelon 2 command to ensure that all Navy-wide common interests and concerns are addressed.

(b) Maintain the Navy Shipboard Environmental Information Clearinghouse for use by all Navy activities.

(c) Manage the conversion of Navy shipboard HVAC&R systems.

(d) Monitor the drawdown of the Navy's reserve of ODSs and, if the actual rate of drawdown varies from predicted rates, develop corrective actions, fully coordinate them with the appropriate Echelon 2 commands, and provide recommended corrective actions to CNO (N45).

(e) Establish and maintain a single Navy ODS Advisory System that will provide consistent guidance to the Fleets and field activities.

(f) In coordination with the Fleets, evaluate on an annual basis the ODS Reserve requirements for cognizant mission-critical applications of ODSs and submit any changes to CNO (N45).

(g) Revise procurement guidance for shipboard galley equipment to include only equipment that meets the requirements of paragraph 8-5.9.i.

(h) Ensure miscellaneous NAVSEASYSCOM-owned equipment and systems that use ODSs have material support plans or are converted or replaced to use non-ODS materials.

(i) Ensure COMNAVSEASYSCOM field activities meet requirements for elimination of ODS equipment.

(j) Review and approve requests for additions, deletions, or changes to the authorized users list for the ODS Reserve for all shipboard applications.

8-6.4 COMNAVSUPSYSCOM shall:

(a) Serve as the Navy liaison with DLA on matters pertaining to the establishment, maintenance, operation, and funding, as appropriate, of the ODS Reserve.

(b) Revise, as necessary, acquisition instructions and guidance to include additional ODSs as they are regulated by the EPA.

(c) Assist Echelon 2 commands with the ODS recycling and reclamation program.

(d) Incorporate refrigerant and halon recovery and recycling equipment and appropriate spare parts into the Navy supply system as soon as possible after contract award and notification by other Echelon 2 commands.

(e) Provide monthly reports of ODS requisitions as compiled by Navy Inventory Control Point, Mechanicsburg (NAVICP-M) to COMNAVSEASYSCOM for incorporation into the ODS Reserve monitoring system.

(f) Review and approve requests for additions, deletions, or changes to the authorized users list for the ODS Reserve for all logistics distribution activities.

8-6.5 COMNAVFACENGCOM in coordination with CNIC shall:

(a) Develop, and revise as necessary, guidance for shore activities on ODS alternatives for air conditioning and fire protection systems.

(b) Develop a sample scope of work for analyzing shore-based HVAC&R equipment and providing recommendations to commanding officers on the most cost-effective manner of replacing, converting, or retrofitting existing HVAC&R systems.

(c) Prepare plans for the replacement, conversion, or retrofitting of existing HVAC&R systems at shore activities as requested.

(d) Provide technical support to activities in the development of ODS conversion plans.

8-6.6 BUMED shall provide workplace hazard evaluations and health risk assessments for ODS substitutes which are proposed for use in industrial operations and Navy-unique working environments, as requested by other Echelon 2 commands. Reference (f) provides guidance regarding procedures for requesting health hazard assessments.

8-6.7 NETC shall:

(a) Develop alternate training procedures using safe alternatives to ODSs where consistent with operational requirements without degradation of mission effectiveness.

(b) Incorporate ODS issues into hazardous material control and management training as well as enlisted Class A and Class C schools and officer training courses, as appropriate.

(c) Incorporate EPA-required training on the proper use of ODS recovery and recycling equipment into HVAC&R technician curriculums.

(d) Ensure that training in the proper use of ODS recovery and recycling equipment is incorporated into the Environmental and Natural Resources Training System Plan.

(e) Ensure all graduates of NETC courses that teach maintenance on systems containing ODSs are federally certified per reference (a) as a condition for graduation.

8-6.8 COMNAVAIRSYSCOM shall:

(a) Monitor the drawdown of the COMNAVAIRSYSCOM portion of the ODS Reserve and develop any required corrective actions in cooperation with CNO (N45), COMNAVSEASYSCOM, COMSC, and the Fleets.

(b) In coordination with the Fleets, evaluate on an annual basis the ODS Reserve requirements for cognizant mission-critical applications of ODSs and submit any changes to CNO (N45).

(c) Identify and address ODS program, technical, and supportability issues related to naval aviation and coordinate solutions with appropriate aircraft program managers, Echelon 2 commands and CNO (N45).

(d) Review and approve requests for additions, deletions, or changes to the authorized users list for the ODS Reserve for all aviation applications.

8-6.9 Commander, Military Sealift Command (COMSC) shall:

(a) Monitor the drawdown of the MSC portion of the ODS Reserve and develop any required corrective actions in cooperation with CNO (N45), COMNAVSEASYSCOM, COMNAVAIRSYSCOM, and the Fleets.

(b) In coordination with other Echelon 2 commands as appropriate, evaluate on an annual basis the ODS Reserve requirements for cognizant mission critical applications of ODSs and submit any changes to CNO (N45).

(c) Identify and address ODS program, technical, and supportability issues related to COMSC operations and coordinate solutions with appropriate Echelon 2 commands and CNO (N45).

(d) Revise procurement guidance for shipboard galley equipment to include only equipment that meets the requirements of paragraph 8-5.9.i.

(e) Manage the conversion of shipboard HVAC&R systems on COMSC vessels.

(f) Ensure miscellaneous MSC-managed equipment and systems that use ODSs have material support plans or are converted or replaced to use non-ODS materials.

(g) Review and approve requests for additions, deletions, or changes to the authorized users list for the ODS Reserve for all sealift applications.

8-6.10 Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM) and Fleet Commanders shall:

(a) Coordinate with COMNAVSEASYSCOM, COMNAVAIRSYSCOM, and COMSC, as appropriate, to manage equipment and weapon system conversion programs and schedules.

(b) In coordination with CNO (N45), COMNAVSEASYSCOM, COMNAVAIRSYSCOM, and COMSC, monitor the drawdown of the ODS Reserve and develop any required corrective actions.

(c) In coordination with COMNAVAIRSYSCOM, COMNAVSEASYSCOM, and COMSC, as appropriate, evaluate on an annual basis the ODS Reserve requirements for cognizant mission critical applications of ODSs.

(d) Develop and execute plans to meet Navy performance goals for shipboard AC&R equipment leakage rates as described in paragraph 22-4.2.2.e.

(e) Ensure Type Commanders manage existing funds to replace shipboard galley equipment as described in paragraph 8-5.9.h.

8-6.11 COs ashore and afloat shall:

(a) Implement appropriate ODS procurement guidance as established by COMNAVSUPSYSCOM, COMNAVFACENGCOM, CNIC and other Echelon 2 commands. Establish requisition procedures to ensure ODS Reserve material is used only for prescribed mission critical applications.

(b) Ensure that ODSs are included in the HM authorized use list.

(c) Establish practices and procedures internally to reduce emissions of ODSs as much as possible.

(d) Provide resources (tuition, travel, per diem, etc.) for training refrigerant and halon technicians on ODS emission reduction and recovery and recycling equipment and ensure compliance with applicable technician certification requirements.

(e) Submit requests for waivers to any of the mandatory provisions of this policy via the chain of command to CNO (N45). Statutory requirements may not be waived.

8-6.11.1 COs ashore shall:

(a) Ensure all non-mission critical ODS equipment is managed via ODS conversion plans and conversions and replacements are implemented in accordance with these plans and CNO waivers where applicable.

(b) Budget sufficient resources to maintain and demonstrate compliance with ODS regulatory requirements under reference (a), including all HVAC&R equipment leak monitoring and repair.

CHAPTER 9

CLEAN WATER ASHORE

9-1 Scope

9-1.1 This chapter identifies requirements and responsibilities for the control and prevention of surface water pollution, and ground water pollution related to Underground Injection Control (UIC) at Navy shore facilities within the United States, Commonwealth of Puerto Rico, Virgin Islands, Commonwealth of the Northern Mariana Islands, Guam, America Samoa, and the Trust Territory of the Pacific Islands. Refer to Chapter 21 for information on Navy activities in foreign countries and Chapter 22 for information on ship discharges.

9-1.2 References. Relevant references are:

(a) 16 USC §1451 *et seq.*, Coastal Zone Management Act of 1972;

(b) 33 USC § 1251 *et seq.* (40 CFR Parts 100-136, 140, 230-233, 401-471, and 501-503), Federal Water Pollution Control Act (known as the Clean Water Act);

(c) E.O. 12088, Federal Compliance with Pollution Control Standards;

(d) 40 CFR 130, Water Quality Planning and Management (TMDLs);

(e) 40 CFR 122-123 (33 USC §402), National Pollutants Discharge Elimination System (NPDES) Program;

(f) 40 CFR 403 & 405-471 (33 USC §301-303, and §307-309), Environmental Protection Agency (EPA) General Pretreatment Standards and Effluent Limits for Point Source Categories;

(g) 40 CFR 122 (33 USC §402), Stormwater Discharges;

(h) 40 CFR 230-231 (33 USC §403-404), Dredged or Fill Permits;

(i) 33 USC 1329, Section 319 Non-point Source Management Program;

(j) 42 USC §6901 *et seq.* (40 CFR Parts 240-282), Resource Conservation and Recovery Act;

(k) 42 USC §6939e, Federal Facilities Compliance Act of 1992;

(l) 40 CFR 503, Standards For The Use Or Disposal Of Sewage Sludge;

(m) OPNAVINST 3100.6H, Special Incident Reporting (OPREP-3 PINNACLE, OPREP-3 NAVY BLUE, and OPREP-3 NAVY UNIT SITREP).

9-2 Legislation

9-2.1 Coastal Zone Management Act, 16 USC **§1451 *et seq*.** Administered by NOAA of the Department of Commerce, the CZMA (reference (a)) provides grants to promote development and management programs whose goal is the achievement of wise use of the land and water resources of the coastal zone. State CZMA programs are to protect natural resources; manage development in high hazard areas; manage development to achieve quality coastal waters; have orderly processes for the siting of major facilities; locate new commercial and industrial development in or adjacent to existing developed areas; provide public access for recreation; redevelop urban waterfronts and ports, and preserve and restore historic, cultural, and esthetic coastal features; simplify and expedite governmental decision-making actions; coordinate State and Federal actions; give adequate consideration to the views of Federal agencies; ensure that the public and local government have a say in coastal decision-making; and comprehensively plan for and manage living marine resources.

Under the CZMA, Federal actions that affect any land or water use or natural resource of the coastal zone must be consistent with the State program to the maximum extent practicable.

9-2.2 Federal Water Pollution Control Act, also known as the Clean Water Act, 33 USC §1251 *et seq*. The purpose of the CWA (reference (b)) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. To accomplish these goals, each State is required to establish Water Quality Standards (WQS) for its surface waters based on designated uses. Under CWA Section 303(d), each State is to submit to EPA a list of surface waters that are not meeting their WQS. For these "impaired" water bodies, each State is supposed to develop TMDLs, which are the amount of pollutants that can be assimilated by a body of water without exceeding the WQS. Based on the developed TMDLs, the States or EPA would limit any discharge of pollutants to a level sufficient to ensure compliance with State water quality standards. Direct discharges of pollutants to the waters of the United States are regulated by NPDES permits issued by EPA or under State NPDES programs approved by EPA. This includes discharges of storm water from municipal separate storm sewer systems, industrial areas, and construction sites greater than or equal to one acre. Non-point sources of pollution are to be managed through State or local controls. Indirect industrial discharges of effluent to publicly owned treatment works (POTWs) are subject to pretreatment standards promulgated by the EPA, State or local regulatory agencies.

The CWA prohibits spills, leaks or other discharges of pollutants into waters of the United States in quantities that may be harmful, which includes discharges of pollutants that:

- Violate applicable water quality standards; or
- Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The Oil Pollution Act of 1990 (OPA 90) amended the CWA to expand oil spill prevention activities, improve preparedness and response capabilities, and ensure that companies are responsible for damages from spills. The CWA also requires a permit for the discharge of dredged or fill materials into waters of the United States. Refer to Chapters 11, 12, 13 and 15 for information on oil and hazardous waste handling requirements.

CWA 2000 amendments include Beaches Environmental Assessment and Coastal Health Act (BEACH Act); Wet Weather Quality Act; and Estuaries and Clean Waters Act. Refer to Chapter 25 for information on requirements related to Coastal Zone Management.

9-2.3 Marine Protection, Research and Sanctuaries Act (Ocean Dumping Act), 33 USC §1401 *et seq*. The MPRSA requires the protection of contiguous zone waters from sewage sludge discharges and direct dumping, and through an ocean dumping permit program, provides procedures for the intentional disposal and/or abandonment of material into ocean waters.

9-2.4 Rivers and Harbors Act of 1899 (RHA), 33 USC §401 *et seq*. The RHA regulates the disposal of refuse and debris into the rivers and harbors of the U.S. and makes it illegal to create any obstruction to navigable waters without the approval of the U.S. Army Corps of Engineers (USACE). EPA, USACE, and States regulate dredge and fill operations and dredge/fill material disposal. EPA establishes criteria and guidelines to protect the nation's waters from contamination by dredged or fill material. The USACE and some States administer permit programs for dredge and fill operations in waterways and wetlands, and for construction activities in navigable waters.

9-2.5 Safe Drinking Water Act, 42 USC §300f *et seq*. The SDWA requires EPA to set national primary drinking water standards and provides for the direct control of underground injection of fluids that could potentially affect groundwater supplies. States usually assume the predominant role in executing groundwater protection programs. EPA has direct responsibility only if a State chooses not to participate in the underground injection control program (UICP). As amended in 1996, SDWA Section 1447(a) provides that Federal agencies "1) owning or operating any facility in a wellhead protection area; 2) engaged in any activity at such facility resulting, or which may result, in the contamination of water supplies in any such area; 3) owning or operating any public water system; or 4) engaged in any activity resulting, or which may result in, underground injection which endangers drinking water" shall be subject to and comply with all substantive and procedural Federal, State, interstate, and local requirements to the same extent as any person. On-site wastewater treatments systems (OWTS) commonly referred to as septic systems are considered Class V underground injection wells.

9-2.6 Section 108 of the Federal Facilities Compliance Act (FFCA) of 1992, 42 USC §6939e. Section 108 of the FFCA amended Subtitle C of the Solid Waste Disposal Act (42 USC §6901 *et seq.*) to establish when solid or dissolved material introduced by a source into a Federally Owned Treatment Works (FOTW) is not considered a solid waste. An FOTW is not required to satisfy the requirements of Section 108 if it decides to manage its influent as a solid waste. However, an FOTW that has decided to take advantage of a domestic sewage exclusion similar to that enjoyed by POTWs must meet the statutory requirements of Section 108.

9-3 Terms and Definitions

9-3.1 Contiguous Zone. The belt of seas, 9 nautical miles wide, that is adjacent to and seaward of the territorial seas of the United States and was declared to exist in Department of State (DOS) Public Notice 358 of June 1, 1972, 37 FR 11906.

9-3.2 Discharge. Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping of any pollutant, but excludes certain cases under CWA Section 402.

9-3.3 Discharge of a Pollutant

a. Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or

b. Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft, which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, Municipality, or other person, which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger."

9-3.4 Direct Discharge. A discharge of a pollutant directly into the waters of the United States.

9-3.5 Discharge of Dredged Material. Any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States. The term includes, but is not limited to, the following:

- The addition of dredged material to a specified discharge site located in waters of the United States;

- The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and

- Any addition, including redeposit other than incidental fallback, of dredged material, into waters of the United States which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

9-3.6 Domestic Discharge. Any wastewater discharge produce by ordinary living uses, including liquid waste containing animal or vegetable matter in suspension or solution, or the water-carried waste from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or other source of water carried wastes of human origin.

9-3.7 Dredge and Fill Operations. Dredge and fill operations encompass construction or other work involving excavation or discharge of dredged or fill material in waters of the U.S.

9-3.8 Federally Owned Treatment Works. A domestic sewage treatment works owned and operated by the Federal government . This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the FOTW. FOTWs that discharge treated effluent directly to waters of the U.S. are "treatment works." FOTWs that discharge pretreated effluent to another treatment works for final treatment and ultimate discharge to waters of the U.S. are "pretreatment works" (FOPTWs).

9-3.9 Indirect Discharge. A nondomestic discharge introducing pollutants to a publicly owned treatment works or a federally owned treatment works.

9-3.10 Industrial Wastewater Treatment Plant (IWTP). A facility that treats exclusively non-domestic wastewater. Treatment may be chemical, or physical. An Oily waste treatment facility is a type of Industrial Waste Treatment plant.

9-3.11 Injection Well. An injection well is any excavation that is cored, bored, drilled, jetted, dug or otherwise constructed, the depth of which is greater than its largest surface dimension used to inject fluids into the subsurface. An injection well may also be any dug hole with a depth that is greater than the largest surface dimension. Also included are improved sinkholes or subsurface fluid distribution systems.

9-3.12 Internal Waters and Inland Water

a. "Internal waters" and, except as provided in paragraph (b) of this section, "inland waters" mean:

(1) With respect to the U.S., the waters shoreward of the territorial sea baseline.

(2) With respect to any foreign country, the waters shoreward of the baseline of its territorial sea, as recognized by the U.S.

b. "Inland waters" as used in the CWA, means the waters shoreward of the lines of demarcation described in the International Regulations for Preventing Collisions at Sea (72-COLREGS), except the Great Lakes and the connecting and tributary waters as far east as Montreal, the waters of the Mississippi River between its source and Huey P. Long Bridge and all of its tributaries emptying there into and their tributaries, that part of the Atchafalaya River above its junction with the Plaquemine-Morgan City alternate waterway, and the Red River of the North.

9-3.13 Land Application. Use and/or disposal of treated wastewater, sewage sludge, industrial sludge, or septage by application upon or incorporated into the soil with no resulting discharge to surface waters.

9-3.14 National Pollutant Discharge Elimination System. A national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA. The term includes an approved program. NPDES programs are either EPA or State programs. State programs must be approved and authorized by EPA.

9-3.15 Navigable Waters. As defined in reference (b), Section 110.1, "*Navigable Waters*" means the waters of the United States, including the territorial seas. The term includes:

a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

b. Interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

– That are or could be used by interstate or foreign travelers for recreational or other purposes.

– From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

– That are used or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as navigable waters under this section.

e. Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

f. Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

9-3.16 Navy-Owned Treatment Works (NOTW). A treatment works owned by a Navy activity. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the NOTW. NOTWs that discharge treated effluent directly to waters of the U.S. are "treatment works." NOTWs that discharge pretreated effluent to another treatment works for final treatment and ultimate discharge to waters of the U.S. are NOPTWs.

9-3.17 Non-point Source Pollution. Non-point source water pollution is water pollution originating from diffuse, non-discrete sources. Non-point source water pollution generally results from land runoff, percolation, atmospheric deposition, hydrologic modification, or precipitation.

9-3.18 Point Source. Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

9-3.19 Pollutant. Includes dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological material, radioactive materials (other than those regulated as source, by-product, or special nuclear material (SNM) under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

9-3.20 Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a publicly owned treatment works.

9-3.21 Publicly Owned Treatment Works. Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by

a State or a municipality. This definition includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW providing treatment.

9-3.22 Privately Owned Treatment Works (PROTW). Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by a private entity or corporation. This definition includes sewers, pipes, and other conveyances only if they convey wastewater to a PROTW providing treatment.

9-3.23 Storm Water. The portion of precipitation that does not naturally percolate into the ground or evaporate but flows via overland flows, channels or pipes into a defined surface water channel or stormwater system during and immediately following a storm event. Examples include storm water runoff, surface water runoff, infiltration (other than infiltration contaminated by seepage from sanitary sewers or by other discharges) and drainage related to storm events or snowmelt.

9-3.24 Territorial Seas of the United States

a. With respect to the U.S., "territorial seas" means the waters within the belt, 3 nautical miles wide, which are adjacent to its coast and seaward of the territorial sea baseline.

b. With respect to any foreign country, "territorial seas" means the waters within the belt that are adjacent to its coast and whose breadth and baseline are recognized by the United States.

9-3.25 Territorial Sea Baseline. The delimitation of the shoreward extent of the territorial seas of the United States drawn according to the Convention on the Territorial Sea and the Contiguous Zone, 15 U.S.T. 1606, as recognized by the United States.

9-3.26 Toxic Pollutant. Any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

9-3.27 Treatment Works. Any domestic or industrial wastewater treatment devices or systems, regardless of ownership (including Federal facilities, such as FOTWs and NOTWs), used in the storage, treatment, recycling, and reclamation of domestic and industrial wastewater (including land dedicated for the disposal of associated sludge).

9-3.28 Treatment Works Treating Domestic Sewage. A POTW or any other sewage sludge or wastewater treatment device or system, regardless of ownership (including Federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, "domestic sewage" includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, EPA Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance.

9-3.29 Total Maximum Daily Load. Amount of a specific pollutant that a water body can receive, assimilate, and still meet water quality standards. TMDLs consists of the sum of Waste Load Allocations from point sources; Load Allocations from non-point sources; and a Margin of Safety.

9-3.30 Waters of the United States

a. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters, which are subject to the ebb and flow of the tide;

b. All interstate waters, including interstate "wetlands;"

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

d. All impoundments of waters otherwise defined as waters of the United States under this definition;

e. Tributaries of waters identified in paragraphs (a-d) of this definition;

f. The territorial sea; and

g. "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a-f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

9-3.31 Water Quality Standards. The water quality goals of a water body (or a portion of the water body) designating the use or uses to be made of the water and establishing criteria necessary to protect those

uses, including anti-degradation policies. Standards can be either State regulations or laws, or Federal regulations applied to a specific State.

9-3.32 Watershed. A watershed is a drainage area or basin in which all precipitation and other waters drain or flow to a marsh, stream, river, lake or groundwater.

9-4 Requirements

9-4.1 General

a. As required by E.O. 12088 (reference (c)) and the CWA, Navy facilities will comply with all substantive and procedural requirements applicable to point and non-point sources of pollution. These requirements include Federal, State, interstate, and local laws and regulations respecting the control and abatement of water pollution such as load reduction requirements resulting from the development of TMDLs for impaired water bodies (reference (d)). Navy facilities must comply in the same manner and to the same extent as any nongovernmental entity, including the payment of reasonable service charges (not payment of civil penalties or fines).

b. The discharge of any pollutant that does not comply with effluent standards or other procedural requirements is unlawful. The discharge of radiological, chemical or biological warfare agents or low level radioactive waste is prohibited.

9-4.2 Surface Water Discharges

a. **Direct Discharges.** Permits are required for all point source discharges to waters of the U.S. (reference (e)). For all discharge points in States that have an EPA-approved NPDES program for Federal facilities, permits must be requested from the applicable State environmental agency. For all discharge points in States that do not have authority to issue NPDES permits for Federal facilities, permits may need to be requested from both the EPA and the State. All monitoring records must be retained as required by Federal, State and local regulations.

(1) **Wastewater Discharges.** Domestic and industrial wastewater treatment plant discharges as well as other process wastewater and cooling water discharges from Navy facilities directly to waters of the U.S. must comply with all terms or conditions of EPA, State, or locally issued permits.

(2) **Storm Water Discharges.** Storm water discharges must meet all applicable Federal, State and local permit requirements. Storm water discharges are a major contributor to surface water quality impairment. Significant sources of storm water discharge include urban (facility) runoff, industrial activity, and construction. These types of storm water discharges are either regulated under Phase I or Phase II of the CWA Storm Water Program. The Phase I regulations apply to municipal separate storm sewer systems (MS4s) serving a population over 100,000, as well as storm water discharges associated with regulated industrial activities as defined in the storm water regulations, including construction activities disturbing 5 acres of land or more. The Phase II regulations apply to MS4s serving a population less than 100,000, that are located in an “urbanized area”, and construction activities that disturb greater than or equal to one (1) acre of land, or as specified by an individual State. Federally operated storm sewer systems are defined as MS4s. Navy activities subject to storm water regulations must apply for NPDES permit coverage under either an individual permit or a general permit. Refer to reference (f), §122.26 (a), for information on the

types of storm water discharges that are regulated. Refer to reference (f), §122.34((b)(3)(iii), for information on allowable non-storm-water discharges such as water line flushing, lawn watering, and fire fighting activities.

b. **Indirect Discharges.** Indirect discharges to NOTWs, POTWs and PROTWS must meet all applicable Federal effluent guidelines (reference (g)) and any State, county, and local permit requirements. Industrial wastewater discharges from Navy facilities may be subject to Federal categorical treatment or pretreatment standards (reference (g)), or other applicable standards as established by State, county and local regulations.

c. **Non-point Source Control.** Non-point source discharges must conform to best practicable management procedures defined by Federal, State or local requirements (reference (h)).

9-4.3 Sub-Surface Discharges. Discharges to groundwater must meet applicable requirements of the SDWA, State, and local implementing requirements, and applicable permit conditions. Additional information on SDWA's Underground Injection and Wellhead Protection Program can be found in Section 10-4.2.p of Chapter 10.

a. **Underground Injection Control.** All owners or operators of Class I and V wells and all applicants for UIC permits shall comply with applicable provisions of 40 CFR 144, 146, 147.1250 subpart Z and 148. Septic systems may be considered Class V underground injection wells. New large-capacity cesspools are ***banned*** nationwide as of April 5, 2000. Large capacity cesspools may no longer be constructed. (New large-capacity cesspools are those for which construction was started on or after April 5, 2000 (40 CFR *§* 144.88(a)(2)). Existing large-capacity cesspools ***should have been closed*** by April 5, 2005 (40 CFR *§* 144.88(a)(1)(i)).

b. **Land Application.** This includes the use and disposal of treated wastewater, sewage sludge, industrial sludge, or septage. These systems may include spray fields, tile fields, rapid infiltration basins, percolation ponds, and evaporation basins. A permit may be required from the state for land application.

9-4.4 Hazardous Pollutant Discharges. Hazardous waste may be introduced into a treatment facility only if the facility is specifically permitted to treat the type of waste introduced under a RCRA TSD permit, or a "permit by rule" (reference (i)). The Federal Facilities Compliance Act (reference (j)) provides FOTWs with the same domestic sewage exclusion provided to POTWs, provided no hazardous waste is introduced to the FOTW..

9-4.5 Sludge Disposal. The sewage sludge use and disposal regulation (see reference (k)) sets national standards for management and disposal of sewage sludge. The rule is designed to protect human health and the environment when sewage sludge is beneficially applied to the land, placed in a surface disposal site, or incinerated. Generally NOTW sewage sludge disposal requirements are incorporated into NPDES permits. If, however, they are not, reference (k) is self-implementing in most cases. This means that the rule will generally be fully enforceable, even in the absence of a permit. In addition, all installations shall comply with applicable Federal, State and local sewage sludge disposal requirements. Navy facilities shall take all reasonable measures to beneficially dispose of sludge. Beneficial disposal includes a number of land application methods and composting,

9-4.6 Waste Disposal Sites. Surface water runoff and leachate from waste disposal sites will conform to applicable requirements specified for disposal of solid waste (Chapter 16) or hazardous waste (Chapter 15).

9-4.7 Dredge and Fill Operations

a. **Permits.** Applications must be made to USACE for: a) a permit to construct a structure in, or to otherwise alter or modify, navigable waters or wetlands, b) dredge operations, including maintenance dredging, and c) dredge disposal unless the disposal is permitted under a nationwide permit. In addition, applicants are required to obtain State certification that such actions comply with applicable State effluent limitations, water quality implementation plans, toxic effluent limitations, fish and wildlife protection plans, etc. State certifications may be done either as a part of the USACE permit process or independently if no USACE permit is required because of a nationwide permit. Projects covered by a nationwide permit require USACE notification even though no permit application is required. Field sampling may be required to select proposed dredge disposal sites. Other surveys, including site monitoring, may be required at disposal sites before, during, and after disposal. (See reference (1))

b. **Permit Exemptions.** Projects for which EISs have been written and submitted to Congress and that have specific congressional authorization do not require USACE or State permits.

Projects covered by a nationwide general permit require USACE notification, but do not require individual permits. However, on a case-by-case basis, some additional individual requirements may be applied by USACE or States.

c. **Discharges of Dredged or Fill Material.** Discharges of dredged or fill material into waters under USACE jurisdiction will comply with Federal regulations. Disposal by ocean dumping requires a USACE permit and compliance with EPA requirements (Chapter 23).

Discharges to waters under the jurisdiction of States will comply with applicable permits and discharge regulations, including State fee schedules.

Disposal site selection may entail field sampling and analyses. Elutriate and/or bioassay testing may be required to determine if the proposed dredged materials should be classed as polluted or unpolluted. Other surveys, including site monitoring, may be required at disposal sites before, during, and after disposal.

9-4.8 In-water Construction. The USACE and some States require a permit for any in-water construction. Facilities proposing in-water construction will obtain applicable permits prior to award of construction contracts, and comply with all permit conditions.

9-5 Navy Policy

9-5.1 Pollutant Reduction or Elimination. Navy Policy is to reduce or eliminate pollutants from all sources. Navy activities shall explore opportunities for pollutant reduction or elimination in wastewater discharges through product substitution, wastewater reduction, reuse, and recycling. Pollutants shall be reduced or eliminated from storm water discharges by control of pollutant sources through procedural and structural BMPs. The use of Low Impact Development designs is encouraged as a means of reducing storm water discharge volumes and controlling pollutants at the source.

9-5.2 Watershed Management. Installations should apply a watershed approach when evaluating the impact of their overall activities on the quality of area water resources and address water impacts by reducing pollutant discharges. A watershed approach is an integrated holistic management strategy that addresses the condition of land areas within the entire watershed. It ensures that non-point sources as well as point sources of pollution are addressed. Navy water program managers should consult other media experts (e.g. natural resources, RCRA/CERCLA, and air) to fully implement the watershed approach. Installations that discharge pollutants to or near impaired waters should get involved as early as possible in the State or local process that leads to the identification of impaired waters and the development of TMDLs. Even those installations with only a potential to discharge pollutants to an impaired water body should participate as stakeholders in the process. Participation should occur early in the TMDL process, including, when practicable, before the state or other authority approves or creates a schedule for establishing the applicable TMDL.

9-5.3 Pretreatment Program. NOTWs shall develop, implement, and maintain pretreatment programs for all known industrial dischargers to the NOTW that could affect treatment processes or impact compliance with permit limits. Bases shall periodically develop a list of all industrial waste discharges on the facility. This is to be accomplished no less than once every 5 years as part of an industrial wastewater management plan.

9-5.4 Dredge and Fill Operations. Early planning for dredge spoils disposal site selection, preparation, and use is essential.

a. Requests for renewal of permits for maintenance dredging from the USACE shall be filed with the cognizant District Engineer at least 2 years before expiration.

b. An EA or an EIS shall be prepared by the sponsoring Navy activity and reviewed under Chapter 5 for each project involving a change to the width or depth of a channel or other water body.

c. Existing dredge spoil disposal sites, approved by USACE, shall be used wherever possible. Proposed new dredge spoil disposal sites shall be identified to the cognizant USACE District Engineer for evaluation and approval from 2 to 2 1/2 years before project initiation.

9-5.5 Water Re-Use. To support water conservation efforts, Navy commands shall ensure that all activities implement water re-use practices to reclaim, recycle and re-use wastewater to the maximum extent feasible, taking into account economic payback, process requirements and the scarcity of water resources available to the primary water supplier for the activity. Re-use of water shall be accomplished in accordance with all applicable Federal, State and local laws and requirements.

9-5.6 Perchlorate. Permitted wastewater effluent discharges at installations where the use of perchlorate is associated with processes related to the manufacture, maintenance, processing, recycling, or demilitarization of military munitions shall sample for perchlorate at permitted wastewater discharge points. Sampling shall be conducted semi-annually and if possible, in conjunction with effluent sampling already conducted under the applicable permit to each point source. Installations with confirmed results that indicate the presence of perchlorate in wastewater effluent discharges at level above the method reporting limit for the analytical method used shall consult with their Budget Submitting Office on appropriate actions. Sample results are to be reported to the permitting regulatory authority if it is required by the NPDES permit or State regulations.

Further information and policy on perchlorate, as well as other emerging contaminates issues can be found at the Materials of Evolving Regulatory Interest Team (MERIT) web site: (http://intranet.dodmeritinfo.net/index.cfm)

9-5.7 Spills. Spills of sewage or other substances that might be considered pollutants which endanger critical water areas, have the potential to generate public concern, become the focus of enforcement action, or pose a threat to public health or welfare shall be reported by OPREP-3 NAVY BLUE or OPREP-3 NAVY UNIT SITREP in accordance with reference (m). Spills of oil and hazardous substances shall be reported in accordance with the requirements in Chapter 12.

9-5.8 Fines and Penalties. There is no waiver of sovereign immunity for fines and penalties in the CWA. This includes EPA imposed penalties, State imposed penalties, local penalties, or any penalties sought by citizens in a citizen's suit. Because we cannot pay penalties, we also cannot undertake Supplemental Environmental Projects in lieu of environmental penalties.

Refer to Appendix B for more detailed and specific Navy policy on what actions should be taken upon receipt of any notice of deficiency of Federal, State, interstate, or local environmental control laws or regulations.

9-5.9 Training

a. Every person involved in operations at naval shore facilities which could result in pollution of surface or ground water shall have received environmental overview training specified in Chapter 28 of this instruction; will have received specific comprehensive training in water pollution prevention required by the CWA and implementing regulations; and will be familiar with the provisions of this chapter.

b. COMNAVFACENGCOM environmental professionals, Navy regional environmental coordinators, Navy regional commanders/shore activity technical and legal environmental staff and their managers shall receive introductory or executive environmental training in water pollution prevention and coastal zone management.

Wastewater treatment plant operators shall have received environmental awareness training specified in Chapter 28 of this instruction, and shall have received training and certification required by applicable State and local water quality regulations. Where State and/or local regulations do not specify training, the following subjects shall be included in their training plan:

– Basic wastewater plant design,

- Wastewater plant operations,
- Basic maintenance/calibration of plant controls and equipment,
- Wastewater treatment principles,
- Wastewater sampling and analysis, and
- Wastewater plant/systems documentation and reporting requirements.

9-5.10 Request to Board or Regulate Navy Vessels. Consult chapters 1 and 22 if there is any request by Federal, State or local regulators to board, or regulate any Navy Vessel.

9-6 Responsibilities

9-6.1 BSOs shall:

(a) Implement the CWA program requirements at their shore facilities.

(b) Plan, program, budget and provide funding for current and future requirements under the CWA and revisions to the applicable regulations.

9-6.2 COMNAVFACENGCOM shall:

(a) Prepare permit applications for construction and initial operation of MILCON funded projects and pay related fees from the funds appropriated and budgeted for the projects. Provide permit applications for submittal to the applicable regulatory agency.

(b) Assist commands, as requested, in identifying applicable effluent standards and appropriate control technologies and best management practices, and in developing storm water management plans and industrial wastewater management plans.

(c) Coordinate the review of all projects for the construction of new treatment works with the appropriate Federal, State, and local regulatory agencies.

(d) Maintain liaison with USACE to facilitate dredge and fill project planning, preparation of EAs/EISs, and disposal site approval.

(e) Operate and maintain NOTWs.

9-6.3 RECs shall:

(a) Provide coordination and assistance to installations within the applicable region regarding implementation of this chapter.

(b) Assist with resolution of issues with States and local regulators.

9-6.4 Regional Commanders/COs of Shore Activities shall:

(a) Comply with the applicable substantive and procedural Federal, State, local and regional clean water laws and regulations.

(b) Cooperate with Federal, State, local, and regional environmental regulatory officials.

(c) Prepare or review and sign, or designate in writing the appropriate person to sign, all applications for permits to construct wastewater treatment plants, for in-water construction, or for all new dredging, maintenance dredging, and dredge disposal operations; and obtain, renew, and pay for all new and recurring permits.

(d) Ensure continuing compliance with applicable Federal, State, and local regulations and permit conditions.

(e) Coordinate CWA issues and permits with COMNAVFACENGCOM, BSO, and with RECs.

(f) Identify and submit environmental compliance projects, per Chapter 1, required to bring wastewater sources into compliance with applicable requirements.

(g) Identify, plan, program, budget and implement requirements for current and future requirements under the CWA.

(h) Improve opportunities to recycle and reclaim and reuse wastewater and sludge.

(i) Develop, implement, and maintain current storm water management plans, and comply with Federal, State, and local regulations and permit conditions, as applicable.

(j) Ensure environmental personnel are properly trained (and certified as applicable).

(k) Implement the instructions outlined in Appendix B upon receipt of a CWA violation.

9-6.5 CO or Officer in Charge (OIC) of tenant activity that operates or uses sewage and wastewater collection and/or treatment systems shall:

(a) Ensure compliance with all permit conditions for applicable Federal, State, and/or local permits.

(b) Ensure compliance with the policies of this manual and with written sewage and wastewater collection and treatment requirements established by the BSO and Commanders of Districts and Regions.

CHAPTER 10

SAFE DRINKING WATER ACT COMPLIANCE ASHORE

10-1 Scope

10-1.1 This chapter identifies requirements, establishes policy, and assigns responsibilities for the production, use, protection and conservation of drinking water at shore installations in the United States, commonwealth of Puerto Rico, Canal Zone, Virgin Islands, Commonwealth of the Northern Marianas Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands.

10-1.2 References. The relevant references are:

(a) 40 CFR 144-147, Underground Injection Control Program: Criteria and Standards (http://www.gpoaccess.gov/cfr/index.html);

(b) U.S. Environmental Protection Agency: Preparing Your Drinking Water Consumer Confidence Report, Guidance for Water Suppliers, EPA/816-R-99-002 (March 1999) (http://www.epa.gov/safewater/topics.html);

(c) 40 CFR 141, National Primary Drinking Water Regulations (http://www.gpoaccess.gov/cfr/index.html);

(d) Naval Facilities Engineering Service Center: Cross-Connection Control and Backflow Prevention Program Implementation at Navy Shore Facilities, User's Guide UG-2029-ENV (May 1998);

(e) U.S. Environmental Protection Agency: Lead in Drinking Water in Schools and Non-Residential Buildings, EPA/812-B-94-002 (April 1994);

(f) Naval Facilities Engineering Command: Guidance for Sampling Water Coolers (May 1998);

(g) U.S. Environmental Protection Agency document: Cross Connection Control Manual, document no. EPA 816-R-03-002 dated February 2003

(h) U.S. EPA/State Joint Guidance on Sanitary Surveys (December 1995);

(i) Federal Energy Management Program (Water Conservation) (http://www.eere.energy.gov/femp/technologies/water_efficiency.cfm);

(j) Naval Facilities Engineering Service Center: Naval Water Conservation Guide for Shore Activities, User’s Guide UG-2017-E&U, (July 1996), (https://energy.navy.mil/publications/waterguide/wguide.html);

(k) UFC 3-440-02N (16 Jan 04), incorporated MIL-HDBK-1165, Water Conservation, (7 Apr 1997) (https://energy.navy.mil/publications/water/mil_hdbk_1165.pdf);

(l) Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management (24 January 2007);

(m) American Water Works Association Manual of Standard Practices, Emergency Planning for Water Utility Management, AWWA M19 Second Edition 1984 (http://www.awwa.org);

(n) Services Steering Committee: Consumer Confidence Report Guidance Document (February 1999).

10-2 Legislation

10-2.1 Safe Drinking Water Act (SDWA). An amendment to the Public Health Service Act, the Safe Drinking Water Act (SDWA or "the Act") federalized the regulation of drinking water systems. The SDWA has been amended and /or reauthorized several times since passage as Public Law 93-523 in 1974. The SDWA has been codified as Title 42 of the United States Code (USC), Chapter 6A Public Health Service, Subchapter XII Safety of Public Water Systems (42 USC 300f-300j) http://www.access.gpo.gov/uscode/uscmain. html.

Among other things, the Act requires the U.S. Environmental Protection Agency (EPA) to set national standards for levels of contaminants in drinking water that may have an adverse effect on human health. The 1996 Amendments strengthened consumer right to know provisions and the multiple barrier approach to protecting water quality.

The SDWA provides for state implementation. Upon application to EPA, if a State has drinking water standards "no less stringent" than the Federal standards, "adequate" enforcement procedures, and variance and exemption conditions "no less stringent" than the Federal conditions, then the Federal Government grants the State primary enforcement authority. Today most of the States have such authority. Under the 1996 SDWA Amendments sovereign immunity has been waived and Federal facilities are subject to applicable State and local laws and regulations

In 2002, the Public Health Security and Bioterrorism Preparedness and Response Act amended the SDWA requiring each community water system serving more than 3,300 people to prepare a Water System Vulnerability Assessment (WSVA) and Emergency Response Plan (ERP).

10-3 Terms and Definitions

10-3.1 Action Level (AL). The concentration of lead or copper in water that is used to determine compliance with the Lead and Copper Rule. Under the Lead and Copper Rule, action levels have replaced lead and copper maximum contaminant levels.

10-3.2 Backflow Preventer. An approved device or assembly or piping arrangement (i.e., air gap) used to prevent backflow into a potable water system.

10-3.3 Community Water System (CWS). A public water system (PWS) that serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents.

10-3.4 Consecutive Water System. A water system which has no water production or source facility of its own and which obtains all of its water from another water system. A consecutive water system may be further classified as any of the water system types shown in Figure 10-1. As an example, Section 10-3.5 defines a Consecutive Public Water System.

10-3.5 Consecutive Public Water System. A water system which has no water production or source facility of its own and which obtains all of its water from another water system and also meets the definition of a public water system.

10-3.6 Consumer Confidence Report (CCR). This report provides water quality information to consumers. The report must contain mandatory information and be delivered to customers by 1 July every year.

10-3.7 Consumer. Any person served by a PWS. Human consumption includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene.

10-3.8 Customer. A billing unit or service connection to which water is delivered.

10-3.9 Consumptive Use Permit (CUP). A permit that regulates the withdrawal of groundwater.

10-3.10 Cross-Connection. Any physical arrangement whereby a water supply system is connected, directly or indirectly, with any other sewer, drain, plumbing fixture or other device which contains or may contain contaminated water.

10-3.11 Disinfectant. Any oxidant including, but not limited to, chlorine, chlorine dioxide, chloramines, and ozone added to any part of the treatment or distribution process for the purpose of killing or inactivating pathogenic microorganisms.

10-3.12 Disinfection Byproducts (DBP). Disinfection byproducts are compounds formed from the reaction of a disinfectant with organic and inorganic compounds in the source water during the disinfection process.

10-3.13 Injection Well. A well (depth is greater than the largest surface dimension) into which fluids are being injected.

10-3.14 Lead Free. Solders and flux are considered lead free if they contain not more than 0.2 percent lead; pipes and fittings are considered lead free if the lead content is not more than 8.0 percent

10-3.15 Lead Service Line. A service line made of lead that connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting that is connected to such lead line.

10-3.16 Maximum Contaminant Level (MCL). The maximum permissible level of a contaminant in water that is delivered to any user of a PWS.

10-3.17 Maximum Contaminant Level Goal (MCLG). The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur and

that allows an adequate margin of safety. Maximum contaminant level goals are non-enforceable health goals.

10-3.18 Non-Community Water System. A non-community water system is a public water system that is not a community water system. There are two kinds of non-community water systems: transient and non-transient.

10-3.19 Non-Transient, Non-Community Water System (NTNCWS). A PWS that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.

10-3.20 Permitted PWS. A public water system that has been issued a permit or other formal authorization to operate (i.e. it has been issued a public water system identification number).

10-3.21 Point-Of-Entry (POE) Treatment Device. A treatment device applied to the drinking water entering a building for the purpose of reducing contaminants in the drinking water distributed throughout the building.

10-3.22 Point-Of-Use (POU) Treatment Device. A treatment device applied to a single tap for the purpose of reducing contaminants in drinking water at that one tap.

10-3.23 Potable Water Emergency Response Plan (ERP). The ERP shall include, but not be limited to, plans, procedures and identification of equipment that can be implemented and utilized in the event of a terrorist or other intentional attack on the public water system.

10-3.24 Public Water System (PWS). A system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year. Such term includes:

– Any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and

– Any collection or pretreatment storage facilities not under such control, used primarily in connection with such system.

A PWS is either a community water system or a non-community water system. Figure 10-1 is provided to help installations determine what type of system they operate.

10-3.25 Sanitary Survey. An on-site review of the water sources, facilities, equipment, operation and maintenance of a PWS for the purpose of evaluating the adequacy of such sources, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

10-3.26 Selling Water. There is no definition of “selling water” in the Safe Drinking Water Act. Please see discussion under section 10-4.1.

10-3.27 Service Connection. The opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

10-3.28 Source Water Assessment Program. Under the SDWA Amendments of 1996, States were required to develop, by Feb. 6, 1999, comprehensive Source Water Assessment Programs (SWAP) that delineate source water protection areas, inventory significant contaminants in these areas, and determine the susceptibility of each public water supply to contamination.

10-3.29 Source Water Protection Program. State efforts to manage identified sources of contamination in a manner that will protect drinking water supplies, based on the SWAP.

10-3.30 Source Water Vulnerability Assessment. A study used to determine the likelihood that potential contaminant sources in a watershed or drinking water protection area will degrade the public water system's source water quality.

10-3.31 Supplier of Water. Any person who owns or operates a PWS. Under the SDWA a person is defined as an individual; corporation; company; association; partnership; municipality; or State, Federal or tribal agency.

10-3.32 Transient, Non-Community Water System (TNCWS). A non-community water system that does not regularly serve at least 25 of the same persons over 6 months per year.

10-3.33 Turbidity. The measurement of the amount of light scattered by colloidal, suspended matter in liquid. Elevated turbidity in drinking water may be indicative of water quality problems.

10-3.34 Underground Injection. Well injection, meaning the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well where the depth of the dug well is greater than the largest surface dimension (see reference (a)).

10-3.35 Water System Vulnerability Assessment (WSVA). Conduct an assessment of the vulnerability of its system to a terrorist attack or other intentional acts intended to substantially disrupt the ability of the system to provide safe and reliable supply of drinking water. In addition to EPA's requirement for systems over 3,300 persons, Navy policy expands this requirement to all water systems serving more than 25 consumers.

10-3.36 Well. A bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension.

10-3.37 Wellhead Protection Program. A program to protect groundwater supply wells and well fields that contribute drinking water to public water supply systems.

10-4 Requirements

10-4.1 General. Regulatory requirements for water systems vary depending on the type of water system under consideration. However, Navy water systems must comply with all applicable Federal, State, and local regulations, executive orders and Navy policy. Water systems are initially classified as public water systems (PWS) or non-public water systems (Non-PWS). Federal, State, and local regulations for determining compliance with the SDWA generally apply to PWSs but are not applicable to Non-PWSs. Regulatory requirements for each PWS depend on the classification of the system (i.e.

primary or consecutive, community water system (CWS) or non-community water system, transient non-community water system (TNCWS) or non-transient non-community water system (NTNCWS)) and the type of source water used (i.e. groundwater, surface water or groundwater under the direct influence of surface water). To determine the type of water system you are operating, refer to Terms and Definitions in Section 10-3 and Figure 10-1.

In general States are responsible for implementation of SDWA programs. A directory of State water programs can be found at: http://www.awwa. org/statinfo.htm

Installations shall use laboratories certified by EPA or the cognizant State to perform all PWS SDWA compliance sample analyses. Installations must collect water samples at points that represent the quality of water in the distribution system. Chapter 25 provides Navy policy regarding sampling and testing protocols.

10-4.1.1 Consecutive Public Water Systems. Consecutive PWSs generally are not subject to the requirements of the SDWA if they satisfy all of the following criteria specified in 40 CFR 141.3:

a. Consist only of distribution and storage facilities and do not have any collection and treatment facilities;

b. Obtain all their water from but are not owned or operated by a PWS to which the regulations apply;

c. Do not sell water to any persons, and;

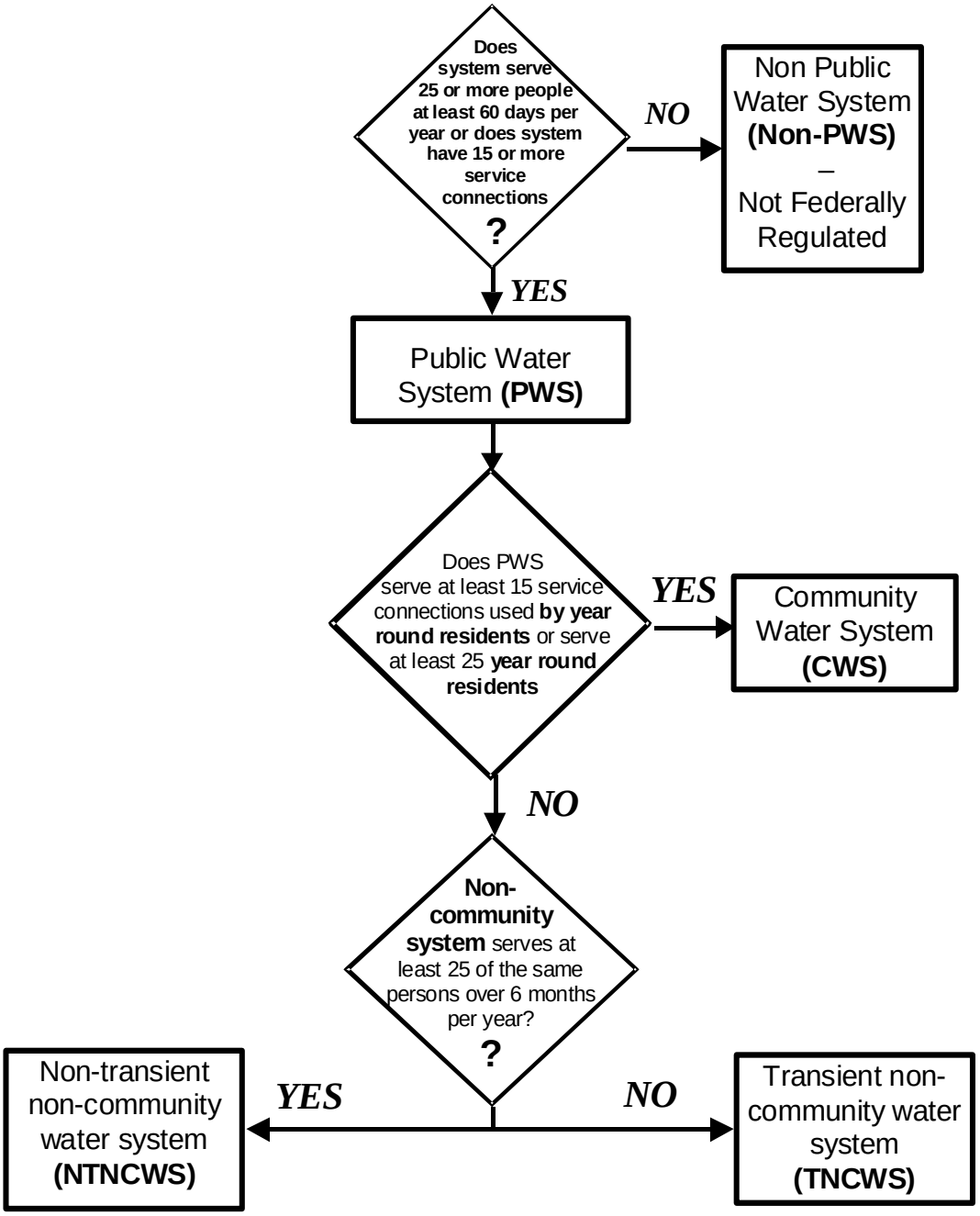
d. Are not carriers that convey passengers in interstate commerce.

There is no definition of "selling water" in the Safe Drinking Water Act. However, an EPA Office of Groundwater and Drinking Water Memo dated March 13, 1998 defines selling water as follows: "A distributor of water for human consumption "sells" water within the meaning of the Act if it charges consumers for the water as a separate item or bills separately for the water it provides (House Report No. 93-1185). Conversely, if the entity includes charges for water in the rental fee, then it is not selling water within the context of the Act. The Navy does not consider reimbursement for the following as selling water: (1) distribution system maintenance costs, and (2) water from one federal entity to another, as this is merely an internal allocation of funds within the executive branch. The EPA definition set out above would apply to non-federal consumers including banks, credit unions, private companies, and restaurants to which Navy distributes water.

If a consecutive PWS does not satisfy all of the above exemption criteria specified under 40 CFR 141.3, it may still be exempted from some regulatory requirements based on the fact that it obtains all of its water from another regulated PWS. This exemption criteria is addressed in 40 CFR 141.29. In general, the consecutive PWS would, at a minimum be required to comply with requirements pertaining to those contaminants which could be contributed by the consecutive PWS distribution system downstream of the point of connection to the regulated PWS.

Any modified monitoring would be conducted under a schedule specified by the applicable State regulatory agency and concurred in by the administrator of the U.S. Environmental Protection Agency. Information on Federal EPA Regulations can be found at: http://www.epa.gov/safewater/.

Water System Classification Flowchart[1,2]



(1) In accordance with Federal laws, State & local laws may be more stringent.
(2) Does not address regulatory requirements of consecutive water systems. This is determined independently by each state.

Figure 10-1

10-4.2 Regulations. This section highlights existing and future SDWA regulations that are most relevant to Navy installations. More information on regulations and a compliance calendar can be found on the EPA Web Page: http://www.epa.gov/safewater/

a. **National Primary Drinking Water Regulations.** National Primary Drinking Water Regulations (NPDWR) or primary standards are legally enforceable standards that apply to public water systems. Primary standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. There are set standards for the following groups of contaminants: Inorganics, Organics, Total coliforms, Disinfectants and Disinfection Byproducts and Radionuclides. A table listing all contaminants and standards can be found on the EPA Web Page: http://www.epa.gov/safewater/mcl.html.

For each contaminant so identified, EPA establishes a "maximum contaminant level" (MCL), a treatment technique, or an action level. Where feasible, this MCL, treatment technique or action level has been used to establish the National Primary Drinking Water Regulation (NPDWR) for the contaminant. Once issued, NPDWR are mandatory for all PWSs. The Act also requires EPA to identify "maximum contaminant level goals" (MCLGs), which are non-enforceable goals for contaminants that may have an adverse effect on human health and are known or anticipated to occur in PWSs. The goal of the Safe Drinking Water Act is to move towards implementing these MCLGs when possible.

(1) **Arsenic Rule.** The EPA reduced the 50 parts per billion (ppb) standard to 10 ppb in January of 2001. Water systems were required to comply with this standard by January 2006 including reporting on the Consumer Confidence Report.

(2) **Radon Rule.** In November of 1999 EPA proposed new standards for Radon in drinking water. This Rule will apply to CWSs that use ground water or a mixture of ground water and surface water. A major provision of the proposal is the option to implement a multimedia mitigation program.

(3) **Radionuclides Rule.** In December of 2000 EPA updated standards for radionuclides in drinking water. EPA also set a new standard for uranium. The standards are: combined radium 226/228 (5 pCi/L); beta emitters (4 mrems); gross alpha standard (15 pCi/L); and uranium (30 µg/L).

(4) **Total Coliform Rule.** This rule sets requirements for coliform levels in drinking water. Coliform bacteria in drinking water indicate that the treatment system is not working or that there are problems in the distribution system. Bacteriological contamination of the drinking water system typically results in gastrointestinal problems. However, in some cases, more serious illness or death can result. EPA standards require that systems detect coliforms in no more than 5 percent of samples taken each month. The minimum number of samples a system must take depends on system size and is outlined in 40 CFR 141.21.

(5) **Surface Water Treatment Rule.** The objective of this rule is to prevent waterborne diseases caused by viruses, Legionella, and Giardia Lamblia. The rule requires that water systems using surface water and ground water under the direct influence (GWUDI) provide filtration and disinfection. Under certain criteria the filtration requirement can be waived, however there are no exceptions to the disinfection requirement.

(a) **Interim Enhanced Surface Water Treatment Rule.** This Rule became effective January 1, 2002. The rule strengthens filter turbidity performance and monitoring requirements in order to optimize treatment reliability. An overall goal of this rule is to minimize levels of Cryptosporidium in finished water. The Rule applies to public water systems serving at least 10,000 people that use surface water or ground water under the direct influence of surface water. The Rule also requires states to conduct sanitary surveys for all surface water and GWUDI systems, regardless of size.

(b) **Filter Backwash Recycle Rule.** Regulated entities must comply with this rule starting December 8, 2003. This Rule applies to all public water systems that use surface water or ground water under the direct influence of surface water; utilize direct or conventional filtration processes; and recycle spent filter backwash water, sludge thickener supernatant, or liquids from dewatering processes. Recycle systems will be required to return spent filter backwash water, thickener supernatant, and liquids from dewatering process prior to the point of primary coagulant addition unless the State specifies an alternative location

(c) **Long-Term 1 Enhanced Surface Water Treatment Rule.** The rule applies to public water systems using surface water or ground water under the direct influence of surface water. This rule proposes to extend protections against Cryptosporidium and other disease-causing microbes to water systems that serve fewer than 10,000 people annually.

(d) **Long-Term 2 Enhanced Surface Water Treatment Rule**. This rule increases monitoring and treatment requirements for water systems that are prone to outbreaks of Cryptosporidium. The rule requires that public water systems that are supplied by surface water sources monitor for Cryptosporidium. Those water systems that measure higher levels of Cryptosporidium or do not filter their water must provide additional protection by using options from a "microbial toolbox" of treatment and management processes. The rule requires open reservoirs to either be covered or receive added treatment.

(6) **Groundwater Rule.** This rule was published in the federal register in November 2006. The purpose of the rule is to provide for increased protection against microbial contamination of drinking water systems that use groundwater sources. The rule will require sanitary surveys be conducted by the State every 3 years for community water systems and every 5 years for non-community water systems. The rule contains additional requirements such as hydro geologic sensitivity assessment and enhanced source water monitoring for certain systems.

(7) **Disinfectant/Disinfection By-Product**

(a) **Stage 1 Disinfectant/ Disinfection By-Product Rule.** This Rule applies to all community water systems and non transient non-community water systems that use a chemical disinfectant in any part of their system. Maximum Residual Disinfectant Levels (MRDLs) are established for disinfection using chlorine, chloramine and chlorine dioxide. Maximum contaminant levels are established for the disinfection by-products total trihalomethanes, haloacetic acids, chlorite and bromate. The compliance deadline for large systems was January 2002. For small systems the compliance deadline was January 2004.

(b) **Stage 2 Disinfectant/ Disinfection By Product Rule.** This rule builds upon earlier rules that addressed disinfection byproducts to improve drinking water quality and provide

additional public health protection from disinfection byproducts. This rule strengthens public health protection for customers by tightening compliance monitoring requirements for two groups of DBPs, trihalomethanes (TTHM) and haloacetic acids (HAA5). In addition, this rule imposes requirements on consecutive systems.

(8) **Consumer Confidence Reporting Rule.** Community water systems shall prepare and provide to their consumers annual reports on the quality of the water delivered by the system. The reports must be delivered by 1 July on an annual basis. Each report must contain data collected during, or prior to, the previous calendar year. Requirements are outlined in 40 CFR 141.151 through 141.155 and reference (b).

Each community water system shall deliver one copy of the consumer confidence report (CCR) to each of its customers. States may waive the mailing requirement for community water systems serving fewer than 10,000 persons. In such cases, systems would be required to inform their customers that the report will not be mailed, make the report available on request to the public, and publish the report annually in one or more local newspapers serving the areas in which the systems' customers are located. Alternative delivery methods should be used to make a "good faith" effort to reach consumers who do not receive water bills. A good faith effort would include a mix of methods appropriate to the particular system. In states with primary enforcement authority, utilities must mail a copy of the completed CCR to the State, followed, within 3 months, by a certification that the report has been distributed to customers and that the information in the CCR is correct.

(9) **Unregulated Contaminant Monitoring Rule.** Large PWS and some small PWSs are required to collect data on a selection of unregulated contaminants. This Rule has two phases; List 1 and List 2. Data from this monitoring will be used in future rule making.

(10) **Public Notification.** In May of 2000 EPA updated the Public Notification Rule. The new Rule has a three-tiered notification system. The owner or operator of a PWS that fails to comply with an applicable MCL, AL, treatment technique, or that fails to comply with the requirements of any schedule prescribed under a variance or exemption, shall notify persons served by the system. The notices shall include specific language about the health effects of each contaminant. The PWS shall publish notices by newspaper, mail delivery, hand delivery, radio, and television announcements depending upon the type of violation or risk involved.

(11) **Lead and Copper Rule** PWSs at Navy installations shall comply with all applicable requirements for the control of lead and copper, as stated in the Federal Lead and Copper Rule (LCR) (see Subpart I of reference (c)). This is to ensure that the levels of lead and copper remain below the levels associated with health risks in treated (finished) water and at the consumer's free flowing tap. Per reference (c) and if approved by the State regulatory agency or EPA (whichever has primacy), installations may combine their consecutive PWSs monitoring plan as part of the supplier's plan, instead of treating each as a separate system. In January of 2000 EPA published minor revisions to the Lead and Copper Rule.

The lead action level is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted per reference (c) is greater than 0.015 mg/L (i.e., if the 90th percentile lead level is greater than 0.015 mg/L). The copper action level is exceeded if concentrations of copper in more than 10 percent of tap water samples collected during any monitoring

period conducted per reference (c) is greater than 1.3 mg/L (i.e., if the 90th percentile copper level is greater than 1.3 mg/L).

As specified in reference (c), if an action level is exceeded, installation PWSs must collect additional water quality parameter samples. Optimal corrosion control treatment may also be required. Should prescribed treatment options fail to bring lead levels below the action level, lead service lines may have to be replaced.

Water systems that meet the lead and copper action levels during specified monitoring periods may reduce the number and frequency of sampling in accordance with reference (c).

(a) **Lead Containing Pipe, Solder, Fixtures, Fittings and Flux.** As required by 42 U.S.C. 300g-6(e), EPA adopted industry standard NSF 61, Section 9 in Federal Register Notice, 62 FR 44684-44685, [August 22, 1997] as the health effects-based performance standard that limits the leaching of lead into the drinking water from plumbing fittings or fixtures dispensing water for human ingestion, including kitchen and bar faucets, lavatory faucets, water dispensers, drinking fountains, water coolers, glass fillers, residential refrigerator ice makers, supply stops and endpoint control valves. In 1998 an amendment to the SDWA known as the Lead Contamination Control Act (P.L. 100-572) became law. This amendment requires testing and corrective action for lead contamination in drinking water in schools and day care centers.

(12) **Cross-Connection and Backflow Prevention.** Cross-connection control programs apply to building interior domestic plumbing systems, fire protection plumbing systems, and exterior water distribution systems. These programs, overseen by States with SDWA primacy, help ensure compliance with primary and secondary drinking water standards by establishing policy, procedures, and instructions for installing, repairing, maintaining, inspecting, and testing backflow preventers. Reference (d) provides guidance to Navy installations for complying with this requirement.

(13) **Source Water Assessment and Source Water Protection Programs.** The SDWA Amendments of 1996 required all States to establish Source Water Assessment Programs (SWAP) and submit plans to EPA by February 6, 1999 detailing how they would delineate source water protection areas, inventory significant contaminants in these areas, and determine the susceptibility of each public water supply to contamination. The States have up to 3 years after EPA program approval to complete the source water assessments.

(14) **Operator Certification.** The 1996 Amendments to the SDWA requires States to develop operator certification programs. Specifically these programs must specify minimum standards for operators of community and non-transient, non-community public water systems. Details include provisions for certification, re-certification and grandfathering.

(15) **Recordkeeping.** Maintain records showing monthly operating reports for at least 5 years, and records of bacteriological results for not less than 5 years, and chemical results for not less than 10 years. Lead and copper monitoring results must be kept for at least 12 years.

b. **National Secondary Drinking Water Regulations.** For contaminants that may cause the drinking water to become aesthetically unpleasing, the Act requires EPA to specify the maximum contaminant level requisite to protect the public welfare. These contaminants are regulated under the

National Secondary Drinking Water Regulations (NSDWR). Although they are not Federally enforceable, several State SDWA programs provide for enforcement of National Secondary Drinking Water Regulations. If the State enforces NSDWRs then Navy activities shall comply.

c. **Underground Injection Program.** The SDWA requires each State to have an Underground Injection Control Program (UICP) to ensure that underground injection does not endanger underground sources of drinking water. All groundwater injection systems must be permitted or (authorized by rule). Under these requirements, installations must implement a program that includes:

– Establishing and maintaining an underground injection well inventory.

– Procedures for proper well closure.

There are five classes of UIC wells. The broadest category is Class V, which includes things such as storm water drainage wells, aquifer remediation wells, and some septic systems.

d. **Wellhead Protection Program.** Installations that receive drinking water from wells must take measures to minimize contamination. These installations shall establish a wellhead protection program that meets applicable State or local wellhead protection requirements

e. **Water System Vulnerability Assessments (WSVAs) and Emergency Response Plans (EPRs).** The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188) Section 401 amended the SDWA to require that each community water system serving a population of greater than 3,300 persons to conduct a Vulnerability Assessment and prepare an Emergency Response Plan. The purpose of this assessment is to determine the vulnerability of the water system to a terrorist attack or other intentional acts intended to disrupt the drinking water supply. These assessments were to be completed on all systems by 31 December 2004 and the ERP's completed 6 months following completion of the VA.

10-5 Navy Policy

10-5.1 General. Navy installations operating water systems shall comply with all applicable Federal, State, and local safe drinking water regulations, executive orders and Navy policy. Navy policy provides additional protection to consumers.

10-5.2 Water System Monitoring. Navy installations that own and operate a consecutive PWS subject to full or partial exemption from regulatory monitoring requirements under 40 CFR 141.3 or 141.29, respectively, shall submit a letter to the State regulatory agency explaining the degree to which exemption criteria are applicable and request the exact requirements to be imposed on the consecutive PWS. The State's response letter is to be permanently retained in Navy files.

Navy water systems will, at a minimum, accomplish the monitoring described in the following subsections. This monitoring is required regardless of variance or exemptions from regulatory monitoring requirements. Sampling and testing shall comply with chapter 25 requirements.

a. **Bacteriological Monitoring.** Navy PWSs shall perform bacteriological monitoring as specified in the Total Coliform Rule at 40 CFR 141.21. Consecutive non-community water systems may

request waivers from this requirement. Waivers shall be submitted by BSOs to CNO N45 for approval. The use of EPA-approved kits by trained personnel is acceptable for Navy policy total coliform analyses. However, if a sample tests positive, follow up analysis must be accomplished using a certified laboratory.

b. **Asbestos.** All Navy water systems with asbestos cement pipes shall monitor for asbestos. At a minimum one sample shall be taken every three years.

c. **Lead in Priority Areas.** All Navy installations shall sample, test, and maintain resultant records for all drinking water coolers and outlets in the following priority areas to determine the presence of lead: primary and secondary schools, day care centers, hospital pediatric wards, maternity wards, and food preparation areas located on medical facilities. References (e) and (f) provide program information including rationale and sampling protocols. If initial screening results exceed 20 ppb in 250-mL samples, installations shall use full protocol sampling on affected outlets. If full protocol sampling exceeds 20 ppb, they shall secure the affected water outlets from service and institute permanent corrective measures.

A copy of all test results shall be made available for all schools, day care centers, and medical facilities where testing has been conducted. A notice of availability of the testing results shall be sent to the parents or legal guardians of children attending the affected school.

d. **Lead and Copper in Water Systems.** Navy consecutive PWSs that serve family housing and were not included in the primary system sampling pool (at the time the primary system performed Lead and Copper Rule monitoring) for lead and copper shall sample for lead and copper. Installations shall ensure the number and location of samples are sufficient to be representative of the system and in conformance with Lead and Copper Rule procedures.

This requirement can be waived if Navy installations operating consecutive PWS water systems document that their water supplier passed its Lead and Copper Rule monitoring and that the water being supplied to them is non-corrosive. A formal waiver does not need to be submitted but documentation must be maintained in drinking water program records.

e. **Review of Primary PWS Records.** Navy consecutive PWSs shall, at least once a year, review the monitoring reports of the primary PWS. Installations shall use these reports, and other sources of information, to determine the risk of water quality deterioration within the distribution system. Installations shall ensure that water quality has not degraded above the MCL for parameters within the distribution system.

10-5.3 Water System Vulnerability Assessments and Emergency Response Plans

All Navy drinking water systems serving more than 25 consumers must complete a Vulnerability Assessment and Emergency Response Plan as required by the Safe Drinking Water Act and Navy Policy. Systems covered under this requirement include consecutive and unregulated systems, as well as small community and non-community public water systems in the US and its possessions and territories.

Specific criteria to be addressed by the WSVA include, but are not limited to:

– Pipes and constructed conveyances,

– Physical barriers,

- Water collection, pretreatment, treatment, storage, and distribution facilities,
- Electronic, computer or other automated systems which are utilized by the public water system,
- The use, storage, or handling of various chemicals, and
- The operation and maintenance of the system.

Navy drinking water systems serving between 25 and 3,300 consumers shall conduct a WSVA and ERP and retain a copy for official use only, unless otherwise required to be forwarded to a Federal, State, or local agency. Activities shall maintain accurate VA and ERP status in the EPRWeb Water Quality Module.

All activities shall establish a team consisting of water system operators, environmental, security, force protection, and medical personnel to periodically review and update their WSVAs and ERPs.

10-5.4 Cross-Connection Control and Backflow Prevention Program Implementation. All installations that own or operate a water system shall develop and implement a Cross-Connection Control and Backflow Prevention Program. At a minimum, the cross-connection control and backflow prevention program shall include procedures and mechanisms to:

- Find and eliminate existing cross-connections and prevent new cross-connections.
- When cross-connections cannot be eliminated, install, inspect, and test backflow preventers.
- Keep an inventory of all existing backflow preventers.
- Certify all backflow preventers as required by the regulatory agency. If there is no regulatory requirement, then all backflow preventers should be certified at least once every 6 months for high hazards and once every 12 months for low hazards by a certified inspector.
- Promptly repair or replace defective backflow preventers. Retain cross connection and backflow preventer inspection and maintenance records for at least 5 years.

Reference (d) provides guidance to Navy installations for complying with this requirement.

Reference (g) provides EPA guidance on the Cross Connection Control Program.

10-5.5 Sanitary Surveys. In many instances, a State may require treatment plants or PWSs that are experiencing compliance problems, particularly with microbial pathogens, to perform a sanitary survey. The State regulatory agency will usually perform the survey. If the State allows, the installation can use a service provider of choice to complete the survey. In the absence of a State requirement, all Navy PWSs shall perform a sanitary survey every 5 years.

a. **Survey Requirements.** For treatment plants, the survey should include the following:

- Verification and reevaluation of vulnerability assessments, watershed protection programs, and wellhead protection programs, as applicable.

- Examination of the source water physical components and condition.

- Schematic diagrams of the treatment process and examination and evaluation of the adequacy and appropriateness of all elements of the current treatment process, including an assessment of operational flows versus treatment process rated capacity and, where appropriate, CT assessment (CT is defined in 40 CFR 141.2).

- Examination and evaluation of the operation and maintenance of the treatment facility including the condition and reliability of equipment, operator qualifications, use of approved chemicals, record keeping, process control, and safety programs.

- Evaluation of the ability of the treatment plant to respond to changes in raw water fluctuations.

- Evaluation of the treatment plant's emergency power supply and security measures.

b. **Distribution System Sanitary Survey Review.** Concerning the distribution system, the sanitary survey should include a review of the operations and maintenance program to ensure attention to the following areas of concern:

- Elimination of unneeded or excess storage.

- Adequate turnover of storage tanks.

- Storage tank cleaning and maintenance.

- Adequate disinfection practices during all main repairs and replacement.

- If applicable, an effective corrosion control program.

- A comprehensive cross connection control program.

- An aggressive valve and hydrant exercise program.

- An adequate water quality monitoring program that achieves compliance with the appropriate regulations and provides for effective water quality control.

- An adequate flushing program, preferably a Unidirectional Flushing (UDF) program that is implemented on a yearly basis.

For more information on sanitary surveys, see reference (h).

10-5.6 Record Keeping. In the absence of more stringent Federal, State, or local record keeping requirements, installations shall maintain records as follows:

- Bacteriological Results - 5 years.
- Chemical Results - 10 years.
- Lead/Copper testing results - 12 years.
- Actions Taken to Correct Violations- 3 years after acting on the particular violation involved.
- Sanitary Survey Reports - 10 years.
- Variance or Exemption Records - 5 years following the expiration of such variance or exemption.
- Water Treatment plant and/or Distribution System Operating Records - 5 years.
- Cross Connection Inspection Records - 5 years.
- Consumer Confidence Reports - 5 years.

10-5.7 Water Conservation. Water is a limited but recyclable resource. To achieve the 2% per year (20010-2015) water consumption reduction goal required by Reference (i) Navy installations shall, when economically practicable, implement water conservation programs to include:

- Installation of water efficient industrial equipment and recycling of industrial process water.
- Low flow showers, toilets, faucets and other devices where applicable.
- Timely repairs of water service line leaks and main breaks.
- Routine leak detection surveys.

See references (i), (j), (k), and (l) for additional guidance.

10-5.8 Exemption from Permitting. Navy installations that qualify for exemption from PWS permitting shall apply, in writing, to the regulatory agency with SDWA primacy for an exemption. In some cases regulators issue a permit when it is not required.

10-5.9 Operation and Maintenance. Installations that own and/or operate water systems (public and non-public, permitted and non-permitted) shall develop and implement an operation and maintenance program applicable to the system. Minimum requirements of the program are to meet the requirements of reference (c), in particular 40 CFR 141 paragraph 141.63(d)(3), and include the proper implementation and documentation of:

- Emergency and preventive maintenance.
- System disinfection after maintenance work is performed.

- Scheduled flushing of the system.
- Reduction of water quality problems (as needed).
- Implementation and documentation of a valve exercise and maintenance program.
- Proper operation and maintenance of storage tanks.
- Maintenance of current water distribution maps.
- Documentation of location and dates of water line breakage.
- Documentation of emergency operations procedures required as a result of events such as earthquakes, hurricanes, chemical releases and terrorist activities. Determine response roles and responsibilities as well as contingency plans for providing potable water to the Navy installation. Reference (m) provides information on emergency planning.

10-5.10 Consumer Confidence Reports. Navy consecutive CWSs shall obtain a copy of their water suppliers CCR and amend this report with information on any additional testing or exceedances and then distribute to consumers. For exceedances, only report data based on certified laboratory results. A good faith effort shall be made to ensure that all consumers are aware of the CCR and additional information. Recommended methods of report delivery include mailing to each housing unit, publishing in the command newspaper, posting on a web site, and posting in conspicuous locations in each building on the installation. See reference (n) for additional guidance.

10-5.11 Consumptive Use Permits. In coordination with legal and technical staff at the BSO and appropriate regional commander, installations that withdraw groundwater shall:

- Document historical water use;
- Determine reasonable foreseeable future water uses;
- Evaluate water rights laws;
- Determine on a case by case basis whether the installation should obtain a consumptive use permit; and
- Ensure, if applying for a consumptive use permit, that restrictions will not impact mission requirements.

10-5.12 Perchlorate.

All Navy-owned drinking water systems (including consecutive systems) that currently sample for inorganic analytes pursuant to regulatory requirements were required to sample for perchlorate using either EPA method 331.0 or 332.0 at a minimum of two consecutive quarters.

Where confirmed analytic results indicated the presence of perchlorate in finished drinking water at any level above the method reporting limit for the analytic method used, installations should have notified their BSO for further actions.

Further information on perchlorate, including policy, as well as other emerging contaminates issues can be found at the Materials of Evolving Regulatory Interest Team (MERIT) web site: http://intranet.dodmeritinfo.net/index.cfm.

10-5.13 Training

a. **General**. All Navy personnel involved in the drinking water program shall receive appropriate environmental training, refer to Chapter 24 for detailed information.

b. **Water Treatment and Distribution System Operators.** Installations shall ensure their water treatment and distribution system operators are trained and certified per applicable Federal, State, and local regulations. Training should include the following elements:

- Basic water plant and/or distribution system design.
- Basic water plant and/or distribution system operation.
- Basic maintenance and calibration of plant controls and equipment.
- Water plant and/or distribution systems treatment principles, including chemical storage and handling.
- Water sampling and analysis.
- Water plant and/or distribution system documentation and reporting requirements.
- Cross-connection control and backflow prevention.

10-5.14 Fines and Penalties. The 1996 amendments to the SDWA waive sovereign immunity for the payment of fines and penalties imposed by Federal, State or local agencies for violations. In addition, EPA may assess administrative penalties of up to $25,000 per day per violation.

10-6 Responsibilities

10-6.1 CNO (N45) shall:

(a) Coordinate the overall implementation of SDWA requirements.

(b) Issue policy and guidance as needed.

(c) Act as the assessment sponsor for SDWA projects.

(d) Approve or disapprove monitoring waivers for bacteriological sampling by Navy consecutive non-community water systems.

10-6.2 COMNAVFACENGCOM shall:

(a) Assist CNO (N45) in providing Navy-wide guidance regarding matters relating to drinking water.

(b) Provide engineering, contracting, and legal assistance, upon request, to BSOs and installations.

(c) Maintain drinking water information systems.

10-6.3 Chief, Bureau of Medicine and Surgery (CHBUMED) shall:

(a) Establish and publish appropriate standards of water quality and monitoring requirements for Navy water systems ashore, afloat and in the field.

(b) Provide health-related advice to Navy commands in carrying out their responsibilities for drinking water quality and distribution.

10-6.4 Regional Environmental Coordinators shall:

(a) Provide coordination and assistance to installations within the applicable region regarding implementation of this chapter.

(b) Assist BSOs with resolution of issues and communication with CNO (N45) and Federal, State, and local regulators.

10-6.5 BSOs shall:

(a) Implement the SDWA program requirements at their shore installations.

(b) Plan, program, budget, and provide funding for current and future requirements of the SDWA, state and local regulations, applicable executive orders, and Navy policy.

10-6.6 Commanding Officers (COs) Or Officers in Charge (OICs) of shore installations shall

(a) Ensure that the installation is in compliance with all Federal, State and local regulations, executive orders and Navy policy pertaining to drinking water. This includes planning, programming and budgeting resources to meet requirements.

(b) Ensure contracts between the Navy and water suppliers require the supplier to supply the results of all permit required National Primary Drinking Water Regulation (NPDWR) monitoring that was performed on raw and treated water that serves the applicable Navy installation and/or activity at least once a year.

(c) Ensure that all personnel involved in the drinking water program are properly trained.

CHAPTER 11

OIL MANAGEMENT ASHORE

11-1 Scope

11-1.1 This chapter identifies requirements and responsibilities applicable to the prevention of oil pollution and the collection, reclamation, and disposal of oily wastes and used oils ashore. Requirements apply in all areas within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands. Chapter 21 provides Navy policy with respect to activities in foreign countries.

11-1.2 Chapter 12 describes the Navy response to oil and hazardous substance spills under the National Contingency Plan (NCP). Chapter 15 describes the management of petroleum products, residues, or other mixtures that meet the reference (a) definition of HW. Chapter 13 describes management of storage tanks. Chapter 22 addresses shipboard oil pollution abatement, and the requirements for ships including the handling of oil and associated waste products.

11-1.3 References. The relevant references are:

(a) 40 CFR 260-266, Hazardous Waste Management;

(b) 33 CFR 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities;

(c) 33 CFR 156, Oil and Hazardous Material Transfer Operations;

(d) 40 CFR 112, Oil Pollution Prevention;

(e) 40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;

(f) 40 CFR 110, Discharge of Oil;

(g) 40 CFR 279, Standards for the Management of Used Oil;

(h) 49 CFR 130, Oil Discharge Prevention and Response Plan for Oil Transportation;

(i) 49 CFR 194, Response Plan for Onshore Oil Pipelines.

11-2 Legislation

11-2.1 Clean Water Act as amended by the Oil Pollution Act of 1990, 33 USC 1321. The CWA prohibits the discharge of oil and hazardous substances in such quantities as may be harmful into or upon the navigable waters of the United States, including the contiguous zone, exclusive economic zone and adjoining shorelines. Under the CWA, EPA published oil pollution prevention regulations in 1973 (amended in 1974, 1976, 2002 and 2004). These regulations include requirements for both oil spill prevention and response. Among other things, OPA 90 preserves State authority to establish laws governing oil spill

prevention, response and periodic drills and exercises. References (b) and (c) are the regulations promulgated by the U.S. Coast Guard (USCG) for transportation-related facilities to regulate the bulk transfer of oil and hazardous materials and ensure compliance with OPA 90. These regulations require facilities to develop operations manuals and spill contingency plans, provide personnel training, and conduct testing of transfer equipment. These regulations apply to facilities that are capable of transferring oil or hazardous materials, in bulk, to or from a vessel, where the vessel has a total capacity from a combination of all bulk products carried, of 250 barrels or more. Reference (d) is the regulation promulgated by EPA to comply with OPA 90 for non-transportation related facilities. It requires the preparation of Spill Prevention Control and Countermeasure (SPCC) Plans and contains specific guidelines for the design and management of bulk storage containers. The guidelines include preventative measures such as requirements for secondary containment, control of drainage from containment areas, corrosion protection of buried metallic tanks and piping, inspection and integrity testing of aboveground tanks and piping, requirements for spill prevention devices such as high level alarms, security requirements for oil storage areas, and personnel training requirements. It also contains specific requirements for responding to releases of oil once they occur. These regulations apply to facilities that, due to their location, could reasonably be expected to have a discharge of oil (based solely upon geographical and location aspects of the facility) and which has completely buried oil storage capacity above 42,000 gallons (aggregate, excluding the capacity of all UST's subject to all of the requirements of reference (e)), or aboveground oil storage capacity greater than 1,320 gallons (aggregate).

11-2.2 Military Construction Codification Act, Section 6. Contains a provision that allows net proceeds from the sale of recyclable materials (including used oil) to be used by Navy activities for certain purposes.

11-3 Terms and Definitions

11-3.1 Bulk Oil Storage Container. Any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil/Water separators and grease traps are considered bulk storage containers in reference (d), however, they are generally exempted from any requirements per paragraph 112.1(d)(6) of reference (d) unless they are used for the purpose of storing oil (see 67 CFR 47068 for more information). Under reference (d), only bulk storage containers of 55 gallons or more in capacity are regulated. Oil Filled Operating Equipment is not considered to be a bulk storage container, however, operating equipment with onboard petroleum storage capacity of greater than 55 gallons is subject to the general secondary containment requirements in paragraph 112.7(c) of reference (d).

a. **Aboveground Storage Tank (AST).** Bulk storage containers or storage tanks not clearly identified as UST's and that are normally placed on or above the surface of the ground. For purposes of this section containers in vaults, bunkered tanks or partially buried tanks are considered aboveground storage tanks or aboveground storage containers. Note that a tank defined as a UST in reference (e) may also be defined as an AST in reference (d).

b. **Completely Buried Tank.** Any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers in reference (d). Bunkered tanks and partially buried tanks are typically considered as USTs under reference (e).

c. **Partially buried tanks.** A storage container that is partially inserted or constructed in the

ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. Note that a partially buried tank is often considered a UST under reference (e) and an AST under reference (d).

d. **Oil Filled Operating Equipment.** Equipment where oil is used 'operationally' which includes electrical substations, electrical transformers, and certain hydraulic or manufacturing equipment. It does not include motive power containers which are used solely to power the movement of a motor vehicle (i.e., fuel tanks) or ancillary onboard oil-filled operational equipment (i.e., hydraulics and lubrication systems) used solely to facilitate its operation. This exemption does not apply to a bulk storage container mounted on a vehicle for any purpose other than powering the vehicle itself (i.e., a tanker truck or a mobile refueler). Examples of oil-filled operational equipment covered by SPCC regulations may include oil-filled electrical transformers, switches, constant current regulators, hydraulic lifts, etc. Only oil-filled operating equipment containing 55-gallons or more of oil is regulated under reference (d). Oil-filled operating equipment is not considered to be a "bulk storage container."

e. **Loading/Unloading Rack.** For purposes of the reference (d) SPCC regulation, the loading/unloading rack is defined as a facility where tank trucks are loaded or unloaded at a fill stand type "rack" which is connected to a tank or tanks. Evidence that a facility has a "rack" is the presence of pipes, pumps, and loading arms. Loading/unloading racks are subject to the requirements of paragraph 112.7(h) in reference (d). Other SPCC regulated petroleum storage tank loading and/or unloading areas not having a "rack" as described above are subject to the paragraph 112.7(c) general secondary containment requirements in reference (d).

f. **Mobile and Portable Facilities.** Facilities designed to transport and deliver petroleum products to various locations are considered mobile facilities, such as tanker trailers or fueling trucks. Portable facilities are containers that are temporary in nature and not fixed, and are not mobile, such as a portable fuel totes or containers. Normal staging or parking areas for such facilities must meet SPCC requirements of reference (d). When mobile and portable facilities are in transport to support mission requirements only general spill prevention and control requirements apply. An example would be Mobile Fuel Tanker Trucks (MFTs). When they are not engaged in training missions and are being staged, they must have containment provisions at the staging area.

11-3.2 Lubricating (Lube) Oil. Crankcase oil, cutting oil, gear lubricant, metalworking lubricant, hydraulic oil, and transmission fluid.

11-3.3 Navigable Waters. As defined in reference (f), Section 110.1, "*Navigable Waters*" means the waters of the United States, including the territorial seas. The term includes:

a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

b. Interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

– That are or could be used by interstate or foreign travelers for recreational or other purposes.

– From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

– That are used or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as navigable waters under this section.

e. Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

f. Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

11-3.4 Off Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that exceed the specified limits set in Table 1, reference (g), Section 279.11.

11-3.5 Oil. Oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

11-3.6 On Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that do not exceed the specified limits set in Table 1, reference (g).

11-3.7 Pollution Prevention. Source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials or energy; protection of natural resources by conservation; reduction/elimination of use of hazardous materials; and recycling/reuse of materials. Chapter 4 provides Navy guidance on P2. P2 Plans are required by Navy policy to be prepared for all Navy facilities.

11-3.8 Processing. Any chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oil to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

11-3.9 Reclaimed. A material is reclaimed if it is processed to recover a usable product, or if it is regenerated.

11-3.10 Recycled. A material is recycled if it is used, reused, or reclaimed.

11-3.11 Transportation or Non-Transportation Related Oil Storage Facilities. Shore activities with oil storage facilities are classified as either transportation-related or non-transportation-related. Transportation-related facilities are primarily involved with bulk oil transfer. Bulk oil transfer includes transferring oil from stationary storage tanks to tanker ships, highway tankers, and railroad tank cars for transport to off-site locations. Non-transportation-related facilities are primarily involved in fuel storage for

on site use.

11-3.12 Used Oil. Any oil that has been refined from crude oil, or any synthetic oil, that has been used and because of such use is contaminated by physical or chemical impurities.

11-3.13 Used Oil Generator. Any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

11-3.14 Used Oil Processor. A facility that processes used oil.

11-3.15 Used Oil Transfer Facility. Any transportation-related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation, or prior to an activity performed under reference (g), Section 279.20(b)(2). Transfer facilities that store used oil for more than 35 days are subject to regulation under Subpart F of reference (g).

11-3.16 Used Oil Transporter. Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but do not produce (or make more amenable for production) used oil derived products or used oil fuel.

11-4 Requirements

11-4.1 Oil Storage Facilities. Transportation-related facilities serving vessels are subject to current USCG regulations. Through reference (b), the USCG requires facility operation manuals for applicable marine transportation-related facilities. These regulations, which apply to all components of DOD, address aspects of the design and operation of on-shore and offshore facilities that are engaged in the transfer of bulk oil to and from vessels.

EPA, through reference (d), requires spill prevention plans for applicable onshore non-transportation-related facilities.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) under reference (h) requires prevention, containment, and response planning requirements of the Department of Transportation (DOT), applicable to transport of oil by motor vehicles and rolling stock that leave naval facilities. Reference (i) contains requirements for oil spill response plans to reduce the environmental impact of oil discharged from onshore oil pipelines. See Chapter 12 for additional information.

11-4.2 Facility Operations Manuals.

a. Facilities that conduct bulk oil transfers to or from a vessel, and meeting the requirements in reference (c) are required to prepare and implement an Operations Manual. These operations manuals must be submitted to the USCG for approval and amended whenever a change in operations occurs.

b. The manual describes how the facility will comply with operating rules and equipment

requirements of references (b) and (c). Additionally, specifics of the facility's transfer operations and personnel responsibilities are discussed. Examples are types and hazards of fuel transferred, descriptions of communications systems, descriptions of emergency shutdown systems, personnel training requirements and the maximum allowable working pressure (MAWP).

c. The USCG will periodically inspect regulated facilities to ensure that the Operations Manual, as well as equipment and personnel, meet all the oil transfer requirements. Facilities need to ensure that any deficiencies are corrected and documentation provided to the USCG.

d. The USCG has the ability to suspend operations at any facility that doesn't comply with these requirements. Facilities need to be cognizant of all applicable requirements and ensure they are in compliance.

11-4.3 Spill Prevention Control and Countermeasure Plans.

a. Facilities that are not transportation-related and that meet the applicability requirements of 40 CFR 112.1 will prepare an SPCC Plan in accordance with reference (d) that establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil into or upon navigable waters. Plans must have full approval of management and must assess the potential for discharge of oil, as well as containment procedures and equipment to prevent oil spills into or upon a navigable waterway or shoreline of the U.S. A licensed professional engineer (PE) must initially review and certify the SPCC plan. Facilities must amend their SPCC Plans when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge. This amendment must be prepared within six months and implemented within six months following preparation of the amendment. Notwithstanding compliance with the above requirement, facilities must review and evaluate their SPCC Plans at least once every five years. Based on the review and evaluation, facilities shall revise their SPCC Plans within six months and implement the amendment within six months following preparation of any amendment. A licensed Professional Engineer must certify any technical amendment to the Plan. Facilities must also document their completion of the review and evaluation, and must sign a statement as to whether facilities will amend the Plan. The plan shall preferably, follow regulatory sequence. If you do not follow the sequence specified, you must prepare an equivalent plan and supplement it with a section cross-referencing the location where each element of the SPCC regulation has been addressed and discuss how it is met. If the plan calls for additional details, such as procedures, methods, or equipment not yet fully operational, they must be discussed in separate paragraphs. Facilities that have experienced a spill into navigable waters of 1,000 gallons of oil in a single discharge as described in 112.1(b), or two discharges of more than 42 U.S. gallons of oil within any 12-month period, are required to submit relevant information to the EPA Regional Administrator under reference (d) within 60 days.

b. SPCC Plans are only required for facilities that could reasonably be expected to discharge oil into or upon the navigable waters of the U.S. or adjoining shorelines because of facility location. They are not required if the facility has an aggregate aboveground oil storage capacity (AST's and other aboveground Bulk Storage Containers) of 1,320 gallons or less, and if the total storage capacity of completely buried storage containers is 42,000 gallons or less (excluding the capacity of a UST that is subject to all requirements of reference (e)). Only bulk storage containers and operating equipment with an oil storage capacity of 55 gallons or greater are included in the above aggregate storage calculations.

c. Facilities that were in operation on or before August 16, 2002 must make any necessary

amendments to their SPCC Plan and implement that Plan on or before July 1, 2009.. Facilities that came into operation after August 16, 2002 must also prepare and implement an SPCC Plan on or before July 1, 2009. Facilities will review SPCC plans and implement them within 6 months of a change in facility design operation or maintenance or the construction completion and acceptance of a new facility that materially affects the facility's potential for the discharge of oil to navigable waters or adjoining shoreline.

d. **Training.** All facility oil handling personnel must be given initial SPCC training as well as annual SPCC Briefings as specified in section 112.7 (f) of reference (d).

e. Facilities will maintain a complete copy of the SPCC plan at the site if the facility is normally attended at least four hours per day, or at the nearest office if the facility is not so attended. Facilities shall have the plan available to the EPA Regional Administrator or designated representatives, and State and local agencies for on-site review during normal working hours.

11-4.4 Used Oil Recycling. DOD policy memoranda direct military departments to maximize the segregation, recycling and reuse of used oils, and to comply with RCRA regulations.

11-4.5 Used Oil Fuels Burned for Energy Recovery.

a. Facilities burning used oil for energy recovery must test it. Used oil is subject to regulation under reference (g) unless the constituents and properties of the used oil do not exceed the allowable limits specified in Part 279.11 of reference (g). Used oil that does not have constituents and properties that exceed specification, i.e., the allowable limits set by Table 1 in Part 279.11, is not regulated under Part 279. However, the specification standard does not apply to mixtures of used oil and HW still regulated as HW according to Part 279. Also, used oil containing more than 1,000 parts per million total halogens is presumed to be a HW under Part 279.10(b)(1) unless it can be shown that the used oil does not contain HW using acceptable analytical methods. Navy HW management guidance is provided in Chapter 15.

b. Included in Part 279 of reference (g) are standards for used oil generators, transporters, transfer facilities, processors, marketers, and burners burning off-specification used oil for energy recovery. Part 279 also contains specific spill prevention and contingency-planning requirements for used oil storage, transfer and processing facilities.

c. Mixtures of used oil and hazardous waste that is listed in subpart D of part 261 under reference (a) are subject to regulation as hazardous waste under reference (a), rather than as used oil. Mixtures of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristic identified in subpart C of part 261 are subject to hazardous waste regulations under reference (a), if the resultant mixture exhibits any of the characteristics identified in subpart C of part 261. Reference (g) prescribes specific provisions as to the applicability of the RCRA regulations to the management and use of used oil. Burning used oil that is a HW solely because it exhibits a characteristic of HW is subject to standards set forth in reference (g). The management and use of used oil, whether or not the used oil exhibits any characteristics of a HW, are regulated under reference (g).

d. Synthetic oils, fluids, and lubricants must be segregated from the crude-oil-derived used oil.

e. Persons marketing or burning HW fuel must notify EPA regarding their used oil activity in accordance with reference (g). The sale of regulated fuels by the Defense Reutilization and Marketing Office

(DRMO) is considered marketing, while the transfer of regulated fuels between various DOD components and activities is not considered marketing.

11-4.6 Prohibited Uses of Used Oil. Used oils will not be used for environmentally unacceptable purposes such as weed control, insect control, road surfacing, dust control, or open pit burning.

11-5 Navy Policy. Navy shore facilities and Navy ships routinely manage oily wastes and waste oil. This chapter primarily addresses policy related to shore facilities. Chapter 22 contains policy for ships.

11-5.1 Navy Shore Facilities OPA 90 Compliance. Compliance requirements for OPA 90 including Facility Response Plans are found in Chapter 12.

11-5.2 Oil Storage Facilities. Navy policy is to meet USCG and EPA oil pollution prevention regulations pertaining to transportation-related and non-transportation-related facilities and to exceed those regulations wherever practicable.

11-5.3 Oil Transfer Operations. Navy shore installations shall conduct transfer operations and develop an Operations Manual in accordance with USCG regulations of references (c) and (d) and any applicable state regulations for oil transfer operations as described in paragraph 11-4.2.

11-5.4 Used Oil Recycling. Oil shall be recycled and reused within the Navy whenever technically and environmentally feasible and when environmentally acceptable. Navy policy is to recycle used oil per Federal, State and local regulations.

a. Military personnel and civilian employees shall be encouraged to collect used lube (crankcase) oil from personal vehicles for recycling via Navy installation, local, or regional used oil recycling programs.

b. If recycling of used lube oil is not feasible for economic reasons, the lube oil may be burned as a fuel or fuel supplement, provided appropriate chemical and economic analyses are made to determine suitability of burning as well as compliance with air pollution control requirements (chapter 7) and HW regulations (chapter 15). In addition, prior to burning, used oil shall meet requirements in reference (g).

c. When allowed by military used oil specifications, large installations or complexes shall consider closed loop used lube oil re-refining by commercial re-refiners.

d. Net proceeds from the sale of used oil shall be used by a Navy generating installation that has a QRP for certain purposes as specified in chapter 16.

11-5.5 Spill Plans. Navy shore installations shall develop and update SPCC plans in accordance with reference (d), and as described in paragraph 11-4.3. The plans shall also comply with appropriate state and local regulations.

11-5.6 Oily Waste/Waste Oil (OW/WO) Management. The cost and potential environmental compliance problems associated with OW/WO management both ashore and afloat necessitate a comprehensive approach that maximizes opportunities for recovery and recycling of usable products. This approach should be cost effective providing necessary support to ships and submarines considering

circumstances unique to specific ports, including the State and local regulatory climate**.** Include management of OW/WO in activity P2 Plans or equivalent state mandated plans.

a. **Oil Discharge Raft (ODR) Phaseout.** Navy policy since the early 1990s has been to eliminate the use of Oil Discharge Rafts in all Navy ports. If any of these rafts are encountered, a detailed plan of action and milestones for their elimination must be included in the facility P2 Plan.

b. **Use of Oil Water Separators (OWSs) By Ships In Port.** Section 22-5 includes additional oily waste management and operational requirements for ships. Navy policy is to maximize segregation, recycling, and reuse of fuel and oil. Shoreside collection of OW/WO, followed by recovery of recyclable product is, therefore, the preferred method of dealing with OW/WO from ships. However, ships equipped with OWSs and oil content monitors (OCMs) may discharge via those systems in port. Discharged effluent may not exceed 15 ppm of oil in water, cause a sheen, or violate any other applicable water quality standard. Before discharging via an OWS, chapter 22 requires ships to consult with the supporting shore facility host command for discharge requirements.

c. **Collection, Treatment, and Disposal of OW/WO.** Under the appropriate circumstances and after consultation among the concerned activities, commands responsible for writing P2 Plans may modify responsibilities to achieve the most economical method of OW/WO management for the Navy. The responsible commands should examine all options to maximize use of current facilities including functional transfer of OW/WO facilities, funding, and operating responsibilities.

d. **OW/WO as Hazardous Waste.**

(1) Under normal circumstances, bilgewater does not exhibit the characteristics of a HW, and does not typically contain listed HW. However, under certain circumstances, such as when an event or a source introduces a HW identified under reference (a), bilgewater can become HW. Also, some States define bilgewater as HW, even though, it may not be contaminated with listed HW. Therefore, state regulations shall also be consulted prior to determining whether bilgewater is HW or not. Chapter 22 requires ships to notify shore receiving facilities before offloading bilgewater or any other OW/WO if oily waste is contaminated from other than routine sources, such as aqueous film-forming foam (AFFF), solvents, anti-freeze, or other HM. Shore installations shall handle, store, transport, treat and dispose of such OW/WO per applicable HW regulations. Installations shall not use ODRs to receive such waste. Some States consider bilgewater as hazardous waste. Chapter 22 requires ships in those states to consult with the host receiving facility for collection and discharge requirements.

(2) Wastes onboard navy vessels are not regulated as HW under RCRA until offloaded and received by the shore installation. The shore installation becomes the generator and ultimately has the responsibility of designating the ship's waste as hazardous or not. However this does not relieve the ship of its responsibility to inform the receiving shore facility of any HW or hazardous contaminants within the wastes they are offloading. Designation is based upon information supplied by the sip and sampling and testing of the bilgewater and/or other OW/WO. Sampling and testing should be done periodically to see if the waste is a "characteristic" HW under 40 CFR 261.24, meets the toxicity criteria of 40 CFR 261.11 or exceed state HW limits. Installations shall determine the frequency of testing by considering characteristics of historical samples and the level of confidence in sampling results.

e. **Compensating Fuel Ballast Water Systems and OW/WO.** Under normal circumstances,

compensating fuel ballast water is neither OW/WO nor HW. Chapter 22 requires ships to strictly comply with fuel transfer and ballasting procedures to ensure ballast water does not become contaminated with oil or any other waste. Ships using self-compensating fuel tanks are required to ensure adequate margin is preserved to prevent inadvertent discharges of oil with the compensating water. Some State regulations require supporting shore activities to collect and process compensating fuel ballast water before discharge to the environment. Activities in these states shall address collection, treatment, storage, and disposal of such water in the activity P2 Plan or equivalent state plan.

11-6 Responsibilities

11-6.1 **BSOs** shall:

(a) Ensure that shore activities meet federal, state and local requirements related to the prevention of oil spills and the preparation and review of SPCC plans.

(b) Ensure that shore activities meet USCG requirement related to the preparation and implementation of Operations Manuals.

(c) Ensure subordinate commands update area or regional instructions, including Senior Officer Present Afloat (SOPA) and SOPA ADMIN instructions, consistent with this chapter.

11-6.2 **COMNAVFACENGCOM** shall:

(a) Provide technical advice and prepare revisions to NFESC UG-2056-ENV, Spill Prevention Control and Countermeasures Planning Manual User's Guide and NFESC 6-03, Spill Prevention, Control, and Countermeasures – A guide to the SPCC regulation to assist shore activities in the preparation of SPCC plans.

(b) Provide technical advice and assist shore installation in the preparation of an Operations Manuals.

(c) Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used lubricating oil and used contaminated fuels.

(d) Provide technical advice and prepare appropriate manuals or other forms of guidance for used oil management.

(e) Provide technical advice and assist shore installations and RECs in including oily waste/waste oil management in P2 plans, as required.

(f) Provide an input in updating OPNAV instructions and policies related to oil management requirements.

(g) Provide technical advice and assist shore installations and RECs in preparing EPR and required POM exhibits for all compliance projects and requirement.

11-6.3 **COs of shore activities** shall:

(a) Prepare activity SPCC plans per Federal, State, and local requirements; implement and review within prescribed periods.

(b) Ensure training specified in the Facility Operations Manual and SPCC Plan is conducted for the appropriate personnel and at the appropriate frequency, and that training records are maintained.

(c) Ensure staff prepares EPR and required POM exhibits.

(d) Comply with Federal, State, and local requirements concerning oil pollution and used oil fuels for energy recovery.

(e) Establish and maintain a used oil-recycling program.

(f) Comply with USCG, PHMSA, and state regulations for transportation-related oil storage facilities and EPA for non-transportation-related facilities.

(g) Ensure that facility operations manuals are prepared, implemented, maintained, and submitted per USCG guidance reference (c).

(h) Ensure OW/WO management information is included in the facility P2 Plans or equivalent state-required plan as needed.

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CHAPTER 12

OIL AND HAZARDOUS SUBSTANCE SPILL PREPAREDNESS AND RESPONSE

12-1 Scope

This chapter identifies requirements to prepare for and respond to oil OHS spills from Navy vessels and shore facilities worldwide. This chapter summarizes Navy planning and response requirements for both Navy and non-Navy OHS spills. Chapter 11 discusses oil management at shore facilities. Chapter 15 describes the comprehensive management of HM and HW. Chapters 13 and 22 discuss the prevention and minimization of OHS pollution from storage tanks at shore facilities and OHS management aboard ship, respectively. Chapter 21 covers Navy policy for overseas activities, and Chapter 26 identifies Navy responsibility with respect to Natural Resource Damages in the aftermath of OHS spills.

12-1.1 References. The relevant references are:

(a) The National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR 300;

(b) Oil Pollution Prevention and Response; Non-transportation related Onshore and Offshore Facilities, 40 CFR 112;

(c) U.S. Coast Guard, Facilities Transferring Oil or Hazardous Materials in Bulk, 33 CFR 154;

(d) Minerals Management Service (MMS) Facility Response Plan regulations, 30 CFR 254;

(e) Pipeline and Hazardous Materials Safety Administration regulations, Response Plans for Onshore Oil Pipelines, 49 CFR 194;

(f) Resource Conservation and Recovery Act Regulations, 40 CFR 260-282;

(g) Process Safety Management of Highly Hazardous Chemicals, 29 CFR 1910.119;

(h) Reportable Quantities of Hazardous Substances, 40 CFR 117, 302, 355;

(i) Management of Environmental Compliance at Overseas Installations, DODI 4715.5;

(j) Homeland Security Presidential Directive-5 (HSPD-5);

(k) Overseas Environmental Baseline Guidance Document, DODI 4715.5-G;

(l) The National Response Plan (NRP), December 2004;

(m) Hazardous Waste Operations and Emergency Response (HAZWOPER) Safety Regulations, 29 CFR 1910.120;

(n) National Response Team (NRT) Integrated Contingency Plan (ICP) guidance (“One Plan” guidance), June 5, 1996;

(o) OPNAVINST 3440.17, Navy Installation Emergency Management (EM) Program;

(p) OPNAVINST 3100.6H, Special Incident Reporting (OPREP 3, Navy Blue and Unit SITREP) Procedures; (NOTAL);

(q) OPNAVINST 5100.19D, Navy Occupational Safety and Health Program Manual for Forces Afloat;

(r) OPNAVINST 5100.23F, Navy Occupational Safety and Health Program Manual.

12-2 Legislation

12-2.1 The Clean Water Act, originally called the Federal Water Pollution Control Act of 1972, 33 USC § 1321 as amended by the Oil Pollution Act of 1990 33 USC §2701 *et seq.*

a. The CWA prohibits OHS discharges in such quantities that may be harmful into or upon the navigable waters of the United States, including the contiguous zone, exclusive economic zone and adjoining shorelines.

b. The CWA provides the authority for the establishment of the NRT, the National Response Center (NRC) and the NCP (reference (a).

c. NCP regulations establish the roles and responsibilities of various Federal agencies to provide for efficient, coordinated and effective action to minimize damage from oil discharges and HS releases.

d. Under the CWA, the NCP regulations and E.O. 12777, the FOSC is the Federal official pre-designated EPA or the USCG to coordinate and direct response to OHS spills. The FOSC has authority to enforce the administrative and criminal provisions of the law. The CWA also requires vessels and facilities to report OHS spills.

e. The CWA, as amended by OPA 90, provides for the preparation and submission of response plans for tank vessels, offshore facilities, and onshore facilities that could reasonably be expected to cause substantial harm to the environment by discharging into or upon the navigable waters, adjoining shorelines, or the exclusive economic zone. The CWA must be read carefully, as it contains different requirements for commercial and public vessels. The CWA requires the periodic inspection of response equipment and implementation of an exercise program. These amendments also establish new administrative and civil penalties for violations of the CWA and expand administrative provisions under the CWA.

f. OPA 90 revises the CWA and other statutes to expand Federal and State involvement in the nation's oil spill prevention, preparedness, and response activities. Public vessels are exempt from the provisions of OPA 90. Navy shore facilities are required to comply with OPA 90 and applicable regulations (references (b) through (e)). Facilities that meet or exceed the thresholds or criteria detailed in Table 12-1 and references (b) through (e) are subject to the additional planning, training and exercise requirements promulgated in these regulations.

g. OPA 90 provides for natural resource trustees to act on behalf of the public to assess damages and to develop and implement a plan for restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources injured, lost or destroyed as a result of a discharge of oil. For additional discussions of trustee responsibilities and natural resource damage assessment procedures, refer to Chapter 26.

12-2.2 Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC §9601 *et seq.*

a. CERCLA provides the government with authority to compel persons to clean up HS releases. It also contains provisions, which make responsible parties liable for the costs of clean-up, and the creation of the HS Superfund that enables FOSCs to conduct clean-up.

b. CERCLA also requires facilities to report the release of any of the more than 700 listed HS to the NRC. CERCLA exempts oil from the HS list created by the CWA and the Toxic Substances Control Act (TSCA), among others.

c. CERCLA gives the EPA (for inland zones) and the USCG (for coastal zones) the authority to designate a FOSC to direct emergency response and HS removal activities. The FOSC has the administrative and enforcement authority to implement the provisions of CERCLA. Under reference (a), DOD is required to designate the FOSC for HS releases when the release is on, or the sole source of the release is from DOD facilities or vessels.

12-2.3 The Emergency Planning and Community Right-to-Know Act of 1986, 42 USC §11001, *et seq.*

EPCRA requires industry and Federal (by subsequent Executive Order), State and local governments to report hazardous and toxic chemical releases to the public. EPCRA requires these entities to identify potential risks to a surrounding community from a facility or operation that handles hazardous substances and sets forth community notification procedures (see Chapter 6 for more information).

12-2.4 Resource Conservation and Recovery Act, 42 USC §6901, *et seq.*

a. RCRA establishes requirements for facilities, which generate, transport, treat, store, or dispose of solid and HW. Regulations pursuant to RCRA (reference (f)) define HW. RCRA has several programs, including very detailed and specific requirements for facilities that deal with HW, non-hazardous solid waste, underground storage tanks and used oil. In general, reference (f) addresses the day-to-day management of HW.

b. RCRA requires contingency plans designed to minimize hazards to human health and the environment. These plans shall provide information on facility emergency equipment, evacuation, and coordination (reference (f)). Activities must submit a copy of these plans to all local police and fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services (see Chapter 15 for more information).

12-2.5 Clean Air Act Amendments of 1990, 42 USC §7401, *et seq*.

a. One of the goals of the CAA Amendments was to prevent the accidental release of regulated substances and other extremely hazardous substances into the air and to minimize the consequences of those releases. The amendments focus on preventive measures for those chemicals that pose the greatest risk.

b. Section 112(r) establishes a general duty for stationary facilities to identify hazards that may result from the release of regulated substances, to design and maintain a safe facility, and to minimize the consequences of releases when they occur.

c. In 1992, OSHA issued a Process Safety Management of Highly Hazardous Chemicals Rule, reference (g), under the CAA Amendments. reference (g) directs employers to establish a process safety management program to prevent or mitigate catastrophic chemical workplace emergencies and requires employers to have an emergency action plan (see Chapter 7 for more information).

12-2.6 Occupational Safety and Health (OSH) Act, 29 USC §*651, et seq*.

a. OSHA is primarily responsible for protection of worker health and safety under the OSH Act. OSHA has several standards that cover emergency response planning for facilities that handle, store, or transport hazardous substances. These requirements serve to protect facility employees and emergency responders.

b. Reference (g) also includes provisions to clean up uncontrolled HW sites, implement corrective action and establish routine and emergency HW operations.

c. The OSH Act is applicable to Federal employees through Executive Order. Employers must implement a program that includes a written safety and health program, site evaluation and control, training, personal protective equipment, monitoring, medical surveillance, decontamination procedures and an emergency response program. Reference (h) lists reportable quantities of HS.

12-2.7 State and Local Programs

a. State programs requiring OHS spill prevention, preparedness, and response vary widely. All States require notification of State and local authorities of OHS spills. Certain States, and coastal States in particular, have stringent requirements for vessel and facility spill response plans and prevention measures that exceed Federal standards. DOD facilities, including Navy facilities, are subject to State and local facility prevention and response planning requirements. However, public vessels are exempt from most of these same requirements.

b. Navy Shipboard Oil Spill Contingency Plans (SOSCPs) are not subject to State regulations. Commands may, however, provide courtesy copies of SOSCPs to State regulators to promote strong, cooperative relationships with the local community.

12-3 Terms and Definitions

12-3.1 Area Committees. The Federal, State and local agencies that cooperate to prepare an Area Contingency Plan (ACP) and work with Federal, State and local officials to pre-plan joint response efforts.

12-3.2 Area Contingency Plan. A plan prepared by the Area Committee (AC) to respond to worst case OHS spill scenarios, which identifies equipment and personnel available for such response activities. The ACP also identifies and prioritizes sensitive areas and natural resources, identifies strategies for their protection, and pre-approves specific countermeasures and removal actions within the planning area.

12-3.3 Complex Facilities. A facility that possesses a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

12-3.4 Contiguous zone (CZ). For purposes of this chapter, the CZ is an area contiguous to the territorial sea that extends 12 nm from the baseline from which the territorial sea is measured. (In a September 2, 1999 Presidential Proclamation, the United States declared a 24 nm CZ for international law purposes.)

12-3.5 Discharge. Includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil or an actual or substantial threat of any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil. It excludes:

- Discharges permitted under the CWA.

- Discharges resulting from circumstances identified, reviewed and made a part of the public record regarding a permit issued or modified under the CWA, and subject to a condition in such permit.

- Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under the CWA and caused by events occurring within the scope of relevant operating or treatment system.

Reference (a) defines discharge to include a substantial threat of discharge.

12-3.6 Dispersant. Any of several chemical agents that emulsify, disperse, or make soluble oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

12-3.7 Exclusive Economic Zone (EEZ). A zone contiguous to the territorial sea that extends to a distance not to exceed 200 nm from the baseline from which the territorial sea is measured. The United States by Presidential Proclamation dated March 10, 1983 has declared a 200 nm EEZ. The coastal state enjoys sovereign rights within the EEZ for the purpose of exploring, exploiting, conserving and managing natural resources, both living and non-living, of the seabed and subsoil and the waters and with regard to other activities for economic exploitation and exploration of the zone, such as the production of energy from the currents and winds.

12-3.8 Facility. Any structure, group of structures, equipment or device (other than a vessel) used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing or transporting OHS. This term includes any motor vehicle, rolling stock or pipeline used for one or more of these purposes.

12-3.9 Facility Incident Commander. Commanders or COs of naval shore facilities or complexes pre-designated by the cognizant NOSC. The Facility Incident Commander (FIC) designations are based on OHS spill risk and response capability of the command to ensure rapid, effective response to OHS spills within the assigned area. The FIC may designate a QI who meets the qualifications of 10-3.28 to develop and implement the Facility Response Plan (FRP) and manage an oil spill incident. The FIC also has authority to appoint appropriate staff to serve as Incident Commander (IC) during a response. The title of FIC is retained for the CO and may not be delegated

12-3.10 Facility Response Plan. A plan of action for facility spill scenarios required for facilities that meet the threshold requirements of OPA 90 regulations. These plans, which should be coordinated with the local ACP and the NOSC OHS response plans (NOSC plans), identify notification procedures, response and cleanup capabilities, response management organization, environmentally sensitive areas, natural resource protection strategies and measures to protect human health and safety.

12-3.11 Federal On-Scene Coordinator. The Federal official pre-designated by EPA or the USCG to coordinate and direct Federal responses under the NCP (see reference (a)), except for DOD HS releases. In the case of HS releases when the release is on, or the sole source of the release is from DOD facilities or vessels, DOD pre-designates the FOSC. The NOSC is the FOSC for Navy HS releases on or from Navy vessels or facilities.

12-3.12 Final Governing Standards. A comprehensive set of country-specific substantive environmental provisions, typically technical limitations on effluent, discharges, etc., or a specific management practice. FGS, required by reference (i), contain the environmental compliance criteria applicable at DOD installations overseas. FGS are generally based on the more protective requirements of the following:

- Overseas Environmental Baseline Guidance Document
- Host Nation/European Union environmental laws and regulations
- Applicable international agreements

12-3.13 Hazardous Substance

a. Any substance so designated by the CWA.

b. Any element, compound, mixture, solution, or substance so designated by CERCLA.

c. Any solid waste having the characteristics identified under or listed pursuant to the Solid Waste Disposal Act (but not including any waste suspended by an Act of Congress).

d. Any hazardous air pollutant listed under the CAA.

e. Any imminently hazardous chemical substance or mixture upon which the Administrator of EPA has acted under TSCA.

The term *does not* include petroleum, crude oil or any refined product (such as gasoline, diesel or fuel oil) or synthetic oil, not otherwise specifically listed or designated as a hazardous substance under CERCLA, CWA or the Solid Waste Disposal Act (SDWA).

The term *does not* include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

The term *does not* include sewage or sewage/water mix, AFFF, or other substances not specifically designated by the laws cited above.

12-3.14 Incident Command System (ICS). An emergency response structure that defines roles and responsibilities to be used during crisis response or planning. The ICS consists of an individual in charge of the incident (the IC) and four functional groups (Operations, Logistics, Planning and Finance/Administration) that support the IC. During major incidents, including OHS spills, Federal agencies establish an ICS under the National Response System. State agencies may also establish an ICS. An ICS becomes a "Unified Command System" when the party responsible for the spill works jointly with State and Federal agencies. Where the Navy is potentially responsible, the Navy's designated Incident Commander, the State On-Scene Coordinators, and the FOSC make up the Unified Command. Reference (j) mandates the use of National Incident Management System (NIMS) for all Federal crisis response. ICS forms a part of the NIMS.

12-3.15 Integrated Contingency Plan. A contingency plan format that combines different facility response planning documents into a single response document. The ICP development may be beneficial for those facilities that need to meet multiple spill contingency regulatory requirements from various Federal agencies. An ICP may also be developed for facilities that are in close proximity and share response resources.

12-3.16 National Incident Management System. NIMS is a standardized approach to all hazards incident management and response, which includes OHS spills. Implemented by the Department of Homeland Security (DHS) in March 2004, it provides a consistent nationwide approach for Federal, State, local, and tribal governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

12-3.17 Navy On-Scene Coordinator. The Navy official pre-designated to coordinate Navy OHS spill contingency planning and to direct Navy OHS spill response efforts in a pre-assigned area. Shoreside NOSCs are normally RECs pre-designated by the cognizant AEC (See Chapter 1 for definitions of REC and AEC). The NOSC is the FOSC for all Navy HS releases. The NOSC also acts as the incident commander for OHS spills beyond a facility's assigned AOR, and as incident commander for spills which exceed the response capability of a facility located within the NOSC AOR. The NOSC may designate a QI who meets the qualifications of Section 12-3.28 to implement a NOSC plan and manage an oil spill incident.

12-3.18 National Oil and Hazardous Substances Pollution Contingency Plan. The legal framework for Federal government OHS pollution contingency planning and response above the facility level. The NCP (see reference (a)) describes the NRT, the Regional Response Team (RRT) and the NRC and designates the roles and responsibilities of DOD in national OHS spill response planning.

12-3.19 National Response Plan. A plan mandated by HSPD-5 (reference (j)) that integrates Federal domestic prevention, preparedness, response and recovery plans into one all-discipline, all-hazards plan. It establishes multi-agency coordinating structures at the field, regional, and headquarters level that provide national resources to support on-scene incident management efforts and to address impacts to the rest of the country, prevention of and preparation for subsequent events, and management of multiple incidents. It incorporates the provisions of reference (a), and provides a coordinating framework that reflects the incident management of both plans.

12-3.20 National Preparedness for Response Exercise Program (PREP). Federal guidance published by the USCG, PHMSA, EPA, and MMS provides responders with a mechanism for compliance with the exercise requirements of OPA 90 and its implementing regulations. The guidance describes the number and type of exercises to be completed as well as documentation requirements (see Section 12-4.3).

12-3.21 National Response Center (800-424-8802). The 24-hour OHS spill notification center, located at USCG headquarters in Washington, DC. The NRC is the single Federal notification point (outside the Navy chain of command) for emergency spill response. The NRC is responsible for notifying the pre-designated FOSC of reported OHS pollution incidents.

12-3.22 National Response Team. The Federal response organization, consisting of 16 Federal agencies (including DOD), that coordinates OHS spill response and contingency planning efforts. The EPA chairs the NRT and the USCG sits as vice chair.

12-3.23 Navigable Waters. The surface waters of the United States, including the territorial seas. The term includes:

- All waters currently used, used in the past, or susceptible to future use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide.
- Interstate waters, including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - That are or could be used by interstate or foreign travelers for recreational or other purposes.
  - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
  - That are used or could be used for industrial purposes by industries in interstate commerce.
- All impoundments of water otherwise defined as navigable waters under this sub-section.
- Tributaries of waters identified in paragraphs a through d of this sub-section, including adjacent wetlands.
- Wetlands adjacent to waters identified in paragraphs a through e of this sub-section: provided that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not navigable waters of the United States.

12-3.24 NOSC OHS Response Plan (NOSC Plan). The Navy plan to respond to OHS spill incidents within the NOSC's pre-assigned AOR that are beyond the capability of the spilling facility or vessel or occur outside of facility boundaries.

12-3.25 Oil. Animal, vegetable, synthetic or petroleum-based oil of any kind or in any form, including, but not limited to, fuel oil, sludge, oil refuse, oil mixed with wastes other than dredge spoils and refined products such as gasoline, diesel, jet fuel, cooking oil, and synthetic hydraulic and lube oils.

12-3.26 Overseas Environmental Baseline Guidance Document (reference (k))**.** A current compendium of criteria, based on consideration of laws generally applicable to similarly-situated DOD installations within the U.S., that is designated to protect the environment at DOD installations outside U.S. territory.

12-3.27 Public Vessel. A vessel owned (or bareboat chartered) and operated by the U.S., or by a State or political sub-division thereof, or by a foreign nation, except when such vessel is engaged in commerce.

12-3.28 Qualified Individual. The term used in OPA 90 to designate the individual identified in spill response plans (such as FRP and NOSC Plans) who:

- Is available on a 24-hour basis and able to arrive at the facility in a reasonable time.
- Is familiar with the implementation of the plan.
- Is trained in the responsibilities of the QI under the plan.
- Has authority to activate the OHS spill response organization.
- Has authority to direct the obligation of funds required to carry out response activities.
- Will act as a liaison with the pre-designated FOSC.

NOSCs and Facility Commanders are assigned these responsibilities but may delegate QI responsibility to trained personnel in their respective plans.

12-3.29 Regional Contingency Plans (RCPs). RCPs are developed by the RRT to assist the FOSC in the event that an incident exceeds the response capabilities identified in the ACP. Among other things, the RCP sets forth criteria for issues such as the use of alternative response techniques (such as dispersants and in-situ burning).

12-3.30 Regional Response Team. The Federal response network under the NRT, consisting of representatives from regional Federal and State agencies. There are 13 RRTs, one for each of the 10 standard Federal Regions, and one each for Alaska, Oceania (Hawaii and the U.S. Pacific islands), and U.S. Caribbean islands. The DOD is a member of each RRT and assigns an executive agent from one of the services to each RRT. The Navy represents DOD at RRTs I, III, and IX.

12-3.31 Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, including an actual or substantial threat of any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, into the environment, of any hazardous substance (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS or pollutant or contaminant). The term "release" *excludes*:

- Any spilling, leaking, etc. that results in exposure to persons solely within a work place.

- Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine.

- Spilling, leaking, etc. of source, byproduct, or special nuclear material from a nuclear incident subject to the jurisdiction of the Nuclear Regulatory Commission, or any spilling, leaking, etc. of source, byproduct, or special nuclear material from any processing site designated under the Uranium Mill Tailings Radiation Control Act of 1978.

- The normal application of fertilizer or insecticides, herbicides, rodenticides, fungicides, biocides and other pesticide products whose registration and use is managed by the Federal Insecticide Fungicide and Rodenticide Act (FIFRA).

Reference (a) defines release to include a threat of release.

12-3.32 Release, Federally Permitted. Any release of HS in compliance with Federal law including the CWA, the CAA, the Solid Waste Disposal Act, the Marine Protection, Research, and Sanctuaries Act, and the Atomic Energy Act.

12-3.33 Reportable Quantity. A release of a CERCLA-listed HS or an EPCRA-listed EHS exceeding the limit for that substance. HS or EHS releases that equal or exceed these limits must be reported to Federal, State, and local authorities immediately upon discovery. See reference (h) for a list of Reportable Quantities.

12-3.34 Responsible Party. The person or persons who have caused, or could potentially cause an HS release or oil discharge, including the following categories:

- Vessels: Any person owning, operating, or bareboat chartering a vessel, other than a public vessel;

- Onshore Facilities (other than a pipeline): Any person owning or operating the facility, except where possession and right to use the property has been transferred to another person by lease, assignment, or permit;

- Offshore Facilities (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974 (33 USC §1501 *et seq.*)): The lessee or permit holder of the area in which the facility is located or the holder of a right of use or easement granted under applicable State law.

12-3.35 Shipboard Oil Spill contingency Plan. A plan of action for Navy ships that identifies shipboard procedures for preventing, reporting, and responding to oil spills originating on the ship.

12-3.36 Significant and Substantial Harm. Under OPA 90 regulations (references (b) through (e)), EPA, USCG, MMS, and PHMSA can identify certain facilities as being able to cause "significant and substantial" harm to the environment upon a release of oil. Regulators base their determinations on factors similar to the criteria to determine "substantial harm" (see Section 12-3.41 below), as well as the age of tanks, proximity to navigable waters, and spill frequency. Facilities identified as being able to cause "significant and substantial harm" must have their FRP approved by the applicable regulators.

12-3.37 Spill. Throughout this chapter, the term "spill" is used to include both releases of hazardous substances and discharges of oil.

12-3.38 Spill Contingency Plan (SCP). A plan of action for facility spill scenarios, which identifies, among other items, notification and response procedures. An SCP is used by facilities that are not required to meet the OPA 90 threshold requirements for FRP development. The magnitude and scope of the SCP is commensurate with storage capacity, facility operations and spill risks. It should address both oil and HS issues.

12-3.39 Spill Prevention, Control, and Reporting (SPCR) Plan. A spill plan used by overseas installations that meets the requirements of the FGS or the OEBGD (reference (k)). It contains similar information as SPCCs, SCPs or FRPs such as necessary notifications, emergency procedures, response assets, and sensitive areas.

12-3.40 Spill of National Significance (SONS). A spill which, due to its severity, size, location, actual or potential impact on the public health and welfare, or the environment, or due to the necessary response effort, is so complex that it requires extraordinary coordination of Federal, State, local, and Responsible Party resources to contain and cleanup the discharge. National response to a SONS is governed by reference (l).

12-3.41 Substantial Harm. A "substantial harm" facility is one that could reasonably be expected to cause harm to the environment by discharging oil into or on navigable waters. In addition, the applicable regulations, listed in Table 12-1, provide more detailed information to help owners/operators determine whether their facility should be regarded as a "substantial harm" facility.

12-3.42 Sunken Navy Vessel. For the purposes of this chapter, a sunken Navy vessel, is an older, historic vessel that has been sunk due to armed conflict, act of God, or other reason. The U. S. Navy retains title over these vessels wherever located.

12-3.43 Territorial Sea. For purposes of this chapter, TS means the belt of seas measured from the ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit on inland waters, and extending seaward a distance of three miles. (In a December 27, 1988 Presidential Proclamation the United States declared a 12 nm TS for international law purposes.)

12-3.44 United States. The several States, District of Columbia, Commonwealth of Puerto Rico, Commonwealth of the Northern Marianas Islands, Guam, American Samoa, U.S. Virgin Islands, and any other territory or possession over which the U.S. has jurisdiction.

12-3.45 Vessel. Every type of watercraft or other artificial conveyance used, or capable of being used as a means of transportation upon the navigable waters of the U.S.

12-3.46 Worst-Case Discharge (WCD). The largest foreseeable discharge in adverse weather conditions. For specific information on calculating WCD, consult the applicable EPA, USCG, MMS and/or PHMSA regulations (see references (b) EPA – 40 CFR 112, (c) USCG – 33 CFR 154, (d) MMS – 30 CFR 254 and (e) PHMSA – 49 CFR 194).

12-4 Requirements

OHS planning, training, exercises, reporting and response is governed by various Federal regulations. Specific regulatory applicability is dependent on a number of factors including facility location, nature of operations, and whether particular criteria and threshold requirements are met. EPA, PHMSA, USCG, MMS, and OSHA all regulate portions of OHS preparedness and response. Most of the Navy facilities fall under USCG or EPA jurisdictions, but facilities should carefully evaluate their needs to meet other regulatory requirements.

12-4.1 Planning

All Navy facilities shall maintain contingency plans to combat releases of hazardous substances or discharges of oil. Depending on a facility's size and the nature of its operations, it may come under the jurisdiction of several Federal, State and local contingency planning laws and regulations. Under some of these laws and regulations, contingency plans require regulatory approval. Facilities shall review the appropriate regulations to determine if they meet the criteria to prepare and submit plans.

a. **Facility Response Plans**

(1) Those facilities that store, transport, or handle oil and meet the specific threshold requirements of any of the OPA 90 regulations must submit an FRP to the appropriate regulatory agency (EPA, USCG, MMS, or PHMSA). Each agency has established criteria that define which facilities fit this description. Table 12-1 shows a brief description of these criteria. The actual regulations shall be reviewed to determine applicability.

Table 12-1 FRP Threshold Requirements

Facility Type	FRP Threshold Requirement	Regulatory Agency	Citation
Non-Transportation-Related Onshore Facilities	(1) The facility, because of its location, could be reasonably expected to cause "substantial harm" to the environment; (2) The facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 gallons; or (3) The facility's total oil storage capacity is greater than or equal to 1 million gallons, and one of the following is true: (a) The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground oil storage tank within each storage area plus sufficient freeboard; (b) The facility is located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments. (c) The facility is located at a distance such that a discharge from the facility would shut down a public drinking water intake; or (d) The facility has had a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years.	EPA	40 CFR 112 (reference (b))
Marine Transportation-Related (MTR) Facilities	(1) The facility, because of its location, could be reasonably expected to cause "substantial harm" to the environment; (2) Fixed MTR onshore facilities capable of transferring oil to or from a vessel with a capacity of 250 barrels or more; (3) Mobile MTR facilities used or intended to be used to transfer oil to or from a vessel with a capacity of 250 barrels or more; and (4) Those MTR facilities specifically designated as substantial harm facilities by the COTP.	USCG	33 CFR 154 (reference (c))
Non-Transportation-Related Facilities; Offshore Platforms and Pipelines	Each owner or operator of an oil handling, storage, or transportation facility, located seaward of the coast line, must submit a spill-response plan to MMS for approval.	MMS	30 CFR 254 (reference (d))
Onshore Pipelines	Each operator of an onshore pipeline facility shall prepare a response plan and submit the response plan to PHMSA. NOTE: PHMSA allows numerous exceptions to this rule based on factors such as pipe size, operating pressure, age, and construction type. Consult reference (e) for specific criteria.	PHMSA	49 CFR 194 (reference (e))

(2) Most Navy facilities fall under either USCG or EPA jurisdiction. Facilities meeting the criteria for more than one type of facility are "complex facilities." Many Navy facilities fall under this category. A few Navy facilities with pipelines that leave the facility may also fall under the PHMSA's jurisdiction. Additionally, Navy facilities with mobile sources may also fall under PHMSA's jurisdiction. No facility requires more than one FRP. However, each facility must submit an FRP to each Federal agency that has jurisdiction over it. The requirements for the FRP vary widely depending on the type of facility. There are certain essential elements common to all. These include:

- An individual who can be reached on a 24-hour basis and has the authority to take necessary response action.
- An emergency section of the plan that provides concise response direction.
- Extensive drills and exercises with specified documentation and record-keeping.
- A provision for regular update and review of FRPs.
- Provisions for responding to spills up to and including WCD.

(3) "Substantial harm" facilities shall submit FRPs to the cognizant regulatory agency for information, and "significant and substantial harm" facilities shall submit FRPs to the cognizant regulatory agency for review and approval.

(4) Navy barges are considered public vessels and are not required to have vessel response plans. However, these vessels may represent considerable spill risk and should be addressed in response plans. Facilities owning barges that are used only at that facility and are used to store, transfer, or handle oil for that facility should include these barges in their response plans.

b. **Spill Contingency Plans.** Any Navy facility that stores petroleum or HS and does not meet Federal requirements for preparing an FRP shall maintain an OHS SCP (see Section 12-5.1.1).

c. **NOSC OHS Response Plans.** DOD will act as the FOSC and direct the response to HS spills on, or the sole source of the release is from DOD facilities or vessels. In the case of HS spills on or from Navy facilities or vessels, the NOSC will act as the FOSC. As such, the NOSC shall prepare plans that address this contingency. In addition, NOSC plans, in combination with individual facility FRPs, must provide sufficient detail to ensure that the Navy can respond to oil spills up to the WCD and to spills beyond facility boundaries.

d. **Other Planning Requirements.** Facilities may be subject to additional HS contingency planning laws and regulations including RCRA, EPCRA and the CAA. These laws are discussed in detail in Chapters 15, 6 and 7, respectively. Additionally, State and local jurisdictions may have planning requirements. Facilities shall review the requirements for the area in which they are located and develop and submit plans accordingly.

12-4.2 Training. All Navy facilities that store oil or HS in regulated quantities shall ensure personnel are trained to combat releases of HS or discharges of oil. A variety of training is required to ensure that personnel are adequately enabled to carry out the response defined in each of a facility's plans. (See Chapter 28 for additional information on training.)

a. **OSHA Training.** OSHA, through section (q) (6) of reference (m), requires training for all emergency response personnel before they are permitted to engage in emergency response operations. Required training, commonly referred to as HAZWOPER training, includes training on identification of hazards, personal protective equipment, and other safety related measures. Depending on the nature of the position or expected responsibilities of the individual, incident management procedures may also be required.

b. **Facility Response Plan Training.** EPA, USCG, MMS, and PHMSA (references (b) through (e)), require applicable facilities to conduct training as part of their FRP requirements. The training requirements are very general in nature and do not include specific performance targets, frequency or other measurable criteria, however, personnel must be trained to perform assigned duties.

c. **National Incident Management System Training.** NIMS sets forth the requirement for preparedness activities that includes an ICS for managing incident response. This training incorporates training on NIMS operations and ICS roles and responsibilities. There are various levels of training required, depending on assigned responsibilities. (See references (a), (k), and (l)).

12-4.3 Exercises. The CWA, as amended by OPA 90, requires facilities to train and exercise in order to be prepared to respond to oil spills. The law and implementing regulations were not proscriptive about the exact nature of the exercises that needed to be accomplished. The four Federal agencies (USCG, EPA, MMS, PHSMA) that have issued the implementing regulations under OPA 90 developed exercise guidelines to establish a workable exercise program that meets the intent of OPA 90. Compliance with this program is not mandatory, but facilities must follow a program that meets the intent of the CWA and its implementing regulations.

a. **National Preparedness for Response Exercise Program.** PREP is a program developed by the four Federal agencies having regulatory responsibilities under OPA 90. It describes various types of exercises and the frequency of performance for each type. Exercises are conducted on a three-year cycle such that all plan components are tested at least once every three years. OPA 90 and its implementing regulations require that employees responsible for conducting spill response receive proper training to accomplish these tasks. The PREP guidelines are not regulations, however, the four regulatory agencies have agreed that participation in PREP will satisfy all exercise requirements imposed by OPA 90. Complex facilities utilizing PREP to meet OPA 90 exercise requirements need only to conduct one exercise to fully meet the requirements of all regulating agencies for that particular type of exercise. PREP outlines the following exercises:

- **Qualified Individual Notification Exercise.** The purpose of this exercise is to ensure the QI can be reached in an emergency to carry out his or her required duties. Each facility shall conduct one of these exercises each calendar quarter.

- **Emergency Procedures Exercise.** The purpose of this exercise is to ensure personnel are capable of conducting the initial actions necessary to mitigate the effects of a spill. This type of exercise is considered by regulators to be optional for facilities, however, facilities should conduct this type of exercise as necessary to ensure personnel are capable of performing these tasks. If a facility conducts this type of exercise as an unannounced exercise, it would satisfy the requirement for an unannounced exercise (see below).

- **Spill Management Team (SMT) Tabletop Exercise.** The purpose of this exercise is to ensure that the SMT is familiar with the contingency plan and the individual responsibilities assigned by the plan, and is able to use it effectively to conduct a spill response. Facilities shall conduct one tabletop exercise annually. PREP lists several objectives that need to be accomplished at least once in a 3-year exercise cycle.

- **Equipment Deployment Exercise.** The purpose of this exercise is to ensure that personnel who would normally deploy and operate or supervise the operation of response equipment are capable of doing so. It is also to ensure that the equipment is in good working order. Facilities that maintain response equipment shall conduct this type of exercise semi-annually.

- **Unannounced Exercises.** This is not a separate exercise. It is a requirement that one of the emergency procedure exercises, tabletop exercises, or equipment deployment exercises be conducted without providing the participants with prior knowledge of the exercise. Facilities shall make one tabletop exercise, emergency procedure, or equipment deployment exercise unannounced each calendar year.

- **Worst Case Discharge Exercise.** FRPs require that a facility's SMT tabletop exercise schedule include a WCD scenario once in each three-year cycle. This is not an additional exercise, but serves as the SMT tabletop for that year.

- **Area Exercises.** Area exercises are designed to test the entire response community. These exercises may be led by regulators or by plan holders. Navy facilities that participate in Area exercises shall document their participation to receive proper credit.

12-4.4 Reporting

a. **Reporting OHS Spills Within the U.S.** Federal law requires OHS spills within U.S. jurisdiction (including waters of the U.S. EEZ, territories and possessions) that meet or exceed the quantities listed below be immediately reported to Federal authorities. Federal law provides criminal penalties for failure to report OHS spills. These reports shall be submitted to the NRC at 1-800-424-8802 or 202-267-2675. State and local jurisdictions may impose reporting requirements that differ from Federal requirements. Facilities must be cognizant of the reporting thresholds for the State and local area. This may be particularly true for oil spills that do not reach or threaten to reach navigable waterways.

(1) **Quantities to Report.** Navy commands shall report to the NRC:

- Any discharge of oil which causes a film or sheen upon, or discoloration of, the surface of navigable water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of navigable water or upon adjoining shorelines;

- Any discharge of oil, which threatens to reach the navigable waters of the United States;

- Any release of a hazardous substance in the United States (its territories, possessions or navigable waters) in excess of quantities proscribed by reference (h);

- When in doubt, call the NRC.

(2) **Vessels.** While public vessels are generally exempt from State and Federal reporting requirements, commanding officers and masters of Navy vessels shall immediately report the fact and nature of an OHS spill from their vessels to the NRC.

(3) **Hazardous and Extremely Hazardous Substances.** In addition to the reporting requirements set forth above, EPCRA and Chapter 6.5.1(d) of this document require all activities to report to SERC and LEPC any release of a reportable quantity of a HS or an EHS that crosses the facility boundary or escapes to the atmosphere. See Chapter 6 and/or EPCRA for additional information.

b. **Reporting OHS Spills Outside the U.S.** For host nation reporting requirements, facility commanders should refer to FGS applicable to overseas installations and subsequent SPCR plans. Commanding officers and masters of Navy vessels shall follow policy as described in Chapter 22 of this instruction.

12-4.5 Response

a. **OHS Spill Response.** Reference (a) describes the roles and responsibilities of DOD in responding to DOD OHS spills. They are outlined here:

- In the event of an OHS spill from a Navy facility or vessel, the Navy will always assume initial responsibility for clean-up.

- In the case of a HS release that is on, or the sole source of the release is from, any facility or vessel under the control of the Navy, the NOSC assumes the role of the FOSC. As the FOSC, the NOSC will direct the Federal response effort, including coordination with the AC and with other Federal, State, and local authorities.

- In the case of oil, the EPA or the USCG assumes the role of the FOSC—depending upon the location of the spill. Typically, the EPA or USCG FOSC will monitor the Navy response effort and advise appropriate action, if necessary. If the EPA or USCG FOSC determines, however, that Navy response is inadequate or inappropriate, then the FOSC has the authority to assume command of response efforts.

b. **Non-DOD Spill Response.** Navy personnel may also respond to non-DOD spills. As one of 16 Federal agencies that comprise the NRT, DOD and its component Services must provide any response assistance they can upon request of the FOSC, insofar as such assistance would not impair DOD mission readiness. Additionally, SUPSALV is one of several National Special Teams named in the NCP as available to provide assistance to the FOSC. (See reference (a)). In the case of a large or salvage-related pollution incident, the FOSC may specifically request SUPSALV personnel, equipment, and expertise. To facilitate mobilization and funding of SUPSALV equipment and personnel for a non-DOD spill, SUPSALV and USCG have established an Interagency Agreement for Pollution Response.

c. **Natural Resource Trusteeship.** The NCP assigns responsibilities to certain Federal and State agencies for protecting natural resources held in trust for the U.S. public (see reference (a)). In the aftermath of an OHS spill, the Secretary of Defense is responsible for protecting natural resources within Navy management and control. For further details on Natural Resource Trusteeship, see Chapter 26 of this instruction.

12-5 Navy Policy

It is Navy policy to comply with all applicable laws and regulations and the requirements in Section 12-4 of this chapter.

12-5.1 Planning. The Navy shall prepare to respond to Navy OHS spill incidents and undertake immediate, direct action to minimize the effect of a Navy OHS spill upon the environment. The Navy's OHS pollution contingency planning and response organization executes this policy. This organization uses existing chains of command and regional coordination authorities to satisfy the requirements and intent of applicable statutes and regulations.

a. **Facility Planning**

(1) All Navy facilities shall develop a response plan either an FRP or SCP depending upon regulatory requirements size and location of the facility.

(a) Facilities meeting the threshold requirements of the OPA 90 regulations (references (b) through (e)), outlined in Table 12-1, shall develop an FRP. Although the OPA 90 regulations cited here only describe requirements for oil FRPs, Navy facilities may incorporate HS planning into FRPs or SCPs. Regardless of whether HS planning is included in these plans, or a separate planning document, Navy facilities shall ensure HS planning is accomplished.

COMNAVFACENGCOM shall be responsible for providing technical assistance to facilities for developing response plans (see Section 12-6.5). COMNAVFACENGCOM shall provide guidance to facilities on the minimum essential planning elements and stay abreast of planning developments and changing guidance in order to provide facilities with accurate information.

(b) Any Navy facility that stores petroleum or hazardous substances and does not exceed the oil storage threshold requirements of the OPA 90 regulations shall maintain an OHS SCP. OHS SCPs should be tailored to the specific size and operations at the facility. At small facilities, the SCP must, at a minimum, be sufficient to protect employee safety and allow the facility to quickly contact external spill responders, the NOSC, and the facility’s chain-of-command. At facilities that use their own

personnel for emergency spill responders, the SCP must address all of the emergency response plan elements of OSHA's HAZWOPER regulations in part (q) of reference (m). In most cases, SCPs do not need to be submitted for agency approval; however, such plans should be readily available for agency review if requested.

(2) For spills beyond their capability, facilities may rely on the NOSC for additional resources. Note that, in accordance with PREP guidelines, a facility's FRP must include the NOSC as part of the SMT for WCDs in order for the facility to receive PREP credit when the NOSC responds to a facility incident or conducts WCD exercises (see Section 12-5.3.1 for additional information on PREP credit).

(3) SUPSALV is designated as the Navy's corporate oil spill response organization. SUPSALV shall maintain and operate an oil discharge containment and recovery equipment with the requisite knowledge and expertise to support large spill response operations. Facilities shall consider these assets when planning WCD response.

(4) In addition to response assets available from local Navy activities, commercial oil pollution response assets, available through Basic Ordering Agreements (BOAs) pre-negotiated by the USCG, may be a commanding officer's best means of meeting the response requirements of more significant spill scenarios. Planning efforts should consider these assets and where appropriate, include these assets in response plans. BOA activation is addressed in 12-5.5(b).

(5) Membership in oil spill cooperatives potentially exposes the Navy to the risk of significant liability. Accordingly, Navy activities considering membership in an oil spill cooperative shall forward a request to participate to CNO (N45) via their chain of command.

(6) Facilities shall maintain plans in accordance with applicable regulations. At a minimum each plan shall be reviewed and updated annually. Depending on personnel turnover rate, responsibility and notification sections shall be updated more frequently, at least quarterly. Each plan shall be updated and resubmitted as required by regulations, or, at a minimum, every five years or after any major spill event.

(7) Facilities shall report, via the NOSC, the status of FRPs and SCPs to CNIC annually.

b. **Shoreside NOSC Plans.** Shoreside NOSCs are required to develop NOSC plans to combat oil or hazardous substance spills that exceed facility capabilities or occur outside of facility boundaries. This shall be a comprehensive response plan, similar to an FRP, but more general in nature. It shall cover notifications, responsibilities, initial actions, resources, sensitive area prioritization, disposal, natural resource damages, etc. It shall be based on WCD scenarios of facilities within the assigned AOR, as well as scenarios that occur beyond facility boundaries.

Facilities may rely on their NOSC for WCD response, and FRPs submitted to regulators may reflect this fact. Therefore, when applicable, NOSC plans shall address the WCD support required by these facilities within the NOSC's assigned AOR.

These plans shall be consistent and aligned with ACPs and NOSC plans for adjacent AORs (fleet and shoreside). Delineation of responsibility between Fleet and Shoreside NOSCs shall be clear. Overseas Shoreside NOSC plans shall also include information regarding host nation assistance and requirements.

NOSC plans shall be signed by the NOSC (typically a Flag officer) to ensure management endorsement and awareness. NOSC plans shall be reviewed and maintained for currency annually, with notification sections validated quarterly. Plans shall receive a thorough review and update, including a new signature, every five years. Status of NOSC plans shall be forwarded by assigned NOSCs annually to CNIC.

c. **Fleet NOSC Plans.** Fleet NOSCs are required to develop contingency plans to combat Navy ship oil or hazardous substance spills that occur outside the AORs of shoreside NOSCs. As fleet units typically have minimal response assets, fleet NOSC plans shall focus on assigned responsibilities, notifications, and initial actions. Information regarding foreign nations within assigned AOR that may be affected by Navy spills shall be included. Plan coverage shall provide for all Navy vessels (including MSC and U.S. Maritime Administration (MARAD) regardless of Fleet operational control within their AOR. These plans shall be consistent and aligned with shoreside NOSC plans within the AOR. Delineation of responsibility between fleet and shoreside NOSCs shall be clear.

NOSC plans shall be signed by the NOSC (typically a Flag officer) to ensure management endorsement and awareness. NOSC plans shall be reviewed and maintained for currency annually, with notification sections validated quarterly. Plans shall receive a thorough review and update, including a new signature, every five years. Status of NOSC plans shall be forwarded by assigned NOSCs annually to COMNAVSEASYSCOM.

d. **Spill Prevention, Control, and Reporting Plan.** Overseas facilities are governed by both DOD guidance and applicable local laws and regulations. All overseas facilities shall develop and maintain an SPCR plan in accordance with the FGS for the country where the facility is located. If an FGS does not exist for a particular country, the plan shall be developed in accordance with reference (k).

e. **Integrated Contingency Plan.** A facility may choose to develop an ICP per NRT guidance published 5 June 1996, reference (n). This is not an additional plan. The guidance was intended for facilities that wanted to integrate response plan requirements found in various EPA, DOT, USCG, and OSHA regulations. An ICP is not a suitable solution for all cases, and the added complexity and potential cost of maintenance should be considered when determining appropriateness of this option.

ICPs may also be used in locations that have facilities that share response resources. Areas with a high concentration of Navy facilities may benefit from having a single plan with appendices that cover each facility. Consultation with regulators regarding acceptance of such an arrangement shall be conducted prior to combining plans into a single plan.

f. **Shipboard Oil Spill Contingency Plan.** All Navy vessels are required to prepare and maintain an SOSCP that addresses spills from vessels. This plan shall be reviewed and updated at least annually to ensure that is consistent with current ship conditions and policies. SOSCPs shall contain up-to-date NOSC contact information in order to ensure notification of spills to the appropriate NOSC. COMNAVSEASYSCOM has developed a model plan to be used as a template, and maintains a current list of NOSCs which will be available for use by shipboard personnel in updating their SOSCP. Additional information is contained in Chapter 22.

g. **Non-Navy Ports Planning.** Navy vessels (including MSC vessels regardless of OPCON and MARAD vessels as assigned) calling on non-Navy ports, shall arrange (through Logistics requirements (LOGREQ), contract, or other means) for necessary spill preparedness consistent with

generally accepted industry standards and practices for operating within the port in question. NOSCs shall provide technical assistance for determining necessary preparedness measures which could potentially arise during vessel operations in a non-Navy port called upon by USN, United States Naval Ship (USNS), and or MARAD vessels in their respective AOR's. Preparedness measures shall address all accepted operations (e.g., fueling) and shall include meeting all criteria set forth in the OEBGD, FGS, and respective NOSC plans.

h. **Emergency Management.** Facility Commanders and NOSCs shall coordinate planning activities with emergency management functions as much as possible. OHS plan information should either be incorporated or referenced in EM plans as part of the national policy outlined in references (a) and (l) and the Navy's overall EM approach (reference (o)) to ensure efficient use of resources, minimal duplication of effort, and maximum readiness.

i. **Protective Booming.** Protective booming strategies shall be developed and implemented for petroleum-oil-lubricant (POL) transfer operations when any of the following conditions exist:

- Protective booming is required by law or regulation.
- The nature or volumes of fuels to be transferred is of sufficient magnitude that prudent operational risk management indicates that protective booming is required.
- When environmentally sensitive areas are likely to be negatively impacted in the event of a spill.
- When a potential spill could generate significant negative public perception or so adversely affect political relations with a host nation or local jurisdiction that continued port access may be jeopardized.

12-5.2 Training. Navy activities shall train all Navy personnel involved in OHS spill contingency planning and response in accordance with Chapter 28 of this instruction and applicable regulations. The Naval Occupational Safety and Health, and Environmental Training Center (NAVOSHENVTRACEN) manages a number of courses applicable to spill response techniques, spill management and response worker health and safety. Commanding Officers shall ensure that assigned personnel have the requisite training to perform response duties while maintaining safety as the number one priority.

Facility Commanders and NOSCs shall coordinate training activities with EM functions as much as possible. OHS training elements should be incorporated into EM training and OHS personnel shall, where possible, take advantage of applicable courses under the EM program.

a. **Occupation Safety and Health Administration Training.** Navy personnel assigned response duties shall receive HAZWOPER training commensurate with responsibilities. This training must be completed prior to a spill event to avoid any delays in response. Reference (m) section (q) (6) lists required training, but is written for uncontrolled HW sites in general. Additional guidance is available from OSHA that addresses the applicability of these regulations to oil spill response training in more detail. OSHA requires that this training be updated annually. NAVOSHENVTRACEN offers HAZWOPER courses.

b. **Facility Response Training.** Navy facilities owning and maintaining spill response equipment will act as the first responder to a Navy oil spill. As such, Navy personnel must train on the safe use of this equipment and in effective response techniques. This training should typically be received annually, but dependent on the level of expertise of the Facility Response Team (FRT), the amount of personnel turnover, the number of actual deployments, and other factors, may be received at an interval not to exceed once every two years. NAVOSHENVTRACEN offers courses in FRT operations.

c. **National Incident Management System Training.** It is Navy policy to comply with reference (l) regarding NIMS and ICS training. ICS is an effective crisis management system and has been proven for oil spill response. All personnel assigned to an SMT shall receive an appropriate level of ICS training. Facility Commanders and NOSCs shall determine the expected level of participation of SMT members and provide an appropriate level of ICS training. NAVOSHENVTRACEN offers courses in ICS.

d. **General Training.** It is imperative that NOSC management have an understanding of environmental issues beyond OHS response and OSHA concerns. Awareness training, such as general environmental and spill management, not noted above may be necessary to ensure that NOSCs are fully capable of understanding the issues and problems that may arise surrounding OHS spill, response, mitigation and management.

12-5.3 Exercises

a. **OPA 90 Facilities.** OPA 90 regulated facilities shall follow the PREP guidelines to accomplish exercise requirements. Facilities shall document exercise accomplishments in accordance with PREP guidelines and the appropriate regulating agency(ies) to ensure that exercise credit is received. Where possible, credit should be taken for actual spill responses conducted and for operations conducted during training evolutions. Facilities may take PREP credit for completing a WCD exercise when a NOSC conducts an exercise of this type; however, the facility's FRP must name the NOSC as part of the WCD SMT, and the exercise must be similar in scope as the Facility's FRP WCD requirements. Navy facilities should coordinate these exercises with the NOSC and participate when possible to minimize cost. Additionally, Facility Commanders and NOSCs shall coordinate exercises with EM exercises as much as possible. OHS information should be incorporated into EM exercise scenarios and OHS personnel shall participate in EM exercises where applicable.

Facility Commanders shall forward an annual report to the cognizant NOSC indicating intended three-year exercise schedule and previous year accomplishments. As much as possible, facility SMT personnel shall participate in NOSC or Area exercises to reduce costs. Navy facilities that participate in these exercises shall be sure to document their participation to receive proper credit. NOSCs shall review the annual reports and forward to CNIC.

b. **Non-OPA 90 Facilities.** Non-OPA 90 regulated facilities shall develop an exercise program commensurate with facility complexity and risk that ensures that planning documents are adequate for response and personnel assigned have the necessary skills to respond. These programs shall follow the principles of the PREP guidelines, in terms of exercise type and frequency, however exercise scope shall be appropriate to the complexity and risk at the facility. Exercise accomplishments shall be documented. Actual spill responses and training evolutions may serve to meet the intent of exercises, and the exercise

schedule should be adjusted to reflect these evolutions. Facilities should coordinate these exercises with neighboring installations, NOSCs, and the community when possible to minimize cost.

Facility Commanders shall forward an annual report to the cognizant NOSC indicating intended three-year exercise schedule and previous year accomplishments. As much as possible, facility SMT personnel shall participate in NOSC or Area exercises to reduce costs. Navy facilities that participate in these exercises shall be sure to document their participation to receive proper credit. NOSCs shall review the annual reports and forward to CNIC.

c. **Shoreside NOSCs.** Navy's tiered response system may utilize the NOSC SMTs for response to WCDs. NOSCs in themselves are not regulated under OPA 90, however, some FRPs must rely on the NOSC for WCD support, and, as such, NOSCs shall conduct an SMT tabletop exercise annually. Once in each 3-year period, the tabletop exercise shall include a WCD scenario. NOSCs shall ensure that they are familiar with the spill scenarios of Navy vessels, all FRPs, SCPs and SPCRs within their AOR. Where possible, NOSC SMT personnel should be included in facility SMTs to facilitate the NOSC providing WCD SMT support for the regulatory requirements of the FRP. NOSCs shall ensure that the WCD scenario involves core components of fleet units, FRPs, SCPs, and SPCRs and includes interaction between the NOSC and FIC SMTs.

NOSCs shall forward an annual report to CNIC indicating intended three-year exercise schedule and previous year accomplishments for all facilities in the assigned AOR, as well as for NOSC exercises.

d. **Fleet NOSCs.** Fleet NOSCs shall conduct annual SMT exercises to ensure that planning documents are adequate for response and personnel assigned have the necessary skills to respond. As much as possible, Fleet NOSCs shall coordinate exercises with Shoreside NOSCs to minimize costs. NOSCs shall forward an annual report to COMNAVSEASYSCOM indicating intended three-year exercise schedule and previous year accomplishments.

e. **Equipment.** Navy spill response equipment shall be drilled/exercised in accordance with the designated exercise program (PREP or otherwise) to allow activities listing Navy spill response equipment in their plans to take credit accordingly.

12-5.4 Reporting

Navy vessels and activities shall make appropriate notifications immediately upon the discovery of a spill in accordance with applicable regulations as described in Section 12-4.4. Activities shall not delay NRC notification in order to obtain more detailed information about the incident. Immediate voice notification to the NRC fulfills all Federal notification requirements. If reporting activities cannot reach the NRC by voice on the first attempt, they shall immediately notify the nearest EPA office or USCG station. Reporting to EPA or USCG does not relieve the spiller of the responsibility to report to the NRC.

a. **Internal Navy Reporting Requirements.** COs shall immediately report the fact and nature of an OHS spill from Navy vessels or facilities in any location worldwide that meets the following criteria:

– Any OHS spill reported to the NRC (as described in section 12-4.4), State or local authorities.

- Any discharge of oil that causes a film or sheen upon, or discoloration of, the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines;

- Any OHS spills that may endanger critical water areas, have the potential to generate public concern, become the focus of an enforcement action, or pose a threat to public health or welfare that warrants an OPREP-3 special incident reports as prescribed by reference (p).

b. **Reporting Procedures.** Reports shall be made to their chain of command and cognizant NOSC as follows:

- By voice immediately upon discovering the spill.

- By official Navy Message in the format provided at appendices H and I to this instruction as soon as practicable.

- By updated message as soon as the reporting activity becomes aware of new information concerning the origin, quantity, type, operation under way, root cause, or lessons learned of the spill. Similarly, ***if the final estimate of the amount released differs substantially from the amount initially reported,*** the reporting activity must send an updated message to all action and info addresses on the original spill message.

NOTE:

If you call the NRC, send a Navy message. If you call the State or local authorities, send a Navy message. If you are in doubt, send a Navy message.

c. **Message Formats for Oil Spill and HS Release Reports.** Appendix H outlines a format for reporting oil discharges to the Navy chain of command. The format contained in Appendix I shall be used for reporting HS releases. When preparing these messages, Navy commands shall adhere to the following guidelines:

- Provided that prior voice reports have been made to the NRC and the reporting command's chain of command, the reporting command shall use "Routine" precedence for Oil Spill Report Messages or for HS Release Report Messages not classified as an "Extremely Hazardous Substances." If the command has not made both voice reports, it shall use "Priority" precedence on the written message. For Hazardous Substance Release Report Messages classified as "Extremely Hazardous Substances," always use "Priority" precedence.

- To advise the NOSC and Navy leadership of the magnitude of an oil spill, reporting activities shall enter the following volume classifications on the Subject line of each Oil Spill Report Message:

SUBJ: OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME]; or
SUBJ: OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME]; or
SUBJ: OIL SPILL REPORT, SHEEN SIGHTING

- Estimates of volume spilled using sea level visual observation of oil on water are unreliable. To take the uncertainty out of volume estimation, reporting activities should examine loss at the source (i.e. through tank soundings or flow rate calculations). Message writers shall not report estimates of volume by visual observation alone.

- To remove speculation from the Navy spill reporting process, commanding officers are directed to report only "Unknown" for the following report elements until such time as definitively established: source of spill, volume spilled, type of oil discharged, operation underway when spill occurred/discovered and spill cause. Commands should issue updates by message as soon as better information becomes available.

- In the case of unknown volume or type of oil discharged, reporting activities should give particular attention to paragraph 8 in the message on "Slick Description and Movement."

- Reporting activities should classify the cause of an oil spill by citing one or more of the following categories and ***then provide a narrative description of specific spill cause***: Structural; electrical; hose; valve/fitting; tank level indicator; oil/water separator/oil content monitor; other equipment (specify component that failed); collision, grounding, or sinking; valve misalignment; monitoring error; procedural/communications error; chronic/recurring; or weather related.

- Information concerning spill causes are used in root cause analysis to aid in prevention efforts. If a cause is listed as 'Unknown' in the original spill message, Navy commands shall make every effort to provide a definitive cause of the spill. This information should be sent by updated message to all addresses on the original spill message.

d. **Reports from Vessels.** Naval vessels shall make necessary notifications to the NRC and the Navy chain of command in accordance with Chapter 22 and ensure naval messages are sent in accordance with Appendices H and I. Facility commanders or NOSCs shall make all other necessary notifications as appropriate.

e. **Excess Navy Property.** Caretakers shall continue to report OHS spills from excess Navy property until the property passes to the management and control of local reuse authorities.

f. **Sheen Sightings.** Responsible environmental stewardship and longstanding maritime tradition require that commanding officers report to proper authorities any oil on the water's surface discovered in the course of daily operations— whether at sea or in port—whether attributable to Navy sources or not. Accordingly, commanding officers shall submit voice and Navy message reports to appropriate Federal, State, local and military authorities for any oil sheen discovered by naval personnel—even if the cause or source of the spill is unknown. Such reports, however, should ***not speculate as to cause or source*** and ***clearly indicate that a Responsible Party cannot be identified*** from information then currently available.

12-5.5 OHS Spill Response.

The Navy will respond immediately and effectively to all Navy OHS spills. Navy policy is to conduct all Navy OHS pollution responses in such a manner as to retain control of the response. The FIC

or NOSC shall take all appropriate measures to ensure they maintain control of the OHS incident. If the EPA or USCG FOSC determines, however, that Navy response is inadequate or inappropriate, then the FOSC has the authority to assume command of response efforts. In all cases, COs and masters of public vessels remain in command of their vessels and personnel.

a. **Navy Supervisor of Salvage.** SUPSALV, as the Navy's corporate oil spill response organization, maintains and operates an extensive inventory of oil discharge containment and recovery equipment with the requisite knowledge and expertise to support large spill response operations. The NOSC shall consider activating SUPSALV for all OHS spills that exceed local capabilities.

b. **Basic Ordering Agreements.** Resources can be accessed from contractors who have pre-negotiated BOAs. These assets can be used to augment a facility's equipment and personnel resources in the event of a significant emergency. Access to BOAs is managed by COMNAVFACENGCOM. If a spill exceeds a facility's response capabilities and BOA resources are needed, the Commanding Officer should request assistance from the NOSC, and the NOSC should contact COMNAVFACENGCOM to request BOA activation.

When engaging commercial spill response assets, Navy commands shall carefully assess and monitor legal, financial and technical factors.

c. **Salvage-Related Spills.** The Navy shall direct response efforts to pollution incidents resulting from Navy vessel casualties such as grounding and collision. Fleet salvage forces shall take all reasonable precautions to reduce the threat of OHS pollution during salvage operations.

d. **Collision with Navy Vessels.** Where a collision between a Navy vessel and non-Navy vessel results in an OHS spill from the non-Navy vessel, the Navy will provide immediate spill response assistance, regardless of fault. In such situations, the cognizant Navy Fleet Commander shall report the spill, monitor the situation and offer appropriate support to the stricken vessel.

e. **Oil Spills from Sunken Navy Vessels.** The Navy retains title to a number of vessels that were sunk while in Navy service due to armed conflict, act of God or other reason. Navy response to oil spills from such vessels, or oil spills that are reported to be from such vessels, shall be conducted in accordance with the procedures in Appendix O, Environmental Response Procedures for Sunken Vessels.

f. **Military Sealift Command.** The Navy will manage response to OHS spills from vessels owned, operated, or chartered by COMSC, as follows:

- Any vessel carrying the designation of USNS is a public vessel of the United States. The NOSC and other Navy shore facilities will respond to an OHS spill from a USNS vessel just as it would a spill from any other Navy vessel.

- Any vessel owned by the MARAD is a public vessel and when operated under MSC control is considered a Navy vessel the same as a USNS. The NOSC and other Navy shore facilities will respond to an OHS spill from an MSC controlled MARAD vessel just as it would a spill from any other Navy vessel.

– Vessels under bare-boat charter (or long term build-to-charter lease) to MSC ***and operated by MSC exclusively for the benefit of the United States***, are public vessels of the United States for the purposes of this instruction. The NOSC and other Navy shore activities will respond to an OHS spill from such a vessel just as it would a spill from any other Navy vessel.

– Commercial vessels under time or voyage charter to MSC are ***not*** public vessels and must comply with all international, Federal and State pollution prevention and control regulations. Such regulations generally do not permit commercial vessels to cite or rely upon Navy response assets in their OHS SCPs.

g. **Non-Navy Spills (other DOD or private).** The FOSC may request Navy response assistance for non-Navy spills. The Navy will respond to such requests under the terms and conditions of reference (l) and reference (a) and the Navy SUPSALV/USCG Interagency Agreement for Pollution Response. In the case of large marine oil discharges, requests for Navy assistance from the Defense Logistics Agency, the Marine Corps or other DOD components are particularly likely. Navy response to such requests shall be consistent with procedures established by the DOD and any applicable inter-service agreement.

h. **Natural Resources Damages.** In the case of a Navy OHS spill or a non-Navy spill which threatens natural resources within Navy management or control, follow the guidelines in Chapter 26, section 26-7.2 of this instruction.

i. **Health and Safety.** The health and safety of Navy personnel and the public shall be the highest priority of all Navy OHS spill response operations. Responders shall comply with all requirements of references (g), (m), (q), and (r).

12-6 Responsibilities

12-6.1 All **AECs** shall:

(a) Develop and periodically update an area-wide OHS spills contingency planning instruction specifying NOSC and facility responsibilities for OHS spill contingency planning and response in the AOR.

(b) Request technical assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM as needed.

(c) Establish contingency planning and response policies in their areas consistent with this instruction.

(d) Establish a spill response training program consistent with this chapter and regulatory requirements. Request assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM as needed.

(e) Pre-designate NOSCs to plan for and direct response efforts to OHS spills from Navy vessel and shore activities throughout their AORs and ensure Fleet and Shoreside NOSC responsibilities are clearly delineated.

12-6.2 All **BSOs** shall:

(a) Fund OHS spill response expenditures beyond the capability of the Navy subordinate activity ultimately responsible for the cost of spill clean-up from existing funds.

(b) Ensure that all staff personnel under their command who have responsibilities in this chapter (including but not limited to safety, public affairs, logistics, legal, comptroller, security, communications and transportation personnel) receive the general overview spill response training in accordance with Section 12-5.2 and introductory or executive overview training in emergency response management and become familiar with the provisions of this chapter.

(c) Ensure facilities fully comply with Federal, State and international/foreign, laws and regulations for spill prevention, preparedness, and response.

12-6.3 CNIC shall:

(a) Identify and fund shoreside oil spill preparedness and response preparedness requirements.

(b) Provide oversight of shoreside NOSCs ensuring that all required training, drill, and exercise requirements are met and appropriately documented.

(c) Provide oversight of shore installation/facility OHS contingency planning and response requirements ensuring that all required training, drill, and exercise requirements are met and appropriately documented.

(d) Obtain status of shoreside NOSC and facility plans, exercise accomplishments and requirements, and equipment readiness. Provide information to COMNAVSEASYSCOM with an assessment of overall shoreside Navy preparedness to respond to OHS spills worldwide.

(e) Integrate OHS spill preparedness and response program requirements into the Navy Shore Installation Emergency Management Program.

(f) Develop and establish a spill response training program policy ensuring that all assigned staff personnel who have responsibilities under this chapter (including but not limited to safety, public affairs, logistics, legal, comptroller, security, communications and transportation personnel) receive general overview spill response training in accordance with Section 12-5.2 and introductory or executive overview training in emergency response management and become familiar with the provisions of this chapter. Request technical assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM as needed.

12-6.4 COMNAVSEASYSCOM shall:

(a) As requested by AECs provide technical assistance in the development and update of the area-wide OHS spill contingency planning and response instructions.

(b) Assist Fleet NOSCs in the development and updating of NOSC plans to worst case spill scenario planning. Prepare and maintain guidance that includes minimum content requirements and essential elements for compliance with current regulations.

(c) Assist COMNAVFACENGCOM in the development and updating of shoreside NOSC plans to include vessel spills, and worst case spill scenario planning.

(d) Develop, issue and maintain an SOSCP guide. Maintain a list of current NOSC contact information and provide to ships upon request.

(e) Collect status of fleet NOSC plans, exercise accomplishments and requirements, and equipment readiness. Collect status of shoreside NOSC plans, exercise accomplishments and requirements, and equipment readiness via CNIC. Provide CNO (N45) with an annual readiness assessment of all Navy's spill response program.

(f) Determine requirements, budget for, and obtain investment category equipment for major and salvage-related spill response.

(g) Ensure sufficient expertise exists to operate Navy's equipment inventory for major and offshore spill events. Ensure such resources are available for immediate response.

(h) As requested, support COMNAVFACENGCOM by providing technical advice to CNO (N45) in review of requests by Navy shore commands to participate in spill cooperatives.

(i) Establish a mechanism for and coordinate the collection and dissemination of lessons learned from major drills, exercises and spill events.

(j) As requested, assist NAVOSHENVTRACEN with development of technical content of associated training curricula and courses.

(k) Assist NOSCs in meeting worse case discharge exercise requirements for testing and exercising Navy capabilities to respond up to worst case spill scenarios.

(l) Assist Fleet NOSCs in meeting exercise requirements.

(m) Coordinate with Fleet Commanders to include spill response exercises in appropriate Fleet Exercises where risk of spills warrants.

(n) Ensure Navy's equipment inventory for major and offshore spill events is drilled/exercised in accordance with this document. Issue a Navy message to all Navy Regions within the U.S. indicating the status of these drills/exercises so these activities may take credit for readiness, when appropriate.

(o) Maintain a Navy-wide OHS spill report database and provide Navy Oil Spills and Hazardous Substance Release periodic and annual reports to CNO (N45).

(p) Assist NOSCs in major OHS pollution response issues as they arise and in decision-making for major or offshore/salvage-related response operations.

(q) Provide expertise and equipment at the request of the NOSC for spills exceeding local capability including WCD, offshore or salvage-related OHS pollution incidents.

(r) Provide advice, personnel, and equipment, as appropriate for joint salvage/pollution operations.

(s) Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

12-6.5 COMNAVFACENGCOM shall:

(a) Assist shoreside commanding officers with the development of OHS spill contingency and response plans. Prepare and maintain guidance that includes minimum content requirements and essential elements for compliance with current regulations.

(b) Assist shoreside NOSCs in the development and updating of shoreside NOSC plans to include coordinating with COMNAVSEASYSCOM for vessel spills and worst case spill scenario planning.

(c) Determine requirements, budget for, and obtain investment category equipment for inland water and harbor oil discharge control.

(d) As requested, provide technical advice to CNO (N45) in review of requests by Navy shore commands to participate in spill cooperatives.

(e) Provide technical assistance and advise CNIC and other BSOs, as requested.

(f) As requested, assist BSOs and AECs in the determination of emergency response training needs.

(g) As requested by NAVOSHENVTRACEN, provide assistance in the development of technical content for training curricula and courses.

(h) Assist shoreside NOSCs and facilities in meeting exercise requirements.

(i) Coordinate Navy access to USCG BOAs for response to spills beyond the capability of the facility.

(j) Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

12-6.6 CO, NAVOSHENVTRACEN shall:

(a) Develop curricula and delivery mechanism for comprehensive courses of instruction that meet the training requirements as referenced in Chapter 28. As applicable, request assistance from COMNAVFACENGCOM and COMNAVSEASYSCOM in development of technical content of associated training and courses.

(b) Deliver training necessary to meet the requirements of this chapter or as negotiated with sponsors of environmental training.

12-6.7 Fleet NOSCs shall:

(a) Develop area-wide Fleet NOSC plans in accordance with AEC instructions. Coordinate these plans with adjacent shoreside NOSCs. Request assistance from COMNAVSEASYSCOM as needed.

(b) Coordinate fleet planning and operations and ensure that Navy SOPA instructions contain guidance for fleet OHS spill response that is consistent with the shoreside NOSC plans.

(c) Ensure response plans are approved and signed.

(d) Review NOSC plan at least annually and make necessary changes. Validate notifications quarterly. Conduct a complete review and submit for signature at least every five years.

(e) Ensure that all staff with OHS response responsibilities is properly trained and maintain their competencies.

(f) Conduct spill response exercises to test the validity and effectiveness of the NOSC plan.

(g) Promptly notify Federal, State, regional, local, or foreign governments when required.

(h) Coordinate review of OHS spill messages for spills within the AOR, and validate reported data on the NAVSEA-maintained OHS spill database website.

(i) At least annually, provide NAVSEASYSCOM with a status of NOSC plans and exercises, including accomplishments and upcoming exercises or plan reviews/revisions.

(j) Ensure that Operation Orders and instructions containing guidance or policy for fleet OHS pollution response are consistent with Fleet NOSC plans and SOPA instructions.

(k) Direct response operations and coordinate closely with ongoing fleet salvage operations. Request support from COMNAVSEASYSCOM as needed.

(l) Ensure the health and safety of response personnel at any point during on-scene response.

(m) Provide coordination and direction for the cleanup of OHS spills from Navy ships outside 12nm unless otherwise directed by the AEC.

(n) Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

12-6.8 Shoreside NOSCs (in U.S. Areas) shall:

(a) Ensure Navy facilities within assigned AOR can control, contain and clean up OHS spills, and evaluate impacts to natural resources.

(b) Serve as the FOSC under reference (a) for HS releases when the release is on, or the sole source of the release is from Navy facilities or vessels, within assigned geographic boundaries.

(c) Develop, consistent with the AEC's instructions, area-wide NOSC plans, and coordinate the development of the plans with the applicable RCPs and ACPs. Shoreside NOSCs shall ensure that an appropriate plan or plans cover all facilities and vessels within their AOR. Request assistance from COMNAVFACENGCOM as needed.

(d) Coordinate with other DOD component On-Scene Coordinator plans, including Marine Corps plans, to the extent specified by the DOD or as required by any Navy/DOD component inter-service agreement.

(e) Maintain the NOSC plan for currency on an annual basis. Validate notifications quarterly. Conduct a complete review and update the NOSC plan, including any changes resulting from a review of SPCR Plan changes within the AOR, and submit for signature at least every five years.

(f) Coordinate shoreside NOSC plans with fleet planning and operations.

(g) Establish a spill response training program consistent with this chapter and regulatory requirements. Ensure that all staff with OHS response responsibilities is properly trained and maintain their competencies.

(h) Coordinate planning efforts for WCD exercises for facilities within assigned AOR.

(i) Review and approve Annual Allowance Requirements Requests (A2R2) from facilities within assigned AOR. Forward a consolidated and prioritized request list to COMNAVFACENGCOM.

(j) Coordinate an exercise schedule for all facilities under the NOSC's AOR to affect cost savings and ensure uniformity and effectiveness of the exercises.

(k) Accomplish all required exercises and conduct combined exercises, whenever appropriate to reduce costs. Document exercise credit for SMT partnership training conducted jointly or as a single SMT within and serving a specific geographic area.

(l) Coordinate with COMNAVSEASYSCOM to ensure that facilities within the NOSC's AOR receive credit for oil spill removal organization drills and exercises conducted within the response area.

(m) Ensure that activities in their AOR act in accordance with all Navy, Federal, State, and local OHS spill notification procedures. (See Section 12-5.4.)

(n) Coordinate review of OHS spill messages, NRC reports and local reports for spills within their AOR, and validate reported data on the NAVSEA-maintained OHS spill database website.

(o) At least annually, provide CNIC with a status of plans and exercises for all facilities within assigned AOR including accomplishments and upcoming exercises or plan reviews/revisions. This shall also include NOSC plan and NOSC exercises.

(p) Coordinate response operations with adjacent NOSCs, including Fleet NOSCs, for Navy OHS spills that may have an impact on more than one NOSC region.

(q) Ensure the health and safety of response personnel at any point during on-scene response.

(r) Coordinate response operations with the DOD representative to the RRT.

(s) Direct and coordinate response operations closely with ongoing fleet salvage operations.

(t) As needed, coordinate SUPSALV response assistance for spills beyond local capability including WCD into NOSC plans.

(u) Direct all major response efforts for Navy OHS spills within assigned shoreside boundaries to include coastal areas out to the 12 nm zone, unless otherwise instructed by the AEC.

(v) Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

12-6.9 Shoreside NOSCs (in Foreign Areas) shall:

(a) Ensure Navy facilities within assigned AOR can control, contain and clean up OHS spills, and evaluate impacts to natural resources.

(b) Develop overseas NOSC plans, consistent with AEC instructions, FGS and/or OEGBD, and coordinate the development of these plans with applicable host nations. Ensure that an appropriate plan or plans cover all facilities and vessels within their AOR. Request assistance from COMNAVFACENGCOM as needed.

(c) Coordinate with other DOD component OSC plans, including Marine Corps plans, to the extent specified by the DOD or as required by any Navy/DOD component inter-service agreement.

(d) Maintain the NOSC plan for currency on an annual basis. Validate notifications quarterly. Conduct a complete review and update the NOSC plan, including any changes resulting from a review of such changes within the AOR, and submit for signature at least every five years.

(e) Coordinate shoreside NOSC plans with fleet planning and operations.

(f) Establish a spill response training program consistent with this chapter and regulatory requirements. Ensure that all staff with OHS response responsibilities is properly trained and maintain their competencies.

(g) Coordinate planning efforts for WCD exercises for facilities within assigned AOR.

(h) Review and approve A2R2 requests from facilities within assigned AOR. Forward a consolidated and prioritized request list to NAVFACENGCOM.

(i) Coordinate an exercise schedule for all facilities under the NOSC's AOR to affect cost savings and ensure uniformity and effectiveness of the exercises.

(j) Accomplish all required exercises and conduct combined exercises, whenever appropriate to reduce costs.

(k) Ensure that activities in their AOR act in accordance with all required foreign country OHS spill notification procedures, within the guidelines established by OEBGD and applicable FGS.

(l) Coordinate review of OHS spill messages for spills within their AOR, and validate reported data on the NAVSEA-maintained OHS spill database website.

(m) At least annually, provide CNIC with a status of plans and exercises for all facilities within assigned AOR including accomplishments and upcoming exercises or plan reviews/revisions. This shall also include NOSC plan and NOSC exercises.

(n) Oversee response operations for Navy OHS spills within assigned areas and coordinate response operations with adjacent NOSCs and with applicable foreign nation agencies.

(o) Ensure the health and safety of response personnel at any point during on-scene response.

(p) Pre-assign geographic areas for response by USN shore facilities.

(q) As appropriate with host nation agreements, mitigate and clean up OHS spills from Navy vessels and activities and reimburse, as appropriate, other commands that provide assistance.

(r) As needed, coordinate SUPSALV response assistance for spills beyond local capability including WCD into NOSC plans.

(s) Direct all major response efforts for Navy OHS spills within assigned shoreside boundaries to include coastal areas out to the 12 nm zone, unless otherwise instructed by the AEC.

(t) Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

12-6.10 Shoreside COs shall:

(a) Develop, annually review, and periodically update FRPs, SCPs or SPCR plans in accordance with this Chapter, the OEBGD, or applicable FGS and coordinate these plans with the NOSC plans. Review FRPs or SCPs for consistency with appropriate State and local environmental and emergency planning authorities.

(b) Provide NOSC with WCD Scenarios from completed FRPs or SCPs so these may be incorporated into NOSC plans.

(c) At least annually, provide NOSC with a status of plans and exercises including accomplishments and upcoming exercises or plan reviews/revisions.

(d) Maintain the readiness of the Navy spill response personnel and equipment assigned to the facility.

(e) Forward completed A2R2 requests to NOSC.

(f) Properly train assigned staff responsible for OHS response.

(g) Tailor training curricula to include State and local emergency response laws and regulations.

(h) Maintain training records and documentation as required by Federal, State, and local regulations.

(i) Accomplish all required exercises and support the Regional SMT when requested by the NOSC.

(j) Incorporate drill and exercise requirements into routine business or other emergency drills wherever practicable.

(k) Make all required Federal, State, and local notifications for Navy OHS spills and make Navy chain of command notifications up to the NOSC level.

(l) Oversee response efforts for Navy OHS spills as the FIC within pre-assigned areas until response is completed or relieved by the NOSC. If and when requested by the NOSC, oversee response efforts outside the facility's boundaries until relieved by the NOSC.

(m) Mitigate and clean up OHS spills from vessels and activities and reimburse, as appropriate, other commands that provide assistance.

(n) Coordinate with Navy’s EM program while carrying out responsibilities under this chapter.

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CHAPTER 13

STORAGE TANKS

13-1 Scope

This chapter provides information and guidance applicable to the regulation of storage tanks (STs). This includes both underground storage tanks (USTs) and aboveground storage tanks (ASTs). It includes those containing petroleum products, and/or hazardous substances (HS) however, excludes those containing hazardous waste (HW) at Navy shore facilities within the United States, the Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands. Chapter 21 describes responsibilities and requirements pertaining to Navy installations in foreign countries. While following this guidance on storage tanks, installations shall also refer to chapter 11 for oil management ashore (SPCC plan requirements), chapter 12 for oil and hazardous substance spills (spill reporting and notification requirements), and chapter 15 for responsibilities and requirements pertaining to the accumulation and storage of HW.

13-1.1 References. The relevant references are:

(a) 40 CFR 112, EPA Regulations on Oil Pollution Prevention;

(b) 40 CFR 280, EPA Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;

(c) 40 CFR 110, EPA Regulations on Discharge of Oil;

(d) OPNAVINST 5100.23E, Navy Occupational Safety and Health Program Manual.

13-2 Legislation

13-2.1 Clean Water Act as amended by the Oil Pollution Act of 1990, 33 USC 1321.

a. The goal of the CWA is to protect the surface waters of the United States. Under the CWA, EPA published oil pollution prevention regulations in 1973 (amended in 1974, 1976, 2002 and 2004). These regulations, contained in reference (a), require the preparation of SPCC Plans and contain specific guidelines for the design and operation of bulk storage containers.

b. The guidelines for oil storage tanks, specifically bulk storage containers include preventative measures such as requirements for secondary containment, control of drainage from containment areas, corrosion protection of buried metallic tanks and piping, inspection and testing of aboveground tanks and piping, requirements for spill prevention devices such as high level alarms, security requirements for oil storage areas, and personnel training requirements.

13-2.2 Hazardous and Solid Waste Amendments. HSWA extended and strengthened the provisions of the SWDA as amended by RCRA. Subtitle I provides for the development and implementation of a comprehensive regulatory program for USTs containing "regulated substances" and releases of these substances to the environment. HSWA requires that Federal facilities comply with all

Federal, State, and local requirements regarding USTs, including payment of registration fees or permit fees when such fees are not taxes. States with approved UST programs or MOUs with the EPA have primary enforcement responsibility regarding UST program requirements in their States. Federal facilities must comply with all applicable provisions of the approved State UST programs.

13-2.3 Energy Policy Act of 2005 (EPACT05). EPACT05, Subtitle B is the Underground Storage Tank Compliance Act of 2005. The UST Compliance Act of 2005 contains amendment to Subtitle I of RCRA which significantly affects Federal and state UST programs. The UST Compliance Act of 2005 focus on preventing releases and includes provisions regarding inspections, operator training, delivery prohibition, secondary containment, financial responsibility, and cleanup of releases that contain oxygenated fuel additives. Section 15228 of EPACT05 modified section 9007 of the SWDA. This modification waived sovereign immunity for reasonable non-discriminatory user fees, inspection fees, monitoring fees; civil sanctions; civil fines; and criminal acts in owning, managing, and oversight of USTs. Refer any new request for user fees to legal for a determination of applicability.

13-3 Terms and Definitions

13-3.1 Aboveground Storage Tanks. Term used to describe oil and hazardous substance bulk storage containers or storage tanks not clearly identified as UST's and normally placed on or above the surface of the ground which are also regulated under reference (a). For purposes of this section, containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage tanks or aboveground storage containers**.** Note that a tank defined as an UST in reference (b) may also be defined as an AST in reference (a) as is the case with deferred UST systems.

13-3.2 Bulk Storage Container. Any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Under reference (a) only bulk storage container of 55 gallons or more in capacity are regulated. Oil Water Separators and grease traps are considered bulk storage containers in reference (a); however, they are generally exempted from any requirements per reference (a) paragraph 112.1(d)(6) unless they are used for the purpose of storing oil (see 67 *Federal Register* (FR) 47068 for more information). Oil-filled electrical, operating, or manufacturing equipment is not considered a bulk storage container. However operating equipment with containment with onboard petroleum storage capacity of greater than 55 gallons is subject to the general secondary containment requirements in reference (a) paragraph 112.7(c).

13-3.3 Hazardous Substance.

a. Any substance so designated by the CWA.

b. Any element, compound, mixture, solution, or substance so designated by CERCLA. The CERCLA list of hazardous substances can be found in 40 CFR 302.4.

c. Any solid waste having the characteristics identified under or listed pursuant to the Solid Waste Disposal Act (but not including any waste suspended by an Act of Congress).

d. Any hazardous air pollutant listed under the CAA.

e. Any imminently hazardous chemical substance or mixture upon which the Administrator of the EPA has acted under TSCA.

The term does *not* include substances regulated as hazardous waste under the Solid Waste Disposal Act (42 USC 6921.)

The term does *not* include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under CERCLA, CWA or the Solid Waste Disposal Act.

The term also does *not* include natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel.

13-3.4 Petroleum. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

13-3.5 Regulated Substance. Any HS and EHS regulated under CERCLA and EPCRA respectively, excluding any substances regulated as HW under Subtitle C of RCRA, and petroleum substances including crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. Some States exclude certain types of petroleum products and therefore, installations should refer to their respective state regulations.

13-3.6 Release. Any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of hazardous substances, EHS, petroleum from a ST into ground water, surface water, or subsurface soils.

13-3.7 Storage Tanks. All tanks and bulk storage containers (both above and underground) containing petroleum products or hazardous substances that are regulated under either reference (a) or (b). Under reference (b) only non-exempted or deferred tanks are regulated (see further information in the UST definition). Under reference (a), only container of 55-gallons in capacity or larger are regulated.

13-3.8 Tank Management Plan. A management document, for installation-level use, that stresses above and underground storage tank spill prevention, planning, regulatory compliance, and record keeping.

13-3.9 Underground Storage Tanks

a. As defined in RCRA, Subchapter IX, section 6991, the term “underground storage tank” means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. The regulations exclude the following:

- Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;

- Tanks used for storing heating oil for consumptive use on the premises where stored;

- Septic tanks;

- Pipeline facility (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, the Hazardous Liquid Pipeline Safety Act of 1979, or an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in (1) or (2);

- Surface impoundment, pit, pond or lagoon;

- Storm water or waste water collection system;

- Flowthrough process tank;

- Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

- Storage tank situated in an underground area (such as a basement, cellar, mine, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term underground storage tank shall not include any pipes connected to any tank described above in paragraphs 13-3.9.a.

b. In addition to the RCRA exclusions, EPA excluded the following UST systems from regulation under reference (b):

- Any UST system holding hazardous wastes listed or identified under Subtitle C of the SWDA, or mixture of such HW and other regulated substances;

- Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(b) of the CAA;

- Equipment or machinery that contains regulated substances for operation purposes such as hydraulic lift tanks and electrical equipment tanks;

- Any UST system whose capacity is 110 gallons or less;

- Any UST system that contains a de minimis concentration of regulated substances;

- Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

NOTE:
The above UST information concerns Federal statutes and regulations. State laws and regulations occasionally define UST systems differently than the Federal laws and regulations.

c. **Deferred UST.** USTs that are deferred from Subparts B (UST Systems; Design, Construction, Installation, and Notification), C (General Operating Requirements), D (Release Detection),

E (Release Reporting, Investigation, and Confirmation), and G (Out of Service UST Systems and Closure) of reference (b). These include:

- Wastewater treatment tank systems;
- Any UST systems containing radioactive materials that are regulated under the Atomic Energy Act of 1954 (42 USC 2011 and following);
- Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the USNRC under 10 CFR 50;
- Airport hydrant fuel distribution systems; and
- UST systems with field-constructed tanks.

NOTE:
The tanks listed above as deferred from subparts B, C, D, E, and G of reference (b) are still regulated by paragraph 280.11 of reference (b) and may be regulated by reference (a). Additionally, Emergency Power Generators USTs are deferred from subpart D only of reference (b). Excluded USTs are listed in paragraph 280.10(b) of reference (b).

NOTE:
States with approved plans may elect not to contain the above deferrals; therefore, state and local laws and regulations should be consulted.

13-4 Requirements

13-4.1 General Operation and Maintenance Requirements

a. Installations with STs will monitor transfer operations to ensure that spilling or overflowing does not occur. They will install and maintain overfill protection equipment in order to prevent releases.

b. Installations will maintain and inspect corrosion protection measures, including coatings and cathodic protection systems. Cathodic protection systems will be tested according to Federal, State, and local laws and regulations.

c. Installations will install ST systems and make repairs to existing ST systems according to Federal, State, and local requirements.

d. Installations will conduct temporary or permanent closure of STs in a manner ensuring protection of soil, surface water, and groundwater. In addition, such closures shall be conducted according to Federal, State and local regulations.

e. The installation will maintain written records demonstrating compliance with operational requirements.

f. Installations will operate, monitor, and test release detections systems according to Federal, state, and local laws and regulations.

13-4.2 Aboveground Storage Tanks

a. **General Operating Requirements.** ASTs containing petroleum are not regulated by RCRA. For ASTs containing petroleum, current Federal regulation is limited to the petroleum pollution prevention and discharge reporting requirements of references (a) and (c). Some States or local governments have developed AST, containing petroleum, regulatory standards, which may not apply to the Navy. In the event of discrepancy, installations shall obtain assistance from their Region/REC environmental staff or legal counsel to determine applicability of regulations.

b. **Release Detection, Testing, and Inspection.** Whenever possible, installations will install release detection systems on AST, containing petroleum systems per references (a) and (c). Such release detections devices, storage tank's tank supports, and alarms, will be routinely inspected to ensure they are operating properly and are in good condition. Inspections will be documented and inspection records kept for at least three years.

c. **Spill Prevention Devices.** ASTs will have overfill prevention devices or operating procedures in place that prevent overfilling the tank. A secondary containment system will be in place for each petroleum storage tank or container of 55 gallons, or greater, capacity. Spill prevention devices and secondary containment will be routinely inspected to ensure they are operating properly and are in good condition. Inspection reports will be kept for at least three years.

d. **Release Reporting, Investigation, and Confirmation.** Installations will report releases of petroleum or HS from ASTs according to the guidance in chapter 12. Installations will immediately investigate suspected releases from ASTs by reviewing storage records, conducting integrity testing, and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties not known to have previously contaminated, then installations shall conduct a release investigation of suspect ASTs in accordance with EPA or respective state regulations.

e. **Out-of-Service ASTs and Closure.** Installations will conduct permanent closure of ASTs per applicable State or local regulations. At a minimum, installations will empty and clean ASTs and associated pipelines and place locking caps on fill lines/risers. For permanent closure, if the AST is not removed, installations will also cap, blank flange, or grout affected pipelines, and maintain associated closure records. Installations will record site conditions, pipelines affected, actions taken, and maintain correspondence records with state and federal regulators.

13-4.3 Underground Storage Tanks

a. **General Operating Requirements**

(1) Installations will ensure all UST systems have corrosion protection, and spill/overfill prevention equipment combined with an approved method of release detection. These systems must meet applicable Federal and State regulations, and be installed per nationally recognized standards. Underground piping that conveys regulated substances must be properly designed and constructed to ensure protection from corrosion. Installations must provide automatic leak detection on pressurized piping and some types of suction piping and must conduct either annual tightness testing or monthly monitoring. After any repairs, the system must be tested for tightness and records of all repairs maintained for at least 5 years.

(2) Installations may be required to replace or upgrade existing USTs that are either exempt or deferred from Federal, State, or local UST regulations per the installations SPCC plan or per best management practices.

b. **Release Detection, Testing, and Inspections.** Note that any UST system that stores fuel solely for emergency power generators is exempt from Federal regulatory release detection requirements. Some State or local regulations may be more stringent. However, these USTs are covered by the SPCC regulation (40 CFR 112). All completely buried metallic tanks require regular leak testing for release detection (40 CFR 112.8(c)(iv).

(1) Installations will install release detection systems on petroleum and HS UST systems as required by Federal, State, or local regulations. Installations will also install release detection systems on non-regulated USTs whenever possible.

(2) Installations will maintain records demonstrating compliance with release detection, testing and inspection requirements.

c. **Release Reporting, Investigation and Confirmation**

(1) Installations will report releases and suspected releases from USTs to the EPA or State agency within 24 hours of discovery. The installation will report petroleum, HS releases into surface waters from USTs according to the guidance in chapter 12.

(2) Installations will immediately investigate suspected releases from USTs by conducting integrity testing and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties, then the EPA or State agency can require an installation to conduct a release investigation of suspect STs.

d. **Release Response and Corrective Action for UST**

(1) The installation must stop any further releases from the UST, and mitigate fire, explosion, and vapor hazards, by preventing any further release through the emptying of the UST system. The installation will take steps to prevent further migration of any aboveground or exposed below ground releases. If the source of an underground release is not known, conduct subsurface sampling in order to determine the source. Investigate the possible presence of free product and recover free product as soon

as practicable. UST releases into surface waters require installations to take the response actions described in chapter 12 or in chapter 15, as appropriate, in addition to the requirements described in this section, paragraph 13-4.3.d.

(2) UST releases require an initial abatement report, initial site characterization report, and free product recovery report to be submitted by the installation to the EPA or State agency in accordance with their respective regulations. In addition, a release investigation report and/or corrective action plan may be required by the EPA or State agency.

(3) Installations will clean up soil and groundwater contamination resulting from UST releases per approved corrective action plan or as otherwise authorized or requested by the EPA or State agency. Prior to any cleanup, the installation will notify the EPA or State agency.

(4) Installations will remove free-floating product to the maximum extent practicable.

e. **Out-of-Service UST Systems and Closure**

(1) Installations will maintain corrosion protection systems during temporary closure of UST system even if the system is empty. Continue to operate release detection systems unless the system is emptied.

(2) When temporarily closing USTs for 3 months or more, leave vent lines open and functioning and cap and secure all other lines, pumps, manways, and ancillary equipment.

(3) Installations will either meet the standards for USTs by upgrading or replacing them or will permanently close USTs that do not meet the standards within 12 months of temporary closure unless the EPA or State agency grants an extension.

(4) Installations will notify the EPA or State agency at least 30 days in advance of UST permanent closure. For a permanent closure, empty, clean, and either fill USTs with a solid inert material or remove them from the ground. Preferably, installations will remove associated pipings and ancillary equipment associated with USTs; if not, they shall cap, blank flange, and keep records of actions taken during closure. The installation shall conduct a site assessment at the time of permanent closure per local, state and federal regulations. If contamination is encountered during closure, the installation will initiate corrective action. For USTs regulated under SPCC regulations, the UST can not be considered "permanently closed until all product and sludge have been removed from the tank and associated lines, all connecting lines, and piping have been disconnected from the container and blanked off; al valves, except ventilation valves, have been closed and locked; and conspicuous signs have been posted on each container stating that it is a permanently closed container and the closure date.

(5) Continued use of a regulated UST system to store a nonregulated substance is considered a change-in-service. A change-in-service requires that the installation empty and clean out the UST and that a site assessment be performed by the installation. Notify the EPA or State agency 30 days in advance of a change-in-service.

(6) The EPA or State agency can require investigation and cleanup of USTs that were permanently closed prior to 22 December 1988 if the UST site poses a threat to human health or the environment.

(7) Installations will retain a permanent closure, site assessment, site characterization, and corrective action records for at least 50 years to protect the Navy from potential liability.

13-5 Navy Policy

13-5.1 The Navy's ST Program policy is to comply with all applicable Federal, State, and local regulations pertaining to the management of ASTs and USTs. However, because of the limited waiver of Federal sovereign immunity to the regulation of ASTs (e.g., the requirement that the AST could have an impact on "navigable water of the U.S." (see 40 CFR §. 112), legal counsel should be contacted if there are any questions concerning compliance with state or local AST regulations.

13-5.2 Whenever possible, the Navy shall replace older, unprotected steel tanks with state-of-the-art ASTs or state-of-the-art double-wall fiberglass USTs with continuous interstitial monitoring.

Preferred method of UST system closure is by removal. Installations shall leave a UST system in the ground and fill it with an inert material only when extenuating circumstances preclude the removal of a UST system.

13-5.3 Navy installations with STs shall have a tank management plan containing the following information:

- Listing of all STs at the installation.
- Regulatory requirements for each ST.
- A plan of action for achieving and maintaining compliance through monitoring, testing, inspection, removal, repair, retrofit, and replacement, of ST systems.
- Testing, inspection, maintenance, and repair schedules for ASTs and USTs.
- Include or reference compliance inspection records of ASTs and USTs.

Installations should include in the ST management plan all STs that have potential to cause environmental damages and/or health hazards, as well as non-regulated ASTs that are likely to be included in future Federal, State, or local regulations.

13-5.4 SPCC Plans. Installations will determine if a SPCC Plan is required. If so the installation will ensure that a Plan is in place that complies with EPA SPCC regulations. SPCC Plan requirements are covered in greater detail in Chapter 11 of this instruction.

13-5.5 Training. Commanders of shore installations shall ensure that all personnel involved in design, construction, installation, management and operation of storage tanks, receive appropriate storage tank training. They shall include the following topics in this training as applicable: Contents of the installation SPCC Plan; Federal, state, and local regulations pertaining to storage tank inspection and maintenance requirements; spill response procedures; standard operating procedures for transfers of oil or filling tanks; corrosion protection measures; compliance records; release detection reporting,

investigation, and confirmation; corrective action plans; closure, site assessment, , monitoring, removal, repair, retrofit, replacement, remediation, leak detection and product inventory requirements, record keeping, and operation of monitoring systems.

13-6 Responsibilities

13-6.1 BSOs and subordinate commands shall include requests for resources to meet ST compliance requirements in POM/budget submittals.

13-6.2 COMNAVFACENGCOM shall:

(a) Assist Navy installations in the preparation of ST Management Plans, SPCC Plans, and EPR Reports.

(b) Provide technical advice and assistance to Navy installations for leak detection requirements.

(c) Update technical directives and design manuals to reflect latest regulatory requirements for STs, including underground piping, other ancillary equipment, and leak detection devices.

(d) Provide assistance to major commands and their installations for estimation of resource requirements.

(e) Provide funding and execution of ST corrective actions that qualifies for Environmental Restoration, Navy ER,N funding, and are within current priorities.

(f) Ensure funding is available to train various NAVFAC commands personnel involved with STs.

(g) Provide an input in updating OPNAV instructions and policies related to ST requirements.

13-6.3 COMNAVSUPSYSCOM shall provide technical input and assistance to COMNAVFACENGCOM concerning leak detection, installation of STs, and the disposition of petroleum recovered during site restoration.

13-6.4 COs of shore installations shall:

(a) Assemble and collate ST data including storage tank volume, type, installation date, monitoring system, and tank contents for achieving and maintaining compliance with all applicable Federal, State, and local laws and regulations.

(b) Ensure that notification forms are completed for regulated STs and submitted to the appropriate Federal, State, or local agency.

(c) Prepare and maintain ST Management Plans and SPCC Plans if required with assistance from COMNAVFACENGCOM. The ST Management Plan shall include at a minimum, the requirements identified in Section 13-5.3.

(d) Accomplish leak detection, inspection, maintenance, and product inventory requirements, record keeping and operation of monitoring systems required by Federal, State, and local ST laws and regulations.

(e) Request sufficient resources to replace or repair STs including monitoring systems as required by applicable Federal, State, and local laws and regulations or by best management practices.

(f) Comply with applicable Federal, State, and local laws and regulations concerning the installation and closure of ST systems.

(g) Prepare EPR and required POM exhibits for all compliance mandated ST projects and mandated by Navy policy.

(h) Ensure that actions involving upgrading, removing and replacing tanks comply with health and safety requirements per reference (d). Whether government personnel or contractors remove the tanks, they shall plan and conduct associated activities to preclude injury to personnel and accidental damage to the environment.

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CHAPTER 14

PCB MANAGEMENT ASHORE

14-1 Scope

14-1.1 Summary. This chapter identifies requirements and responsibilities applicable to the prevention of pollution from polychlorinated biphenyls (PCBs) at Navy shore facilities within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.

14-1.2 Related Chapters. Chapter 21 provides Navy policy with respect to activities in foreign countries. Chapter 22 discusses PCB management aboard ship.

14-1.3 References. The relevant references are:

(a) 40 CFR 750-761, EPA Regulations for Controlling PCBs;

(b) Naval Facilities Engineering Service Center 20.2-028C, PCB Program Management Guide (NOTAL);

(c) DOD Directive 4140.1 of 22 April 2004, Supply Chain Materiel Management Policy (NOTAL);

(d) DOD Directive 4001.1 of 4 September 1986, Installation Management (NOTAL).

14-2 Legislation

14-2.1 Toxic Substances Control Act (TSCA). TSCA bans the use, manufacture, processing, and distribution in commerce of PCBs. TSCA prohibits importation of PCBs of any concentration, for disposal, without an exemption. TSCA and the PCB regulations also strictly regulate the marking, storage, and disposal of PCBs. Regulations issued under TSCA require generator identification numbers and the manifesting of PCB wastes. Some States regulate PCBs more stringently than the Federal program, including the regulation of PCBs at concentrations less than 50ppm or regulation of PCBs as hazardous waste.

14-3 Terms and Definitions

14-3.1 Capacitor. A device for accumulating and holding a charge of electricity, consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

- **Small Capacitor.** A capacitor that contains less than 1.36 kg (3 lbs) of dielectric fluid.

- **Large, High Voltage Capacitor.** A capacitor that contains 1.36 kg (3 lbs) or more of dielectric fluid and operates at 2,000 volts (ac or dc) or above.

– **Large, Low Voltage Capacitor.** A capacitor that contains 1.36 kg (3 lbs) or more of dielectric fluid and operates below 2,000 volts (alternating current (ac) or direct current (dc)).

14-3.2 In or Near Commercial Buildings. Within the interior of, on the roof of, attached to the exterior wall of, in an adjacent parking area serving, or within 30 meters of a non-industrial, non-substation building. Commercial buildings include:

– Civilian or Navy personnel assembly buildings

– Educational properties

– Institutional properties (including museums, hospitals, or clinics)

– Residential properties (living quarters)

– Stores

– Office buildings (including administrative buildings)

– Transportation centers (including airport terminal buildings, bus stations, or train stations).

14-3.3 Non-PCB Transformer. Any transformer that contains less than 50 ppm PCB; except that any transformer that has been converted from a PCB transformer or a PCB-contaminated transformer cannot be classified as a non-PCB transformer until reclassification has occurred per the requirements of reference (a).

14-3.4 PCB or PCBs. Any chemical substance, limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances that contain such substance. Prior to stringent regulation of PCBs, PCBs were used in a variety of applications as a fire retardant, in paints, and for other purposes such as sound insulating felt in submarines and electrical cables. Often, PCBs were added in these applications without being specified in material or equipment procurement specifications; thus, the presence of PCBs cannot always be determined through review of applicable procurement documents. In the disposal of materials and components, care should be taken to identify all potentially hazardous substances and carry out the disposal accordingly.

14-3.5 PCB Article. Any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. This includes capacitors, transformers, electric motors, pumps, pipes, and any other manufactured items.

14-3.6 PCB Article Container. Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment and whose surface(s) have not been in direct contact with PCBs.

14-3.7 PCB Bulk Product Waste. PCB bulk product waste means waste derived from manufactured products containing PCBs in a non-liquid state where the concentration at the time of

designation for disposal is greater than or equal to 50 ppm PCBs. PCB bulk product waste includes, but is not limited to:

- non-liquid bulk wastes or debris from the demolition of buildings and other man-made structures manufactured, coated, or serviced with PCBs.

- PCB-containing wastes from the shredding of automobiles, household appliances, or industrial appliances.

- plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); other similar coatings or sealants; caulking; adhesives; paper; Galbestos; sound deadening or other types of insulation; and felt or fabric products such as gaskets.

- fluorescent light ballasts containing PCBs in the potting material.

PCB bulk product waste does not include: PCB remediation wastes, Mineral Oil Dielectric Fluid (MODEF) removed from electrical equipment, hydraulic fluids, heat transfer fluids, oils removed from household appliances or equipment, bulk paint, waste oil.

14-3.8 PCB Container. Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB articles and whose surface(s) has been in direct contact with PCBs.

14-3.9 PCB-Contaminated Electrical Equipment. Any electrical equipment including, but not limited to, transformers, capacitors, circuit breakers, re-closers, voltage regulators, switches, electromagnets, and cable that contain 50 ppm or greater PCB but less than 500 ppm PCB.

14-3.10 PCB Equipment. Any manufactured item, other than a PCB container, that contains a PCB article or other PCB equipment. This may include appliances, electronic equipment, and fluorescent light ballasts and fixtures.

14-3.11 PCB Item. Any PCB article, PCB article container, PCB container, or PCB equipment that deliberately or unintentionally contains any PCB or PCBs at 50 ppm or greater.

14-3.12 PCB Leak. Any instance in which a PCB item has any PCB on any portion of its external surface or surroundings.

14-3.13 PCB Transformer. Any transformer that contains 500 ppm or greater PCB. The transformer classifications are:

- <50 ppm Non-PCB Transformer.

- 50 - <500 ppm PCB Contaminated Transformer.

- ≥500 ppm PCB Transformer.

14-3.14 PCB Waste Generator. Any person whose act or process produces PCBs that are regulated for disposal or whose act first causes PCBs or PCB items to become subject to disposal requirements or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated.

14-3.15 Quantifiable Level/Level of Detection. For PCB analysis, quantifiable level/level of detection means 2 micrograms/gram (2 ppm) from any resolvable gas chromatographic peak.

14-3.16 Totally Enclosed Manner. Any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

14-4 Requirements

14-4.1 General. Except as authorized in reference (a), EPA regulations ban the use of PCBs in any manner other than totally enclosed.

14-4.2 Transboundary Shipments of PCBs for Disposal. Per reference (a), no person may import PCBs or PCB Items of any concentration for disposal without an EPA exemption issued under the authority of TSCA section 6(e)(3). No person may export PCBs or PCB Items for disposal without an exemption, except that PCBs and PCB Items at concentrations <50 ppm (or <10ug PCB/100 cm^2 if no free-flowing liquids are present) may be exported for disposal. Other treaties and international agreements may also apply to export. Retrograde of U.S. manufactured PCBs from activities OCONUS is not considered export or import of PCBs under TSCA.

14-5 Navy Policy

14-5.1 Compliance with PCB Management Requirements. Navy activities shall comply with the requirements of reference (a) and applicable State and local PCB management requirements. Reference (b) is designed to assist Navy activities in complying with the Federal regulations governing PCBs. In addition, Navy activities shall observe the following:

- PCB Materials. All items or materials containing PCBs or suspected of containing PCBs shall be considered regulated unless exempt by regulation. PCBs may exist in older Navy electrical equipment and hydraulic and lubricating oils, subject to the restrictions in reference (a). NAVSEASYSCOM has established appropriate authorizations and controls for these materials on board Navy vessels and has issued material control requirements as NAVSEA PCB Advisories. In addition to Federal, State, and local requirements, perform all repair, removal, handling, storage, and disposal of PCB materials in accordance with applicable NAVSEA PCB Advisories.

- PCB Spill Reporting. Federal regulations list PCBs as a Hazardous Substance. A spill of a reportable quantity of "pure PCB" shall be immediately reported as required by regulation (see Chapter 12). Use the PCB concentration of the spilled material, the amount of material spilled, and the density of the particular type of PCB (if unknown, assume 10 lbs/gallon) to calculate the quantity of "pure PCB" spilled. The NCP requires the reporting of all spills involving 1 pound or more PCBs to the NRC at 1-800-424-8802. Report spills that directly contaminate surface water, sewers, drinking water supplies, grazing lands, or vegetable gardens to the appropriate EPA

regional office within 24 hours. States, particularly those that regulate PCBs as a HM/HW, may have a more stringent reporting requirement.

– PCB Spill Cleanup. All PCB spills shall be cleaned up per reference (a). The Federal PCB Spill Cleanup Policy presented in reference (a) applies to spills of PCBs (50 ppm or greater) that have occurred since 4 May 1987. Spills that occurred before 4 May 1987 are subject to the self-implementing cleanup provisions of reference (a) or requirements established at the discretion of the EPA or other authorized cleanup authority.

– Contractors. Activities shall ensure that contractors performing work for the Navy on Navy property comply with all applicable PCB requirements while on-site, including Navy requirements.

14-5.2 Navy and Defense Logistics Agency Interface on PCBs. Reference (c) designates DLA's DRMS as the responsible agency for worldwide disposal of all PCBs and PCB items. Navy installations shall use the DRMS PCB contract disposal services as much as economically and operationally feasible. However, when necessary to obtain the combination of quality, responsiveness, and cost that best satisfies installation requirements, Navy installations may use other appropriate contract authority to procure PCB disposal services as reference (d) permits. An installation using PCB disposal contract services other than DRMS shall ensure the contract requirements comply with Federal, State, and local PCB regulations; verify contract requirements and contract quality control procedures are at least as stringent as those used by DRMS; and, obtain concurrence by their BSO.

14-5.3 PCB Transformers in Commercial Buildings. Register PCB transformers in commercial buildings with the building owner. Register PCB transformers in or near commercial buildings with owners of all buildings located within 30 meters of the PCB transformer(s). For Navy installations, compliance with the requirement is adequate if PCB transformers in or near commercial buildings are registered as follows:

– For Navy tenants, with the organization that prepares fire evacuation plans.

– For non-Navy tenants, with the tenant host.

– Navy host installations shall register PCB transformers with EPA in accordance with reference (a).

14-5.4 Navy PCB Equipment Removal Policy. Navy policy is to eliminate PCBs from all Navy-owned electrical distribution systems and equipment, hydraulic fluids, and cooling and lubricating oils to the maximum extent practicable. The following procedures shall be followed:

– **Transformers**:
  - Determine by EPA-approved method, the PCB concentration for all pad mounted and pole mounted transformers. Transformers shall be marked according to classification: the M_L mark for PCB transformers, a tag showing PCB concentration and sample identification number for PCB-contaminated transformers, or a label indicating non-PCB. Activity records shall note the PCB test results (in ppm) for each transformer.

  - To reduce future potential liabilities, transformer elimination shall be accomplished by replacement or removal with load transfer to non-PCB transformers. Retrofill is an acceptable

alternative to replacement for transformers when it has a clear economic benefit (typically transformers in good condition, less than 25 years old, and 300 kilo-volt-ampere (KVA) or larger), and for those transformers that are difficult or impossible to replace due to the constraints of their physical location. For retrofill applications, consider environmentally preferred and/or biobased products.

- **Capacitors**: Establish an accurate inventory of high and low voltage capacitors based on manufacturing information. Mark large capacitors established to contain PCBs over 50 ppm as PCB contaminated and label each with the sample identification (ID) number and concentration. Mark large capacitors established as not containing PCBs as non-PCB. Activity records shall note the PCB classification of each large capacitor.

- **PCB Elimination Plan**:
  - All activities shall prepare a plan for the elimination of PCBs and PCB-contaminated material from all transformers, capacitors, and associated electrical equipment; and hydraulic and lubricating fluids. The plan shall include the proposed date of removal and the requested source of funding for each PCB item. Transformer and capacitor owners shall prioritize corrective projects based on risk and impact to mission if a fire, explosion, or major PCB spill were to occur and the likelihood of such an incident occurring. Transformer and capacitor owners shall coordinate priorities with impacted customers. Pay special attention to the redesign of the power grid to accommodate PCB removal.

  - Submit activity PCB Elimination Plans to the BSO for review and approval via the cognizant FEC. Update PCB Elimination Plans annually by 31 May until all regulatory requirements and Navy goals concerning the elimination of PCBs are met.

- **Procurement**: All future procurement of transformers or any other equipment containing dielectric or hydraulic fluid shall be accompanied by a manufacturer's certification that the equipment contains no detectable PCBs (less than 2 ppm) at the time of shipment. Newly procured transformers and equipment no longer require permanent labels stating they are PCB-free (no detectable PCBs); however, activities may find it useful to mark the items non-PCB for inventory purposes.

14-5.5 Training

a. Every person who repairs, maintains, replaces, inventories, or tests PCB, PCB-contaminated or suspected PCB articles and their immediate supervisors shall receive applicable NAVOSH Worker Right-to-Know Training on hazardous materials; shall receive job specific training on marking, inventorying, reporting, inspection, and spill reporting on PCBs; and, shall receive job specific training regarding additional requirements specific to their installation.

b. Every person involved in PCB program management at naval shore facilities shall receive general environmental overview training specified in Chapter 28 of this instruction; shall receive specific comprehensive training on Federal, State, and local PCB regulations related to their job assignment; and, shall be familiar with the provisions of this chapter.

c. Environmental professionals who provide implementation, technical guidance, or oversight of the PCB management program, at COMNAVFACENGCOM and NAVFAC field activities, Navy RECs, BSO and type commander environmental staffs, and legal environmental staff shall receive general environmental overview training specified in Chapter 28 of this instruction, introductory or executive overview training in PCB management, and shall be familiar with the provisions of this chapter.

d. Maintain training records and documentation as required by Federal, State, and local regulations.

14-6 Responsibilities

14-6.1 COMNAVFACENGCOM shall:

(a) Provide technical assistance to commands in complying with applicable Federal, State, and local PCB requirements.

(b) Evaluate alternatives to the use of PCBs in existing PCB equipment and transformers and provide such information to appropriate commands and activities.

(c) Make necessary changes to facility design criteria and operating instructions to incorporate Federal, State, and local regulations regarding PCBs and PCB items.

14-6.2 COMNAVSUPSYSCOM shall include provisions in inter-service support agreements (ISSAs) with DLA for DLA/DRMS/DRMO support of PCB requirements Navy-wide.

14-6.3 NETC shall develop and provide training on the occupational safety and health aspects of PCBs to Navy personnel as appropriate. Where possible, integrate this training into existing required curricula.

14-6.4 BSOs shall:

(a) Ensure compliance with applicable requirements, including PCB management at GOCO facilities.

(b) Ensure that all activities develop and implement PCB Elimination Plans and that funding is programmed to meet the goals of the elimination plans. At a minimum, program funding to ensure compliance with all applicable regulations and Navy goals for elimination of PCBs.

14-6.5 COs of shore activities shall:

(a) Budget, fund, and manage PCBs in full compliance with applicable Federal, State, and local PCB laws and regulations.

(b) Sign and submit, as appropriate, reports and other required data to EPA, State, or local agencies.

(c) Ensure the training of personnel involved in PCB operations per paragraph 14-5.5.

(d) Transfer accountability and custody of PCBs and PCB items stored for disposal to DRMO, insofar as possible.

(e) Handle, store, mark, inspect, and assess risks of PCBs and PCB items according to applicable Federal, State, or local regulations. With regard to PCB transformers and PCB contaminated transformers:

- Inspect for PCB leaks
- Repair all leaks
- Maintain records
- Provide notification to EPA

(f) Inventory or validate all PCBs and PCB items annually per procedures required by regulatory agencies. Maintain records of testing for PCB concentrations in hydraulic systems, heat transfer systems, and converted or reclassified transformers for the life of the equipment (through disposal).

(g) Report PCB spills or incidents involving combustion as prescribed in Chapter 12 when the spill exceeds the reportable quantities established in Federal regulations. Report fire-related incidents involving PCB transformers immediately to the NRC, regardless of quantity.

(h) No later than December 28, 1998, all owners of PCB transformers, including those in storage for reuse, were required to register their transformers with EPA in accordance with reference (a). A transformer owner who later discovers a PCB transformer must register the newly identified PCB transformer, in writing, with EPA no later than 30 days after it is identified as such. This requirement does not apply to transformer owners who have already registered PCB transformers and are located at the same address. Further, it is recommended that all PCB transformers and equipment be registered with cognizant fire departments.

(i) Develop and implement a PCB Elimination Plan in compliance with Federal, State, and local PCB regulations. Update the plan on an annual basis and send updated information to the BSO no later than 31 May of each year.

CHAPTER 15

HAZARDOUS WASTE MANAGEMENT ASHORE

15-1 Scope

15-1.1 Summary. This chapter identifies requirements and responsibilities for the management of hazardous waste (HW) and medical/infectious waste at Navy shore facilities within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.

15-1.2 Related Chapters. Chapter 13 provides policy for hazardous waste storage tanks. Chapter 21 provides Navy policy with respect to Navy activities in foreign countries. Chapter 22 defines responsibilities for the management of hazardous materials (HM) aboard Navy ships. Chapter 4 and Appendix G describe the Navy's integrated logistics approach for effective HM control and management. This chapter complements the approach by providing mandatory elements for an effective HW management program.

15-1.3 References. Although this chapter deals primarily with HW management, an effective overall HW management program must include HW and HM minimization and must integrate occupational safety and health policy into HW management. References are:

(a) 40 CFR 260-279, EPA Hazardous Waste Management Regulations;

(b) DRMS I 6050.1, Environmental Compliance for the DRMS Hazardous Property Program (S);

(c) BUMEDINST 6280.1A, Management of Infectious Waste;

(d) OPNAVINST 5100.19D, Navy Occupational Safety and Health Program Manual for Forces Afloat (NOTAL);

(e) DODD 4001.1 of 4 September 1986, Installation Management (NOTAL);

(f) DODI 4715.4 of 18 June 1996, Pollution Prevention.

15-2 Legislation

15-2.1 Resource Conservation and Recovery Act. RCRA, which amended the SWDA, regulates the management of solid waste and HW. The Hazardous and Solid Waste Amendments (HSWA) of 1984 amended RCRA to include cleanup, through corrective action, of releases of HW at RCRA-regulated facilities. RCRA requires cradle-to-grave management of HW through a recordkeeping system that tracks shipments of HW, from the point of generation to ultimate disposal, using a manifest. HW treatment, storage, and disposal facilities are regulated through the issuance of operating permits. RCRA provides that EPA may delegate authority to States to regulate HW under State law in lieu of RCRA. Irrespective of EPA-delegated HW authority, State HW substantive and procedural requirements, including the requirement

to obtain State permits, are applicable to Navy facilities under the Federal Facilities Compliance Act (FFCA).

15-2.2 Other Legislation. Several laws including the Hazardous Materials Transportation Act (HMTA), Occupational Safety and Health Act (OSHA), CWA, CAA, TSCA, FIFRA, and EPCRA govern HW.

15-3 Terms and Definitions

15-3.1 Facility. For the purposes of this chapter, a facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control.

15-3.2 Hazardous Waste. A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or

- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

NOTE:

State regulations may be more stringent and take precedence over Federal regulations.

15-3.3 Hazardous Waste Generator. Any person, by site, whose act or process produces HW or whose act first causes a HW to become subject to regulation.

a. **Large Quantity Generator.** Monthly generation quantity of 1,000 kilograms (kg) (2200 pounds (lbs)) or more HW or 1 kg (2.2 lbs) or more acute HW.

b. **Small Quantity Generator.** Monthly generation quantity of 100 – 1,000 kg (220 - 2,200 lbs) HW and less than 1 kg (2.2 lbs) acute HW.

c. **Conditionally Exempt Small Quantity Generator.** Monthly generation quantity less than 100 kg (220 lbs) HW and less than 1 kg (2.2 lbs) of acute HW. Such generators are exempt from substantially all RCRA requirements. Further discussion is found in reference (a).

15-3.4 Solid Waste. Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operation, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 USC Sect. 2011 *et seq*].

15-3.5 Universal Waste. Any of the following hazardous waste that are subject to the universal waste requirements 40 CFR Par 273: (1) Batteries as described in 40 CFR 273.2; (2) Pesticides as described in 40 CFR 273.3; (3) Mercury thermostats as described in 40 CFR 273.4; and (4) Lamps as described in 40 CFR 273.5.

15-4 Requirements

15-4.1 Hazardous Waste

a. **General.** Any activity that generates, transports, treats, stores, or disposes of HW and any activity that produces, burns, distributes, or markets any HW-derived fuels must notify the EPA or State environmental agency of their activities, obtain an EPA or State HW generator ID number, and comply with applicable Federal, State, and local HW laws and regulations.

Reference (a) contains the Federal RCRA regulations. Nearly all states are authorized by EPA to administer and enforce the RCRA program. A State with final authorization administers its HW program in lieu of EPA administering the Federal program in that State. When new, more stringent Federal requirements are promulgated, authorized States are obligated to enact equivalent authority within specified time frames. However, if such newly issued requirements are imposed under HSWA and are more stringent than the existing Federal RCRA program, they are enforceable by EPA until the State is granted authorization to do so. Compliance with applicable State and local HW regulations is also required.

b. **Identification of HW.** Generators must identify and designate all waste streams to determine if the waste streams are HW. HW is either "listed" (specifically named in Federal/State regulations) or may exhibit any of four characteristics:

- Ignitability
- Corrosivity
- Reactivity
- Toxicity (as determined by the toxicity characteristics leaching procedure (TCLP) or additional procedures under State law).

A determination of whether any of these four characteristics apply to a waste can be made by reviewing the definitions in the appropriate Federal and State regulations, comparing the properties of the waste to those that define HW, or by using EPA-approved test methods. Mixtures of a solid waste and a listed HW are also considered hazardous and are regulated under RCRA, unless the listed HW was listed solely for the characteristic of ignitability, reactivity, and/or corrosivity. Such mixtures are excluded from regulation as a hazardous waste once they no longer exhibit a characteristic. It is the generator's responsibility to determine whether their waste is a HW subject to regulation under RCRA and/or applicable State and local laws.

NOTE:

Knowingly diluting a HW for the purposes of avoiding HW regulations is prohibited.

c. **HW Generation and Accumulation.** Threshold monthly generation rates and accumulation quantities are established in Federal or State regulations. A large quantity generator may, subject to state and local regulations, accumulate hazardous waste on-site for 90 days or less without a permit or interim status provided certain waste management, contingency planning, and employee training requirements are met. A large quantity generator who accumulates HW for more than 90 days, as prescribed in Federal or State regulation, becomes an operator of a storage facility, subject to RCRA permit requirements, unless an exception has been approved by the appropriate federal or state regulatory agency. For active installations only, Regional Commanders and Installation Commanding Officers have the authority to sign RCRA permits.

Generation rates between 100 and 1,000 kilograms per month subject the generator, known as a "Small Quantity Generator," to HW generator requirements that include obtaining an EPA ID Number and using the Uniform Hazardous Waste Manifest to ship wastes off-site. A Small Quantity Generator may accumulate HW on site for 180 days or less without a permit or interim status provided the quantity of waste accumulated on-site never exceeds 6,000 kilograms, for all entities that produce waste within the property line of your command, and the Small Quantity Generator complies with all other applicable regulations. If more than 1,000 kilograms per month are generated, the generator and the waste are subject to full regulation under RCRA.

According to Federal HW regulations, HW accumulation at a satellite accumulation point is limited to a cumulative maximum of 55 gallons of all (not each) HW or one quart of acute HW. Satellite accumulation points must be located at or near the point of generation and be under the control of the operator of the process generating the HW at all times. Waste accumulated in excess of 55 gallons (cumulative) must be removed within 3 days (may be less in accordance with local regulations) to a less than 90-day accumulation area or a permitted storage facility.

Generators are obligated to send their HW to TSD facilities that comply with RCRA regulations. The generator must certify on the HW manifest that the method selected for treatment, storage, or disposal is the practicable method available to the generator that minimizes the present and future threat to human health and the environment. In addition, generators must certify that they have a HW minimization program in place to reduce the volume and toxicity of waste generated.

A generator who generates a HW subject to Federal land disposal restrictions must notify the TSD facility that the waste is a restricted waste or certify that the waste meets the requirements for land disposal.

d. **HW Transportation.** Transportation of HW off-site requires a HW manifest (see paragraph 15-4.1.f). Transporters must have an EPA identification number to pick up and haul waste to a TSD facility. A transporter of HW is also subject to the hazardous material transportation requirements of DOT, including labeling, marking, placarding, use of proper containers, spill reporting, and hazmat employee training. Transport of HW over a public highway requires the vehicle operator to have a commercial drivers license with a hazardous material endorsement. Some states may require additional training over DOT requirements.

e. **HW Treatment, Storage, and Disposal.** TSD facilities need a permit to continue existing operations or to initiate new operations. EPA initially developed a two-part permitting procedure. The Part

A application conferred interim status to an existing TSD facility, allowing the TSD facility to operate until receipt of a decision on the Part B final permit application.

TSD facilities may only be expanded or significantly changed and still remain in an interim status with the approval of EPA regional offices or the State HW office. Interim status cannot be conferred on a new TSD facility if operation commenced after 19 November 1980. In such instances, a final permit must be applied for and obtained before operation begins. Any operation before award of a Part B permit or modification of an existing Part B permit must be approved by the cognizant State or EPA.

Any existing facility that becomes subject to RCRA, due to new regulations or amendments to the existing regulations, may be granted interim status after timely submission of a Part A application and may have a 12 month grace period to submit its Part B permit application.

f. **HW Manifest System.** The Uniform Hazardous Waste Manifest or State equivalent must accompany all HW transported over any public road. A generator who offers HW for transport off-site must prepare a manifest.

Further, the generator or designated representative must sign the manifest certifying that the shipment has been prepared according to applicable EPA and DOT regulations. In circumstances where a PWC, NAVFAC or DRMO is managing the pickup, transport, and disposal of HW for an activity, the PWC, NAVFAC or DRMO may prepare the manifest, but the responsibility for correct and complete manifest preparation remains with the generator. The manifest does not replace DRMO Disposal Turn-in Document DD 1348-1A."

NOTE:

DRMO is not, in most cases, the HW generator and assumes none of the HW generator's responsibility for ensuring that wastes are correctly profiled or that manifests and all required documentation and reports are accurate and complete. DRMO may enter the facility's ID number on the manifest, but it remains the facility's responsibility to verify all information and to sign the manifest. If HM is turned into a DRMO for resale and is later determined by the DRMO to be HW, the DRMO will fulfill the generator requirements; however, records and manifests must be kept by the activity that actually generated the HW.

DRMOs will accept HM and HW in accordance with the turn in requirements in DOD 4160.21, Chapters 4 and 10. DOD policy requires Navy installations to use MSDS, and OSHA compliant labels (29 CFR 1910.1200). Reference (b) provides specific turn-in requirements. HM which does not have a MSDS or and OSHA compliant label will be received as waste and the generating activity must provide enough information to the DRMO to properly store and manage the property.

Sufficient copies of the manifest shall be provided to allow the generator, each transporter, and the TSD facility operator designated to receive the HW to keep a copy for their records and to allow copies to be returned to the generator for recordkeeping and distribution to the appropriate State(s). Activities shall also include a 24-hour manned duty telephone number in the "generator" block on each manifest. Each generator signatory shall be authorized in writing to sign the manifest for the installation commander and/or permit holder, as appropriate.

g. **Reporting and Recordkeeping.** There are many recordkeeping requirements applicable to generators and TSD facilities. Some records are specific to the generator or type of facility, and others are required by law. The following is a list of the most common reporting and recordkeeping requirements:

(1) Biennial Reports. Generators and TSD facilities shall submit a Biennial Report to the appropriate EPA regional office or designated State agency by 1 March of each even-numbered year (some States require an annual report rather than the biennial report). Maintain a copy of each Biennial Report for a period of at least 3 years from the due date of the report.

(2) Manifests. Except as otherwise required by State law, copies of manifests signed by the generator, the transporter, and the TSD owner or operator must be maintained for 3 years from the date the HW was accepted by the original transporter.

Large Quantity Generators who have not received a signed manifest within 35 days of the date the HW was shipped must contact the transporter or designated TSD facility to determine the status of the waste. Generators who do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated TSD facility within 45 days of the date the HW was shipped must file an Exception Report with the EPA or State, as appropriate. Maintain a copy of each Exception Report for a period of at least 3 years from the due date of the report.

Small Quantity Generators who do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the EPA Regional Administrator for the Region in which the generator is located.

If a TSD facility accepts hazardous waste from an off-site source without an accompanying manifest, the TSD operator must submit a report to the EPA Regional Administrator or appropriate State office within 15 days after receiving the waste.

(3) Land Disposal Restriction (LDR) Notifications and Certifications. Generators of waste must determine whether their waste meets the LDR treatment standards, either by testing or using knowledge of the waste. With the initial shipment of waste, the generator must transmit a one-time written notice to each TSD facility receiving the waste and place a copy in the generator's file. The notice should include the applicable notification and certifications in accordance with the LDR section of reference (a). No further notification is necessary unless the waste or TSD facility change, in which case a new notification must be sent and a copy placed in the generator's file.

Whether waste determinations are based on knowledge of the waste or analytical testing, generators must retain all supporting data used to make the determination in the on-site files.

Generators managing and treating HW in less than 90 day tanks or containers, in order to meet applicable LDR treatment standards, must develop and follow a written waste analysis plan that contains all information necessary to treat the waste(s) in accordance with the LDR requirements. The plan must be kept

on site in the generator's records. Generators managing hazardous waste in a Clean Water Act system must maintain a one-time note to the on-site file.

Generators must retain on-site a copy of all notices, certifications, waste analysis data, and other documentation related to the RCRA Land Disposal Restrictions for at least 3 years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. The 3-year record retention period is automatically extended during the course of any unresolved enforcement action.

(4) Spill reporting. In the event of a fire, explosion, or other release which could threaten human health outside the facility or when a spill has reached surface water, the emergency coordinator must immediately notify the National Response Center (using their 24-hour toll free number 1-800-424-8802). Additional notification may be required by the facility spill response plan. See Chapter 12 for spill procedures and reporting requirements. Transporters shall report any discharge of HW in transit as specified in Federal regulations.

(5) Training Documentation. Generators and operators of TSD facilities shall develop a training plan and maintain personnel training records of those engaged in hazardous waste management, as required by Federal and State regulation. Federal RCRA regulations require that training records on current personnel be kept until closure of the facility. Training records on former employees must be kept for at least 3 years from the date the employee last worked at the facility. Training documentation requirements apply to the following types of training:

- General awareness training
- 40 hour initial training for facility operators
- 24 hour supervisory operations for facility managers
- 8 hour HAZWOPER refresher annual training
- Annual Spill response training
- Biannual manifest training

(6) Pollution Prevention Annual Data Summary. Navy generators shall submit a P2ADS annual calendar year report to NFESC. (See paragraph 15-5.4). Additional reports and recordkeeping requirements apply for specific types of facilities. A thorough review of the regulations applicable to the facility is necessary to ensure complete records are maintained.

Though not required by regulation, it is good practice to keep a written record of inspections such as that of waste accumulation and container storage areas. In addition, copies of correspondence with regulators, applications for permits and renewals, report of releases, documentation of response actions, etc., are all useful should a question arise.

h. **Federal Facility Compliance Act.** The FFCA of 1992 subjects Federal facilities to all provisions of Federal, State, interstate, and local HW laws and regulations. The full range of available enforcement tools, including civil fines and penalties, are available to EPA, States, and local governments in

enforcing these laws and regulations. The FFCA exempts agents, employees, and officers of the United States from personal liability for any civil penalty arising from acts or omissions within the scope of their official duties. The installation or command whose activities most directly led to the violation(s) is responsible for payment of possible penalties with its operating budget or other available sources of funds. The FFCA also requires payment of any non-discriminatory fees or service charges assessed in connection with a Federal, State, interstate, or local HW regulatory program. This includes assessments in connection with the processing and issuance of HW permits; amendments to permits; reviews of plans, studies, and other documents; and, the inspection and monitoring of facilities.

15-4.2 Radioactive Mixed Waste. Sometimes RCRA HW becomes mixed with radioactive waste, creating a combination that is regulated under both RCRA and the Atomic Energy Act. The Director of Naval Nuclear Propulsion Program (CNO (N00N)) is responsible for all policy and other matters pertaining to radioactive mixed waste resulting from naval nuclear propulsion work, and CNO (N4) is responsible for all other Navy mixed waste. RCRA Generator requirements apply to mixed waste. Refer to Navy Nuclear Propulsion Program (NNPP) policy on mixed waste management.

15-4.3 Infectious Waste Management. Federal facilities that generate infectious waste are responsible for complying with State and local infectious waste regulations. Federal facilities that transport infectious waste across State lines are also responsible for complying with the transporter, disposal, and manifesting requirements for the State into which it is transported. See reference (c) for definitions and management procedures of infectious waste.

15-5 Navy Policy

15-5.1 General. Navy HW processes shall incorporate the following elements of pollution prevention:

- HM considerations, especially those relating to environment, safety, and health shall be incorporated into the earliest stages of Integrated Logistics System (ILS) planning and acquisition.

- HM and HW shall be incorporated into an activity's EMS.

15-5.2 Compliance with HW Management Requirements. Navy activities shall comply with applicable HW management requirements. Compliance with all aspects of an EPA-approved State HW management program is considered compliance with Federal requirements. Contracting offices shall ensure that contractors performing work for the Navy on Navy property comply with all applicable requirements while on site. If a State has a program that is not approved by EPA, Navy activities shall comply with both the State and Federal program requirements.

a. **Applicability of RCRA to Navy Ships and Navy Shore Activities.**

(1) The 1992 FFCA provides that any HW generated on public vessels (which includes Navy vessels) shall not be subject to the storage, manifest, inspection, or recordkeeping requirements of RCRA until such waste is transferred to a shore facility, unless:

- The waste is stored on the public vessel for more than 90 days after the public vessel is placed in reserve or is otherwise no longer in service, or

- The waste is transferred to another public vessel within the territorial waters of the United States and is stored on such vessel or another public vessel for more than 90 days after the date of transfer.

Shore facilities shall manage used and/or excess HM and solid waste transferred from a Navy ship in compliance with applicable HM, HW, and solid waste regulations. For all used HM and solid waste determined by the shore facility to be HW, the shore facility shall be the HW generator and shall assume all responsibility for subsequent management of the HW except for funding. Ships' or fleet accounts as appropriate shall reimburse the receiving shore facility for HW handling and disposal and for lab testing if needed.

Ships' forces must follow the requirements of reference (d) with respect to the segregation, packaging, handling, safety, and labeling of HM. In addition ships shall segregate solid waste in compliance with regulations of the State in which the waste is to be off loaded; the receiving shore facility shall provide information regarding waste segregation requirements. The "Used Hazardous Material" label required by reference (d) for every container of used HM transferred from the ship contains a process description of how the HM was used. If the ship does not provide identification and labeling, the receiving shore activity may designate ship's used HM and solid waste based on laboratory analysis and charge the ship or fleet accounts for lab testing and any additional handling, documentation, administrative, and overhead costs. (Accurate process descriptions based on special knowledge will often suffice to allow the receiving shore facility to designate waste and is preferable to expensive lab testing).

Cooperative, "partnership" relations between shore facilities and ships are encouraged. Ships shall make every effort to ensure HM and solid waste are properly segregated, identified, and transferred; receiving shore facilities shall make every effort to provide quality, timely service to the ships. Shore facilities may refuse to accept HM or solid waste from ships if the segregation, identification, or process description is insufficient or incorrect, though to do so would acknowledge a breakdown in the desired cooperative "partnership" relation. Problems experienced with HM or solid waste received from a ship should be reported to the ship's CO, and if flagrant or repeated, to the ship's immediate superior in command (ISIC).

Retrograde of HM/HW from activities OCONUS is not considered importation of HW under the RCRA regulations. Following proper arrangements, Navy activities shall accept OCONUS DOD shipments of HW.

A ship scheduled for decommissioning shall remove all HM prior to the date of decommissioning to the extent practical and appropriate. All HM shall be removed from the ship and processed by the supporting shore activity within 90 days after decommissioning.

Except where used HM is transferred from a tended unit to a tender, ships shall only transfer used HM to another ship during operations that preclude the ship entering a port in which normal offload may occur. Transfers of HM shall be for the sole purpose of returning the material to a supporting shore activity. The operational commander must approve such transfers prior to accomplishment. All used HM received by the receiving ship shall be offloaded within 5 working days of arrival at a U.S. Navy port.

(2) **HM/HW from Navy Ships in Private Shipyards.** Federal contract law establishes several requirements regarding HW management under contracts, other than new construction, for work on board Navy ships in shipyards. Those requirements primarily affect Navy ships entering private shipyards for work administered by COMNAVSEASYSCOM; however, ships undergoing contracted work at Navy activities and under the cognizance of COMSC are also affected. These requirements are discussed in Chapter 22.

(3) **Transporting Shore-Generated Hazardous Waste Aboard Ship.** The Navy has not applied for, and ships have not been granted, EPA identification numbers for transport of HW. Therefore, ships shall not accept HW from a Navy shore activity, either within or outside the U.S., for transportation to another activity or facility, either within or outside the U.S. for processing and disposal, unless that ship has an EPA identification number for transport of HW.

(4) **Application for EPA generator ID numbers.** Navy vessels shall not be specified as the 'generating site' by any entity applying for an EPA generator ID number. This applies to Navy organizations as well as contractors, at Navy facilities or contractor owned facilities.

b. **Applicability of RCRA to Military Munitions and Ordnance.** Navy and DOD current policy is that military munitions and ordnance are not a HW subject to regulation under RCRA until there is an intent for DOD to dispose of or destroy them. Sites used for disposal or destruction of ordnance by open burning or open detonation, not related to training or EOD emergency action, are subject to RCRA regulations. In that regard:

- Assignment of munitions or ordnance to the Special Defense Property Account or Centralized Demilitarization Account does not by itself constitute a designation as a HW. Those munitions are, rather, awaiting a final decision of use, reuse, reclamation, sales, or demilitarization.

- RCRA HW requirements are applicable to the demilitarization process at the point where a determination is made in writing by an authorized DOD representative that the munition shall be discarded rather than retained as an item of military ordnance.

- After the decision is made to dispose of or destroy military munitions or ordnance, such items shall be managed per RCRA requirements and strictly under DOD regulations. Any resultant products generated by a demilitarization process such as ash, sludge, or a residue, shall be analyzed to determine if it is a RCRA HW and managed according to analytical results.

- EOD emergency response is a non-routine operation conducted to abate an imminent and substantial hazard to public health, safety, or property, and such operations are not subject to regulation under RCRA. If, however the site is used for open burning or open detonation to dispose of or destroy munitions or ordnance not related to training or emergency operations then such sites are subject to regulation under RCRA. RCRA requirements do not apply to EOD sites used solely for training or to sites used for emergency operations.

- Munitions and ordnance firing/explosive activities for training, research and development, and QA/QC testing purposes shall not be considered demilitarization or disposal operations. Further, RCRA regulations are not applicable to the associated firing tables or impact ranges (as long as such areas are not used for demilitarization or disposal purposes).

- Off-specifications small arms ammunition of calibers up to and including 50 caliber shall not be considered 'reactive' within the definition in RCRA (unless they contain high explosives. They could, however, be HW for some other reason such as toxicity.

- Navy installations shall comply with appropriate RCRA permitting requirements for demilitarization operations for conventional munitions and ordnance. Permits obtained shall adhere to RCRA regulations and DOD procedures and provide for adequate protection of human health and the environment and shall avoid unnecessary administrative burdens or operational requirements that would limit DOD's flexibility in managing its demilitarization program.

- The management of explosive HW components and associated explosive wastes shall be included in activity HW Management Plans.

15-5.3 HW Management Plans. Every Navy shore activity that generates HW shall develop and use a HW Management Plan or a HW management component in its P2 Plan and EMS. A HW Management Plan or component(s) shall:

- Identify applicable Federal, State, and local regulations pertaining to the generation and management of HW.

- Identify training requirements and describe procedures for obtaining training and maintaining training records.

- Assign responsibilities for the generation, designation, handling, storage, treatment, disposal, and all documentation.

- Describe all HW generation and management procedures.

- Include or reference the HW minimization plan and goals.

- Include or reference contingency plans and emergency response procedures.

The plan or component shall be kept up to date to include changes in HW generation and management procedures, as well as changes in applicable Federal, State, and local HW regulations. The plan or component shall include or reference minimization procedures sufficient to achieve DOD minimization goals. Tenant activities may be covered by the host CO's HW Management Plan.

15-5.4 Navy Pollution Prevention Annual Data Summary. All Navy shore installations that generate, store, treat and/or dispose of HW shall prepare an annual calendar year report (Report Symbol DD-A&T(SA) 1485 (5090)), per guidance provided by NFESC. A completed annual report for the previous calendar year shall be sent to NFESC by 16 March. NFESC will provide the data to BSOs for review prior

to submitting a final report to CNO. All Large Quantity and Small Quantity Generators shall report. Installation reports should include all Navy tenants that generate hazardous wastes. Conditionally Exempt Small Quantity Generators who are tenants shall be included in the report of their host installation. Conditionally Exempt Small Quantity Generators that are not under a host command are not required to report. See Chapter 16 for a discussion of other solid waste reporting.

15-5.5 Navy and Defense Logistics Agency Interface on HW. The DLA's DRMS is designated the responsible agency for worldwide disposal of all HW. However, reference (e) permits COs to contract directly for HW disposal service when, "...they can get a combination of quality, responsiveness, and cost that best satisfies their requirements." The Assistant Secretary of Defense (Production and Logistics) (ASD(P&L)) in a memorandum dated 9 August 1989 (NOTAL) reemphasized the CO's prerogative to dispose of HW directly and specifies that, "...such decisions should be concurred in by the component chain of command to ensure that installation contracts and disposal criteria are at least as stringent as criteria used by DRMS."

Navy installations shall use DLA HW contract disposal services as much as economically and operationally feasible. However, for those wastes not managed by DLA or when necessary to get the combination of quality, responsiveness, and cost that best satisfies installation requirements, Navy installations may request some other appropriate contract authority to provide contracting services for HW disposal. An installation not using DRMS contract services shall insure the contract requirements comply with Federal, State, and local HW regulations; shall ensure contract requirements and contract QC procedures are at least as stringent as those used by DRMS; and, shall obtain concurrence by their BSO. Generator liability and responsibilities are the same whether using DLA HW contracting services or any other HW contracting service.

15-5.6 HW Minimization. Navy activities shall reduce HW generation and disposal per references (e) and (f), and by implementing a combination of the following procedures and processes in priority order:

- Eliminating and/or reducing, at the source, the use of HM by changing the process, equipment, requirement, or materials used.
- Substituting a less hazardous/toxic HM in the process.
- Recycling/recovery and reuse of HM.
- Reducing and/or eliminating excess and expired shelf-life HM.
- Treating HW to reduce the volume or to reduce it to a less toxic or non-hazardous state.
- Destruction of HW.
- Disposal as a last resort.

When requirements in technical directives or weapon system procedures require use of HM beyond the control of the activity, appropriate action shall be taken to advise the cognizant Echelon 2 command of the need for appropriate action.

a. **Certification.** Federal laws and regulations require certification on HW manifests that the activity, insofar as is economically practicable, has a program to minimize the volume and toxicity of wastes generated. To make such a certification, Navy activities shall have a pollution prevention plan or hazardous waste minimization plan with POA&M. See Chapter 4.

b. **Goals.** The long-term Navy goal is to eliminate HW disposal to the maximum possible extent by eliminating the use of HM and/or by implementing best management practices (BMPs) and best demonstrated available technology (BDAT).

15-5.7 Training

a. Every person who produces, packages, handles, treats, or transports hazardous waste shall have received applicable NAVOSH Worker Right- to-Know Training on hazardous materials; shall receive applicable training as shown on Figure 15.1; and, shall receive job-specific training regarding hazardous waste safety, packaging, labeling, handling, documentation, transportation, and turn-in procedures specific to their installation. Training curricula shall be tailored to include State and local HW laws and regulations.

Each command shall maintain training records and documentation as required by Federal, State, and local regulations.

b. Every person involved in hazardous waste management at naval shore facilities shall receive the general environmental overview training specified in Chapter 28 of this instruction; shall receive specific comprehensive training on Federal, State, and local HW regulations related to their job assignment; and, shall be familiar with the provisions of this chapter.

c. Every person who directly affects HW transportation safety in commerce shall receive training on compliance with applicable DOT requirements and HM transport safety.

d. Environmental professionals involved with HW at COMNAVFACENGCOM and FECs, Navy RECs, BSO and regional commander environmental staffs, and legal environmental staff shall receive the general environmental overview training specified in Chapter 28 of this instruction, introductory or executive overview training in hazardous waste management, and shall be familiar with the provisions of this chapter.

15-6 Responsibilities

15-6.1 **BSOs** shall:

(a) Ensure that their activities comply with applicable Federal, State, and local HW laws and regulations.

(b) Ensure subordinate commands develop and use HW Management Plans or a HW management component of P2 Plans as required by section 15-5.3.

(c) Budget and allocate sufficient resources to ensure shore activities manage HW per all applicable Federal, State, and local HW laws and regulations, including the assignment and

training of operational and management personnel, operation and maintenance of equipment and facilities, transport and disposal of waste, etc.

(d) Ensure their activities comply with Navy HM and HW management and reporting requirements.

15-6.2 COMNAVFACENGCOM shall:

(a) As requested, provide technical assistance to BSOs and activities in complying with Federal, State, and local HW laws and regulations and in the preparation of activity HW management and Pollution Prevention Plans.

(b) Prepare an annual P2ADS. The report shall show progress toward achieving goals by each BSO and the Navy as a whole and other information as directed by CNO (N45).

(c) Assist ships, BSOs, and shore activities in reaching a long-range goal of elimination of HW disposal to the maximum extent possible.

(d) Designate and supervise PWCs in receiving, storing, and shipping HW.

(e) As requested, assist shore activities in obtaining permits for all new HW management facilities.

(f) Pay fees for applications and permits for construction of MILCON-funded HW management facilities from funds appropriated for the project.

15-6.3 COMNAVSUPSYSCOM shall:

(a) Establish and implement an HMC&M program as required by reference (f) throughout the supply system.

(b) Maintain and update procedures and instructions to ensure that transportation, storage, and handling of HM/HW fully complies with applicable regulations.

(c) Develop a program for the acquisition, stocking, and supply of conforming containers required for the transportation and storage of HW.

(d) Include provisions in ISSAs with DLA for DLA/DRMS/DRMO support of HW requirements Navy-wide.

15-6.4 Director of Naval Nuclear Propulsion Program (CNO (N00N)) is responsible for all matters pertaining to radioactive mixed waste resulting from Naval nuclear propulsion plants.

15-6.5 NETC shall develop and provide training on the occupational safety and health aspects of HW and HM applicable to Navy personnel.

15-6.6 BUMED shall:

(a) Ensure reference (c) instruction on infectious waste management for Navy medical treatment facilities is current.

(b) Ensure that subordinate commands comply with Federal, State, local, and SOFA requirements regarding the identification, generation, handling, storage, transport, treatment, and disposal of infectious waste.

15-6.7 COs of shore activities in coordination with the appropriate regional commander shall:

(a) Develop and use a HW Management Plan or HW component of a P2 Plan as required by section 15-5.3 of this chapter.

(b) Budget, fund, and manage HW in full compliance with applicable substantive and procedural Federal, State, and local HW laws and regulations.

(c) Cooperate with Federal, State, and local HW regulatory officials.

(d) Provide reports and other required data and information to Federal, State, and local HW regulatory agencies.

(e) Submit a P2ADS to NFESC.

(f) If CO of a host activity, serves as the HW generator for the "site" or "facility" as defined by the applicable regulatory agency and obtain and maintain applicable HW generator ID number.

(g) If CO or officer in charge of a tenant activity, comply with the policies of this manual and with written HW Management Plans established by the host CO.

(h) Provide training for all personnel involved in HW management and operations under applicable Federal, State, and local requirements.

(i) If in charge of port facilities, receive HM from ships and process it for reuse or disposal per applicable Federal, State, and local regulations.

(j) If a generator of infectious waste:

- Comply with the infectious waste management procedures specified in reference (c).
- Determine, evaluate, and comply with Federal, State, local, or Status of Forces Agreement (SOFA) regulations that are more stringent than the requirements in reference (c).
- Request technical assistance, as required, from cognizant NAVFACENGCOM or BUMED in carrying out required actions.

- Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, treat, and dispose of infectious waste per applicable Federal, State, local, or SOFA regulations.

15-6.8 COs of shore activities assigned to receive used/excess HM, solid waste, or infectious waste from ships and HW from other shore activities shall:

(a) Receive ships' used/excess HM and solid waste and process it for reuse or for disposal as HW per Federal, State, and local environmental laws and regulations.

(b) Provide accessible facilities to receive HW and to store it per applicable EPA and/or State regulations until the material is disposed or transferred to DLA.

(c) Provide accessible facilities to receive and store infectious waste per applicable Federal, State, local, or SOFA regulations until disposal of the materials.

(d) Provide for disposal of infectious waste per applicable Federal, State, local, or SOFA regulations.

(e) Manage infectious wastes in foreign countries to assure protection of human health and the environment, as well as meet any applicable SOFA requirements.

15-6.9 Fleet commanders and type commanders, as appropriate, shall:

(a) Reimburse Navy shore activities receiving ships' used/excess HM and solid waste for expenses incurred for laboratory analysis, HW handling, storing, and disposal.

(b) Reimburse Navy shore activities receiving ships' infectious waste for expenses incurred in handling, storing, and disposing of the material.

Figure 15-1 Health and Safety Training Requirements for Hazardous Waste and Emergency Response

Hazardous Waste Clean-Up Sites		Other Emergency Response Staff	
Staff			
• **Routine site employees**	40 hours initial 24 hours field 08 hours annual refresher 24 hours supervised field	Level 1 - First responder (awareness level)[1]	Sufficient training or proven experience in specific competencies
• **Routine site employees (minimal exposure)**	24 hours initial 08 hours field 08 hours annual refresher	Level 2 - First responder (operations level)[2]	Level 1 competency and 8 hours initial or proven experience in specific competencies
• **Non-routine site employees**	24 hours initial 08 hours field 08 hours annual refresher		Annual refresher
Supervisor/Managers of			
• **Routine site employees**	40 hours initial 24 hours field 08 hours hazardous waste management 08 hours annual refresher 8 hrs command specific job site training	Level 3 - HAZMAT technician[3]	24 hours of Level 2 and proven experience in specific competencies Annual refresher
• **Routine site employees (minimal exposure)**	24 hours initial 08 hours field 08 hours hazardous waste management 08 hours annual refresher	Level 4 - HAZMAT specialist[4]	24 hours of Level 3 and proven experience in specific competencies Annual refresher
• **Non-routine site employees**	24 hours initial 08 hours field 08 hours hazardous waste management 08 hours annual refresher	Level 5 - On scene incident commander[5]	24 hours of Level 2 and additional competencies Annual refresher

Note: See 29 CFR 1910.120 (q)(6).

Treatment, Storage, and Disposal Sites	
Staff	
• **General Site employees**	24 hours initial or equivalent 08 hours annual refresher
• **Emergency response personnel**	Trained to a level of Competency Annual refresher

Note: See 29 CFR 1910.120 (e) and (p)(7).

[1] *Witnesses or discovers* a release of hazardous materials and who is trained to notify the proper authorities

[2] *Responds* to releases of hazardous substances in a defensive manner, without trying to stop the releases

[3] Responds aggressively to stop the release of hazardous substances

[4] Responds with and in support to HAZMAT technicians, but who has specific knowledge of various hazardous substances

[5] Assumes control of the incident scene beyond the first-responder awareness level

CHAPTER 16

SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY ASHORE

16-1 Scope

16-1.1 Summary. This chapter identifies solid waste management, waste prevention, and recycling policies. All Navy installations worldwide that generate 1 or more tons of solid waste per day must follow the solid waste reporting, solid waste management planning, recycling requirements, and affirmative procurement requirements outlined in this chapter. Requirements derived from RCRA and similar statutes apply to installations within the United States, the Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Commonwealth of the Northern Marianas Islands. Chapter 21 discusses additional Navy policy for overseas installations.

16-1.2 Related Chapters. Chapter 4 discusses pollution prevention. Chapter 11 covers reclamation and recycling of used oils. Chapter 15 discusses the management of HW. Chapter 22 discusses the handling of solid wastes aboard ship.

16-1.3 References.

(a) 29 CFR 1910, Occupational Safety and Health Standards;

(b) 40 CFR 247, Guidelines for Procurement of Products that Contain Recycled Material;

(c) 32 CFR 172 (DODI 7310.1 of 10 July 1989, Disposition of Proceeds from Sales of Surplus Property);

(d) DOD Memorandum, 18 August 1993, DOD Personal Property Disposal and Recycling. Guidance for personal property disposal and recycling operations; (NOTAL);

(e) 40 CFR 246, Guidelines for Source Separation for Materials Recovery;

(f) 40 CFR 243, Guidelines for Solid Waste Storage and Collection;

(g) NAVMED P5010, Manual of Naval Preventive Medicine;

(h) 40 CFR 262.11, Hazardous Waste Determination;

(i) 40 CFR 240, Guidelines For The Thermal Processing Of Solid Wastes;

(j) 40 CFR 268, Regulations on Land Disposal Restrictions;

(k) 40 CFR 257, Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices;

(l) 40 CFR 258, Criteria for Municipal Solid Waste Landfills;

(m) DEPSECDEF Memorandum, 28 January 1983, Sales of Recyclable Materials. Interim Guidance for Establishing and Operating a Qualified Recycling Program Establishment and Implementation; (NOTAL)

(n) Naval Energy and Environmental Support Activity (NEESA) 5.0-004, Solid Waste Management Plan (SWMP) Guide; (NOTAL) (available from NFESC);

(o) NFESC UG-2039-ENV, Qualified Recycling Program Guide; July 2000 (NOTAL);

(p) DODI 4715.4 Pollution Prevention, 1 July 1998 (NOTAL);

(q) UFGS Guide Specification 01572, Construction and Demolition Waste Management;

(r) EO 13423 Strengthening Federal Environmental, Energy, and Transportation Management;

(s) DOD Memorandum, 12 October 2004, Revised Pollution Prevention and Compliance Metrics;

(t) Deputy Under Secretary of Defense (Environmental Security) (DUSD(ES)) Memorandum, 15 May 1998, Recycling of Firing-range Scrap Consisting of Expended Brass and Mixed Metals Gleaned from Firing-Range Clearance Through Qualified Recycling Programs;

(u) Solid Waste Annual Report-Base (SWAR-Base), available from the Defense Environmental Security Corporate Information Management (DESCIM), 200 Stoval St. Rm. 12549, Alexandria, VA 22332-2300 or by download from DENIX Website.

16-2 Legislation

16-2.1 Federal Facilities Compliance Act. This law allows Federal and State regulators to enforce federal, state, and local solid waste laws and regulations at Federal facilities. FFCA requires Federal facilities to pay any nondiscriminatory fees or service charges assessed in connection with a Federal, State, interstate, or local solid or HW regulatory program.

16-2.2 Military Construction Authorization Act of 1975 (amended 1982). This Act allows an installation to use the proceeds from the sale of recyclable material to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or OSH projects.

Military Construction Codification Act Section 6, 1982. Amends 10 USC 2577 to allow the use of recycling proceeds for MWR activities.

16-2.3 Occupational Safety and Health Act, 1970, 29 USC 651 *et seq*. This Act assures safe and healthful working conditions for men and women by authorizing enforcement of the standards developed under the Act: by assisting and encouraging the States in their efforts to assure safe and healthful conditions; and by providing for research, information, education, and training in the field of

occupational safety and health. See reference (a). OSHA is made applicable to federal facilities through E.O. 12196.

16-2.4 Solid Waste Disposal Act of 1965, as amended by RCRA. SWDA 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 SWDA encourages beneficial reuse of wastes through recycling and burning for energy recovery. The Act also requires Federal agencies to procure EPA guideline products containing recovered materials to the maximum extent possible. The Comprehensive Procurement Guideline is codified as 40 CFR 247. See reference (b).

16-3 Terms and Definitions

16-3.1 Activity. An independent command performing a specific mission having its own UIC.

16-3.2 Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

16-3.3 Contained Disposal. Landfilling or incineration of solid waste in a permitted facility. This is the least desirable solid waste option and ranks at the bottom of the priority list for integrated solid waste management.

16-3.4 Direct Sales. Competitively selling recyclable materials to a vendor by the managing activity's QRP without utilizing the DRMO. Direct sales authority is granted to the installation's QRP by the BSO.

16-3.5 Diversion Rate. The rate at which non-hazardous solid waste is diverted from a disposal facility. Disposal facilities include landfills (both solid waste and inert) and incinerators. Composting, mulching, recycling, reuse, and donation are generally accepted waste diversion methods. The diversion rate will be calculated twice, once without considering construction and demolition (C&D) debris, and once considering C&D. See current NFESC guidance for calculation details.

16-3.6 Energy Recovery. Steam or electrical energy produced from solid waste used as a fuel in a waste to energy plant. All incineration, including energy recovery, is counted as disposal in diversion rate calculation.

16-3.7 Excluded Materials. Materials that may not be sold through a QRP. These materials are listed in reference (c). Proceeds from the sale of excluded materials SHALL NOT be returned to a QRP.

16-3.8 Installation. For the purposes of this chapter, an installation is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control, fence line to fence line.

16-3.9 Integrated Solid Waste Management Plan (ISWMP). A comprehensive study and plan for solid waste management and recycling.

16-3.10 Managing Activity. An activity or an administrative element assigned to manage a recycling program (including personnel, funds, and equipment).

16-3.11 Office Waste. Solid wastes generated by the every day affairs of government workers in government buildings and rooms. Excludes waste generated in cafeterias, snack bars, or other food preparation and sales installations.

16-3.12 Office Workers. Military and civilian personnel other than janitorial and trade specialists.

16-3.13 Qualified Recycling Program. A recycling program organized in accordance with the regulations for the sale of installation-generated recyclable material purchased with appropriated funds. An installation with a QRP can retain the sales revenues of scrap or other recycled materials purchased with appropriated funds.

16-3.14 QRP Manager. Position appointed by installation CO by instruction to manage the QRP.

16-3.15 QRP Recyclable Materials. Any recyclable material that is not an excluded material as described in 14-3.7.

16-3.16 Recyclable Material. A material that can be transformed into a new, useable product through the process of recycling.

16-3.17 Recycling. The result of a series of activities by which materials that would become or otherwise remain waste, are diverted from the solid waste stream by collection, separation, and processing, and are used as raw materials in the manufacture of goods sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials. For purposes of a QRP, scrap metal is a recyclable material (reference (d)).

16-3.18 Recycling Program. An organized operation that requires concerted efforts to divert or recover scrap or waste from waste streams, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability.

16-3.19 Resource Recovery. The recovery of materials or energy from solid waste.

16-3.20 Resource Recovery Facility. Any physical plant that processes non-hazardous, commercial, or institutional solid waste, biologically, chemically, or physically and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass for resale or reuse.

16-3.21 Solid Waste. Any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but not including solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 USCA Sect. 2011 *et seq*.].

16-3.22 Source Reduction. Reducing, at the point of introduction into the process, the volume or weight of material used before the products are purchased, used or discarded. This includes reuse of materials, items, or products prior to recycling and/or disposal.

16-3.23 Source Separation. The separation of recyclable materials at their point of generation by the generator. See reference (e).

16-3.24 Waste Office Paper. Letterhead, dry copy papers, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts. Classified wastes are explicitly excluded, except as allowed by applicable security directives.

16-4 Requirements

16-4.1 Solid Waste Collection, Storage, and Disposal. Federal, State, and local requirements concerning collection, storage, and disposal apply to military facilities generating solid wastes, whether the solid waste is collected by the military or by a non-military collector. See references (f), (g), (h), (i), (j), (k), and (l).

Reference (h) requires any person who generates solid waste to determine if that waste is a hazardous waste. Refer to Chapter 15 for hazardous waste determination and management requirements.

16-4.2 Source Reduction. Federal, State, and local requirements concerning source reduction apply to Navy activities. This technique of preventing waste is the preferred method of managing solid waste.

16-4.3 Solid Waste Resource Recovery

a. **Resource Recovery Alternatives.** Alternatives for disposition of recovered materials include:

(1) Sale of recovered materials through DLA.

(2) Participation in existing or planned civilian community or commercial resource recovery facilities or systems. Where warranted, such participation may include funding a pro rata share of a community facility.

(3) Donation of waste materials to a voluntary or community organization, even when the materials are located on DOD-owned, leased, or occupied facilities if:

– Materials were not government purchased or generated.

– Materials, while owned or generated by DOD, are uneconomical for government supported collection and disposal.

(4) Direct sale of recovered material by authorized shore installations.

b. **Recyclable Materials Sales Program.** Installations with QRP programs shall first use recyclable materials sales proceeds to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, training, program awareness expenses, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plans. Any remaining proceeds may be transferred to the non-appropriated MWR account for any approved programs or retained in the QRP suspense account to cover anticipated future program costs.

16-4.4 Solid Waste Disposal.

a. **Incineration of Solid Waste.** Federal, State, and local requirements apply to incineration facilities. Installations shall interpret the application of capacity emission standards established by EPA, State, or local agencies. They shall sufficiently treat all waters discharged from the facility to meet applicable effluent limitation standards. They shall obtain all necessary permits.

An installation may operate an incineration facility for solid wastes in conjunction with a final land disposal facility. Land disposal is required, under EPA guidelines and applicable State regulations, for residues from the incineration operation and those non-hazardous wastes that cannot be incinerated for reasons of health, safety, or technological limitation. Installations will use only those land disposal facilities with appropriate operating permits for residues and non-combustible materials. See reference (i).

b. **Disposal in Military-Owned Landfills.** Installations shall design, construct, and operate land disposal sites to protect the environment and health and safety of personnel associated with their operation. They shall apply pertinent provisions of the Occupational Safety and Health Act and attendant regulations per references (a), (j), (k), and (l).

16-5 Navy Policy

16-5.1 Solid Waste Disposal Facilities. The Navy shall not open new solid waste disposal facilities except where it is in the clear interest of the Navy.

Navy-owned landfills shall be designed to meet the most stringent of Federal, State, or local regulations.

Navy installations shall not burn Navy waste materials including trash, rubbish, garbage, construction debris, and liquid wastes, in open fires (except in limited situations as determined by health or safety considerations and with the approval of the appropriate local agency, State agency, and EPA regional office).

16-5.2 Property. Navy installations shall consider solid waste generated by Navy operations and actions on a navy installation as government property for purposes of disposal. Navy exchanges and commissary stores may salvage and dispose of their recoverable resources. Contractors shall manage

solid waste they generate on a navy installation under the requirements of their contracts (See reference (m).)

16-5.3 Navy Integrated Solid Waste Management Programs. All Navy installations worldwide that generate 1 ton or more of solid waste per day shall develop and implement ISWMPs and QRPs. See references (n) and (o) for guidance developing these plans.

Installations shall design these programs as total systems that consider relative economic advantages of the latest technology as well as the potential for resource recovery. Installations shall develop ISWMPs using the following priority basis:

- Source reduction
- Reuse
- Recycling
- Disposal via landfill or incineration

When disposing via landfill, Navy installations must place solid waste in appropriately permitted, designed, and constructed landfills).

16-5.4 Source Reduction. Installations shall incorporate the following in Navy source reduction or P2 programs, where feasible:

- Reduction of packaging, especially where packaging is used primarily for attractive merchandising or convenience functions.
- Process modifications.
- Procurement of materials that generate less solid waste.
- Reduction of waste generation in the office by:
  - Reusing materials (i.e., file folders, paper clips, interoffice routing envelopes, etc.).
  - Dual-sided copying.
  - Using electronic mail instead of paper memos.
  - Reduced mailing and distribution lists.
  - Duplex Printing.
- Maximum use of the General Supply Administration (GSA) supply system for paper and paper products.
- Good housekeeping or best management practices.

– Employee training.

– Any reasonable mechanism that successfully avoids, prevents, or reduces solid waste at the source.

16-5.5 Solid Waste Resource Recovery

a. **Recycling.** Navy installations shall comply with Federal, State, and local recycling laws, regulations, and policies.

The host activity at an installation shall ensure that there is a recycling program at the installation. The host usually administers the QRP however, the host may delegate the QRP to a tenant activity at the installation.

Commissary and Navy exchanges may operate authorized recycling programs outside a QRP.

Reference (p) provides guidance for the establishment or abolition of resource recovery and source separation programs.

All C&D projects awarded to contractors at navy installations shall include a Construction Waste Management Plan for C&D debris, per reference (q). The Construction Waste Management Plan shall evaluate and determine the extent of recycling, reuse, and composting possible for the project.

An installation shall establish a recycling program for the following purposes:

– To comply with Federal, State, and local environmental laws and regulations and reference (r).

– To reuse readily available resources.

– To avoid excessive costs for disposal of solid waste by other means (cost avoidance).

– To reduce the volume of wastes disposed of in landfills and incinerators.

– To meet DOD Measures of Merit (MOM) goals per reference (s).

– To obtain proceeds from the sale of recyclable materials.

(1) Navy installations may recycle scrap metal (ferrous and non-ferrous) through a QRP. This includes firing range-expended cartridge cases and mixed metals gleaned from range clearance that do not require demilitarization and that have been certified safe. All other scrap from ammunition, explosives and dangerous articles (AEDA), even if certified safe, shall be sold through the DRMS. Trained personnel designated in writing by the commanding officer shall certify safe all firing range scrap consisting of expended cartridge cases and mixed metals gleaned from range clearance prior to any QRP accepting the material for disposal. See reference (t).

(2) The QRP manager shall either conduct or request from DRMO a recovered materials market analysis, including estimated return from sale and length of market availability prior to any source separation effort.

The recycling manager shall maintain economic analysis and market determination on file at the managing activity and incorporate the resulting information into the ISWMP.

(3) The QRP manager may add any suitable material to those being recycled. As a general rule, installations shall recycle all non-hazardous solid waste where the cost of recycling is less than the cost of disposal.

b. **Goals.** Navy BSOs shall achieve DOD solid waste reduction and recycling goals, known as MOM per reference (s). This goal requires the defense components to ensure that integrated non-hazardous solid waste management programs provide an economic benefit when compared with disposal using landfill and incineration alone. To achieve this goal, shore activities will have to increase source reduction, recycling and composting. The Solid Waste Annual Report software and P2ADS track this goal. BRAC activities which have been officially closed and which have been transferred to Naval Facilities Engineering Command ownership are not required to report solid waste data in their P2ADS.

c. **Qualified Recycling Programs.** Only installations that have a QRP are authorized to receive proceeds from the sales of recyclable materials.

Navy installations that want to conduct direct sales of recyclable materials purchased with appropriated funds shall submit a request to their BSO for approval. The request is subject to oversight by CNO (N45). Installations shall forward a copy of direct sales approval letter to CNO (N45). Managing activities with a QRP must conduct direct sales in accordance with references (c), (o) and (q) and will be subject to audits, inspections, and other oversight.

Reference (o) provides guidance for setting up a QRP and establishing and operating a qualified recycling program at Navy and Marine Corps installations. A QRP includes the following program requirements:

- A managing activity designated by the installation commanding officer. Potential managing units are the environmental department, the supply department, the public works department, or the MWR department.
- A QRP Manager shall be appointed by the Installation CO.
- Means for maintaining fiscal accountability for all funds received and disbursed.
- Maintenance of records of the quantity and types of materials sold for recycling.
- Review of all projects funded with the proceeds of recycling sales by the same chain of command that would normally review such projects if funded from normal appropriations.
- Specific implementation of recyclable material sales requirements contained in this instruction.

– Notify DRMO that the installation has a QRP as established by the Military Construction Codification Act and that the QRP is implemented by a directive or instruction.

(1) After the establishment of an organized QRP or concurrent with such program development, the installation shall coordinate with DRMO to determine whether the specific materials to be sold are actually QRP recyclable materials. Scrap paper, officer paper, cardboard, wood, glass and other obvious scrap can be sold via the QRP. Excluded items are not to be sold by the QRP. The QRP manager, DRMO chief, or an item manager can determine if an item is scrap eligible for the QRP. A usable item may be downgraded to scrap if it has no value except for it material content. If a dispute occurs, refer the matter through the chain of command for resolution. The managing activity can sell recycling materials through DRMO or by direct sales if the BSO grants such authority. DRMO will return net proceeds (selling price of recycled materials minus handing fees) to the QRP.

(2) Navy installations with a QRP shall deposit proceeds from the sale of recyclable materials to **F3840 "Budget Clearing Account (suspense)." Fiscal year end does not affect the accumulation of funds in **F3840, so installations may carry forward and merge proceeds from one fiscal year with proceeds of subsequent fiscal years. Reference (c) details the disposition of proceeds from the sale of recycled material.

(3) Navy installations shall first use sales proceeds to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plans. Installations may transfer any remaining proceeds to the non-appropriated MWR account for any approved programs or retain them in the QRP suspense account for investment in the recycling program or retain them to cover anticipated future program costs.

d. **Resource Recovery Facilities.** Installations shall consider construction of dedicated Navy resource recovery facilities only after thoroughly studying alternative methods of processing recovered materials.

e. **Returnable Beverage Containers.** Navy installations in States with beverage container recovery laws already in force shall comply with State laws. The installation should bring any conflicts between Federal and State requirements, as well as any situations that preclude compliance, to the attention of CNO (N4).

f. **Records.** Navy installations shall keep records by the actual weight measurement (in tons) and also by material and product type. Each installation shall also keep records of quantities (measured by actual weight) and types of wastes that are recycled, proceeds from the sale of recyclable materials, and avoided costs for disposal.

Navy installations shall maintain records of the quantities of waste disposed and recycled by C&D contractors. Materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's Diversion Rate.

DESCIM SWAR-based (reference (u)) software is available from DESCIM for installations to manage their solid waste program and prepare their SWAR. Directions for electronic submittal of the SWAR through the Defense Environmental Network and Information Exchange Bulletin Board System (DENIX BBS) are available from NFESC.

16-5.6 Composting. Navy installations shall compost organic waste as an alternative to land filling whenever possible. Navy installations shall compost landscaping cuttings, yard and green waste, limbs, branches, and other organic materials suitable for composting at an installation, municipal, or private facility. Installations shall consider the following composting alternatives when determining the most feasible composting method:

- Require landscaping contractors to deposit green waste at an installation, municipal or private composting facility. Records of the amount composted are then reported in the SWAR-Base software or the P2ADS, paragraph 16-5.7

- Use municipal or regional composting facilities (regional composting facilities' tipping fees are almost always less than landfill tipping fees).

- Establish composting facilities at the installation if municipal composting facilities are not available or feasible.

16-5.7 Navy Solid Waste Pollution Prevention Annual Data Summary (SW P2ADS). All Navy shore installations worldwide that generate more than 1 ton per day of solid waste shall prepare an annual report per guidance provided by the NFESC (Report Symbol DD-A&T(SA) 1485 (5090)). Send the report to NFESC no later than 1 November following the end of the fiscal year, with copies to the BSO and FEC. Detailed guidance for installation solid waste reporting is provided in a data call package from NFESC. Information obtained from the installation solid waste annual report will be used to track the MOM goal progress.

16-5.8 Solid Waste Training. Solid waste and recycling managers should budget for necessary training to ensure that their programs make progress to reach the goals and guidelines established in references (p), (r), and (s).

Training topics should include QRP management, sales management, financial management, sales procedures, budgeting, AEDA requirements, metals identification, qualified and non-qualified scrap identification, and recycling techniques.

16-6 Responsibilities

16-6.1 BSOs shall:

(a) Ensure that installations under their command comply with current Federal requirements as well as applicable requirements of State, interstate, or local solid waste management agencies.

(b) Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

(c) Ensure that sufficient quantities of solid waste are diverted from landfilling and incineration across their AOR to achieve the maximum economic benefit to the Navy.

16-6.2 COMNAVFACENGCOM shall:

(a) Be the technical focal point for solid waste management issues.

(b) Maintain appropriate technical directives, design manuals, and operation manuals concerning solid waste source reduction, collection, storage, disposal, affirmative procurement, and resource recovery.

(c) Assist, as requested, commanders and commanding officers of shore activities in developing resource recovery programs and SWMPs.

(d) Develop and maintain solid waste reporting and information collecting systems.

(e) Prepare and issue annual solid waste data from the information collected.

(f) Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

16-6.3 COMNAVSUPSYSCOM shall:

(a) Investigate and develop methods to reduce packaging of materials supplied to the Navy.

(b) Develop specifications for the purchase of items manufactured with recyclable materials.

16-6.4 COs of shore activities shall:

(a) Establish recycling programs that divert sufficient quantities of solid waste from landfilling and incineration in order to support the BSO’s requirement of achieving the maximum economic benefit to the Navy.

(b) Develop ISWMPs, including source reduction and recycling programs and resource recovery facilities that incorporate all Federal, State, and local requirements.

(c) Cooperate with the installation or lessor providing solid waste collection and disposal services to establish source reduction, separation programs, and affirmative procurement programs, if in a tenant status.

(d) Cooperate with the designated standard metropolitan statistical area (SMSA) lead agency, if in a listed SMSA.

(e) Report annual solid waste information per guidance provided by NFESC.

(f) Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

16-6.5 COs of fleet activities shall cooperate with the host activity while in port and comply with the activity's solid waste management requirements.

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CHAPTER 17

PESTICIDE COMPLIANCE ASHORE

17-1 Scope

17-1.1 This chapter provides policy, safety and compliance requirements relative to the procurement, storage and use of pesticides at Navy shore installations. The requirements apply within the United States, possessions, and trust territories. Chapter 21 describes Navy policy with respect to installations in foreign countries. The BUMED Preventive Medicine Manual describes Navy policy with respect to pest management aboard naval vessels.

Reference (a) details requirements and responsibilities relative to the application and regulation of pesticides on property under Navy stewardship. Responsibility for Navy pest management program oversight is assigned jointly to NAVFAC and BUMED, which is responsible for disease vector surveillance and control, and safety matters.

17-1.2 Related Chapters. Other chapters that discuss topics pertinent to pesticides include Chapter 9 (prevention of pollutants in wastewater), Chapter 12 (spill prevention and management), and Chapter 15 (management of hazardous waste).

17-1.3 References. Regulations and guidance relevant to pesticide programs:

(a) OPNAVINST 6250.4 Series, Pest Management Program; (NOTAL);

(b) 40 CFR 150-186, EPA Regulations for Pesticide Programs;

(c) DODI 4150.7, DOD Pest Management Program;

(d) 40 CFR 262, EPA Regulations for Hazardous Waste Generators;

(e) EBUSOPSOFFINST 4200.1: Department of Navy Policies and Procedures for the Operations and Management of the Government Commercial Purchase Card Program;

(f) OPNAVINST 5100.23G, Navy Occupational Safety and Health Program Manual; (NOTAL);

(g) Military Handbook 1028/8A of 1 November 1991, Design of Pest Management Facilities; (NOTAL);

(h) 29 CFR 1910, Occupational Safety and Health Standards;

(i) CNO Letter 5090 Ser N456M/1U595820 of 10 Jan 2002, Policy Letter Preventing Feral Cat and Dog Populations on Navy Property.

17-2 Legislation

17-2.1 Comprehensive Environmental Response, Compensation and Liability Act of 1980. CERCLA authorized Federal action to respond to the release, or substantial threat of release, into the environment of HS, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare. Section 107(i) exempts application of pesticide products registered under FIFRA from CERCLA requirements.

17-2.2 Emergency Planning and Community Right-to-Know Act. EPCRA provides for protection and notification of communities in the event of a release of toxic chemicals from installations that store pesticides above established threshold quantities.

17-2.3 Endangered Species Act. ESA provides for the protection of threatened and endangered species of fish, wildlife, and plants and their habitats. The Act requires Federal agencies to ensure that no agency action is likely to jeopardize the continued existence of endangered or threatened species.

17-2.4 Federal Facility Compliance Act. The FFCA waives immunity for Federal facilities under solid and hazardous waste laws, CERCLA, and the RCRA by allowing States to fine and penalize for violations. This is applicable only to pesticides that are a hazardous waste, or are managed or disposed of as hazardous wastes requiring management under RCRA. See chapter 15.

17-2.5 Federal Insecticide, Fungicide, and Rodenticide Act. FIFRA provides the principal means for preventing adverse effects on the environment from pesticides through product registration and applicator certification. The registration of all pesticide products by EPA results in label instructions on each container for use, storage, and disposal. Label instructions are legally applicable to all users. It is unlawful to purchase, distribute, or use any pesticide that does not have an EPA registration number or for which registration has been canceled or suspended. It is also unlawful to apply, store, or dispose of any pesticide or container in any manner inconsistent with applicable regulations. Although FIFRA does not delegate enforcement responsibilities for Federal facilities to the States, many States have established Memoranda of Understanding (MOU) with the DOD regarding the procurement and use of pesticides, and on-site inspection of Navy installations. DOD policy is more restrictive. All pesticides must be applied by appropriately certified personnel except when used for personal relief. Retain indefinitely, all records of pesticide application.

Under FIFRA:

- The pesticide label, regulated by EPA, establishes directions for use, precautions for preventing adverse environmental effects, and disposal requirements. Failure to adhere to the labeling requirements or using the substance in a manner inconsistent with the product label is a violation of Federal law.

- EPA approves State and Federal agency plans for training and certification of pesticide applicators.

- Keep records of all pesticide applications indefinitely; and make such records available for inspection by State or EPA representatives

17-2.6 Federal Water Pollution Control Act as amended by the Clean Water Act of 1977. The CWA provides for protection of surface waters from contamination by pesticides in wastewater and in land runoff.

17-2.7 Food Quality Protection Act. The Act amends FIFRA and the Food, Drug and Cosmetic Act (FDCA). The Act contains language directly applicable to the DOD Pest Management Program by defining "maintenance applicator" and establishing a requirement for minimum training; defining vector and public health pesticide; defining the term Integrated Pest Management (IPM); and promoting IPM through procurement and regulatory policies.

17-2.8 Migratory Bird Treaty Act. This Act protects migratory birds and their nests and eggs from being hunted, captured, purchased, or traded. If an installation uses pesticides to manage bird populations other than European starlings (*Sturnus vulgaris)*, house sparrows (*Passer domesticus*), and feral pigeons (*Columba livia*), it may be required to coordinate with the USFWS.

17-2.9 Occupational Safety and Health Act. OSHA establishes safety and health standards to ensure that every worker (including pesticide applicators) in the nation enjoys safe and healthful working conditions. OSHA is made applicable to Federal facilities through E. O. 12196.

17-2.10 Resource Conservation and Recovery Act. The HW management requirements of RCRA integrate the disposal of excess or waste pesticides as well as pesticide equipment and containers contaminated by pesticides.

17-3 Terms and Definitions

17-3.1 Applied Biology Program. A network of NAVFAC Pest Management Consultants (PMCs) in the Environmental Business Line that assist Navy and Marine Corps installations with FIFRA and Final Governing Standards-based compliance and provide Integrated Pest Management solutions that protect operations, war-fighters, quality of life, property, materiel and the environment from the adverse effects of living organisms.

17-3.2 Pest Management Consultant. Degreed technical specialists, such as NAVFAC civilian entomologists (Applied Biologist) and BUMED commissioned medical entomologists, who have command program oversight responsibilities and provides guidance and information on the management of pest management programs for commands and installations.

17-3.3 Integrated Pest Management. IPM is a planned program incorporating education, continuous monitoring, record keeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, materiel, or the environment. IPM uses targeted, sustainable (effective, economical, environmentally sound) methods including habitat modification; biological, genetic, cultural, mechanical, physical, and regulatory controls; and, when necessary, the judicious use of least-hazardous pesticides.

17-3.4 Material Safety Data Sheet. A document (OSHA form 174, or equivalent) that accompanies a pesticide product, providing the handler with chemical information on ingredients, handling instructions, potential hazards, and manufacturer address and emergency contact information.

17-3.5 Pest. Any organism (except for microorganisms that cause human or animal diseases) that adversely affects operations, preparedness, the well being of humans or animals, real property, materiel, equipment or vegetation, or is otherwise undesirable.

17-3.6 Pest Control Performance Assessment Representatives (PCPAR). Installation personnel trained in contract performance inspection or QA and pest management, whose duties include surveillance of commercial pest management services to ensure performance complies with contract specifications and legal requirements. [Formerly known as Pest Control Quality Assurance Evaluators (PCQAE)].

17-3.7 Integrated Pest Management Coordinator (IPM Coordinator). The individual officially designated by the installation commander to coordinate and oversee the installation pest management program and installation IPM plan. IPM coordinators must be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

17-3.8 Integrated Pest Management Plan (IPM Plan). A detailed document for the design, implementation, and maintenance of all pest management and pesticide storage and use on an installation or group of installations.

17-3.9 Pesticide. Any substance or mixture of substances registered by EPA under FIFRA, intended to destroy, repel, or mitigate pests. Includes, insecticides, rodenticides, herbicides, fungicides, plant regulators, defoliants, desiccants, disinfectants, antifouling paints and biocides (such as water-treatment chemicals). NAVFAC PMCs do not approve disinfectants or biocides.

17-3.10 Pesticide Applicator. Any individual who applies pesticides.

a. **DOD-Certified Pesticide Applicators.** Military or civilian personnel certified per the "DOD Plan for Certification of Pesticide Applicators" in the pest management categories that are appropriate for their type of work.

b. **State-Certified Commercial Pesticide Applicators.** Personnel certified in accordance with FIFRA by a State (in which the work will be performed) with an EPA-approved certification plan and certified in the category in which a pesticide will be applied.

c. **Uncertified Pesticide Applicators.** Individuals who have not successfully completed certification training. Uncertified military and DOD civilian personnel who are in training to become certified pesticide applicators may apply pesticides when under the direct line-of-sight supervision of a DOD-certified pesticide applicator. Uncertified personnel may apply self-help or personal relief pesticides when the operation has been approved by a command pest management consultant.

17-3.11 Pesticide Cancellation. An action by EPA that may limit the use of a pesticide. EPA often issues instructions with the pesticide cancellations providing information on the disposition of cancelled pesticides.

17-3.12 Pesticide Facility. The building and areas designated for handling and storing pesticides.

17-3.13 Registered Pesticide. A pesticide registered by EPA for sale and use within the United States.

17-4 Requirements

17-4.1 Certification and Training. Federal or State commercial certification is required for all pesticide applicators per reference (b), with the exception of those applying pesticides under an approved self-help program or applying repellents for personal relief.

a. **Certification.** DOD or State commercial certification is required for all pesticide applicators per reference (b). All in-house pesticide applicators shall be certified within two years of their employment. Installations shall enroll DOD-certified pesticide applicators in NAVFAC or other appropriate military service component sponsored DOD recertification courses every three years. Army and Air Force recertification courses also meet this requirement and depending when and where NAVFAC courses are scheduled may be more cost effective for an installation. These may be substituted with NAVFAC pest management consultant approval. State-certified pesticide applicators shall be recertified in accordance with state laws and regulations.

DOD- or State-certified pesticide applicators shall perform all pesticide applications on Navy property (whether performed in-house or by contract) except:

- DOD civilian and military personnel in training to become certified applicators may apply pesticides under the direct line-of-sight supervision of a DOD-certified applicator.

- Uncertified pesticide applicators may apply self-help and personal relief pesticides once a command pest management consultant has approved the self-help program and proposed pesticides.

b. **Training**

(1) Installations shall train PCPARs in contract performance and inspection and pest management at NAVFAC-sponsored courses within one year of appointment. Every three years, installations shall enroll PCPARs in refresher training courses sponsored by NAVFAC.

(2) Installations shall train the IPM coordinator in pest management technology at NAVFAC-sponsored courses within one year of appointment. Every three years, installations shall enroll the IPM coordinator in refresher training courses sponsored by NAVFAC.

17-4.2 Records and Recordkeeping

a. Installations, including GOCO facilities shall maintain on site, indefinitely, complete, **daily** pest management operation records. All pest management operations performed on the installation shall be recorded, including surveys and non-chemical control operations, such as; work done on golf courses, by non-appropriated fund installations, by contract services, and as part of outleases, land management, forestry programs, MWR, privatization partners (outdoors), and tenants, as well as work performed by installation pest management personnel. Records shall include, at a minimum, the date of the operation, type of operation, site description, pest, size of area treated, pesticide applicator's name and certification number and pesticide trade name, active ingredient(s), formulation, quantity and final concentration applied. Pest management records shall be submitted to the NAVFAC pest management consultant monthly, at a minimum. If no pesticides are applied, a negative report should be submitted. Originals shall be archived on-site indefinitely.

b. Reference (c) describes the tri-service computer recordkeeping and reporting requirements. All Navy installations shall keep records electronically.

17-4.3 Aerial Application of Pesticides. Navy installations shall submit plans for aerial operations to the appropriate NAVFAC Pest management consultant before execution. The NAVFAC Pest management consultant shall coordinate NEPA documentation, aerial spray validation and QA.

17-4.4 Wastewater Discharges. Installations shall prohibit the discharge of any wastewater from any pesticide mixing, or equipment cleanup area. Rinsate from triple-rinsed containers shall be applied to the application site in accordance with the pesticide label. Hazardous waste and storage requirements apply, per reference (d). See also chapter 15.

17-4.5 State and Local Requirements. Installations shall comply with substantive State and local pesticide regulatory guidance whenever practicable and in a manner that does not unnecessarily interfere with the mission. Where established, shore installation shall adhere to MOUs between DOD and States for the use of pesticides on shore installations.

17-4.6 Integrated Pest Management Plans. Installations that conduct pest management operations, whether by in-house personnel or by contract, shall develop, implement, and maintain written comprehensive IPM plans, incorporating elements delineated in reference (c) or be covered by the plan of another installation. IPM plans shall be specific to the installation(s). Assistance for writing IPM Plans is available from the NAVFAC PMCs. Installations will include the applicable Navy Region in the distribution of IPM plans. IPM plans shall reference the Integrated Natural Resources Management Plan and the Bird Aircraft Strike Hazard Plan. Plans are not required for GOCO facilities. IPM plans shall be updated annually by the installation IPM coordinator, approved by the NAVFAC pest management consultant and rewritten every five (5) years, if significant changes have occurred in laws, instructions, technology or the installation pest management program.

17-4.7 Program Maintenance. Installations shall maintain programs and plans through technical on-site reviews by BUMED and NAVFAC, performed every three years. Program reviews will determine installation compliance with the plans and project sheets, evaluate effectiveness of management operations, identify deficiencies, and provide additional recommendations to keep the installation plan

current. These reviews will confirm that installation programs comply with FIFRA and other applicable Federal and State regulations.

17-4.8 Pesticide Labels and MSDS

a. **Pesticide Labels.** Installations shall ensure that EPA-approved labels are on all pesticide containers. If required, items such as Supply Department labels shall be placed so as not to obscure the pesticide label. Copies of pesticide labels shall be maintained at a central location and made available to interested departments (e.g., Fire, Safety, etc.).

b. **MSDS.** A copy of MSDS and pesticide label(s) for every pesticide product in the shop inventory shall be available at all pesticide facilities.

17-4.9 Pesticide and Pest Management Services Procurement. A NAVFAC Pest management consultant shall approve pesticide and pest management services procurement prior to purchase, except those pesticides used by housing occupants for their own personal relief. This approval applies to pesticides used by in-house forces, commercial services, agricultural outleases, GOCO operations, Base Operating Services (BOS) management, non-appropriated fund instrumentalities (MWR services), purchase card users, or any other means. Purchase card use shall conform with policies in references (a), (c), and (e) regarding approval of contract scope, pesticide selection/application/reporting.

17-4.10 Integrated Pest Management and Pesticide Use Reduction. Navy policy is to employ an integrated pest management program that minimizes pesticide use. This policy also pertains to pesticide use by contractors. Further, where additional regulation prevails, the Navy shall comply with substantive State and local pesticide regulatory guidance whenever possible. MOUs between DOD and a State for the use of pesticides on shore installations may also apply. Pesticide reduction goals are delineated in reference (c).

17-4.11 Pesticide Disposal and Spill Management

a. **Disposal.** Stringent regulations govern the disposal of pesticides, their containers, and related wastes. General guidance for HW applies to pesticide waste per reference (d). Pesticide labels list general guidance on the disposal of pesticide containers. The cognizant pest management consultant shall provide guidance for disposal on a case-by-case basis per reference (a).

b. **Spill Management.** The installation IPM Plan shall address a plan for pesticide spill management, coordinated with the installation's HM/HW programs, and included in the installation's Oil and Hazardous Substance spill contingency plans (see chapter 12). Ready to-use pesticide spill kits must be present in every storage and mixing facility, and in vehicles used to transport or apply pesticides. Contractors shall be responsible for providing their own spill kits.

17-4.12 Safety and Health in the Workplace. Installations shall monitor workplace safety through the responsible safety offices.

a. **Industrial Hygiene.** Installations shall thoroughly evaluate their pest management operations under chapter 10 of reference (f) to accurately identify and quantify potential health hazards.

An industrial hygienist shall evaluate the processes to accurately identify and quantify potential human health hazards.

b. **Medical Examinations.** The medical department of each command shall provide medical surveillance for Navy and civilian personnel engaged in routine pest management operations.

c. **Pesticide Facility Requirements.** Installations shall store all liquid, dust, and granular pesticide formulations in an area with adequate spill containment. Installations shall install powered ventilation effecting six changes of air per hour at pesticide storage areas containing pesticides that emit vapors including liquid, dust, and granular formulations, per reference (g). Pesticide applicators, whether contractor or in-house personnel, shall perform all pesticide mixing in an area with adequate spill containment. A NAVFAC pest management consultant shall approve all plans for new pesticide facilities. Reference (h) provides detailed information on the design and operation of pesticide facilities and workplace requirements.

17-4.13 Occupied Spaces. Installations shall not permit the application of liquid, dust, or aerosol pesticide formulations in any space occupied by unprotected personnel. However, pesticides contained in gel or paste bait formulations may be applied in occupied spaces in accordance with the pesticide label directions.

17-4.14 Personal Protective Equipment. Installations shall provide Navy personnel engaged in pesticide application with appropriate personal protective equipment, (i.e., face shields, respirators, eye protection, impermeable gloves, and protective clothing). Occupational safety and health standards in reference (h), the MSDS, reference (f), and the pesticide labels establish the requirements for personal protective equipment. Installations shall obtain guidance for selection of personal protective equipment from the cognizant BUMED industrial hygienist or NAVFAC pest management consultant or installation OSHA manager/respiratory protection program manager.

17-4.15 GOCO Facilities. Where pest management services are required as part of the maintenance management program on GOCO facilities, the Navy plant representative shall:

– Report all pesticide use as outlined in paragraph 17-7.4.

– Ensure that commercial pest control contractors are properly licensed and certified by applicable State agencies.

– Review GOCO pest management programs every three years with the assistance of a NAVFAC Pest management consultant. Reviews shall emphasize the protection of real property and the environment.

17-5 Responsibilities

17-5.1 CNIC and Regions shall:

(a) Ensure that adequate funding is available for the Commanders and COs of shore installations to properly support their pest management programs.

17-5.2 COMNAVFACENGCOM, via its Applied Biology Program, shall:

(a) Provide on-site program planning and assistance to Navy shore installations in developing and maintaining integrated pest management programs.

(b) Maintain regional training and recertification programs in cooperation with BUMED for civilian applicator personnel and training programs for PCPARs and IPM coordinators.

(c) Maintain a generic performance work statement for pest control services. Provide contractual assistance to shore installations outsourcing commercial pest control services. Provide support, including participation on technical review committees, for source selections. (Source selection is the preferred acquisition strategy for large and/or regional pest management contracts.)

(d) On a reimbursable basis, prepare IPM plans for regions and/or installations.

(e) Ensure that outdoor pesticide applications on privatized land, such as housing, are in compliance with standards for prior contract review, oversight and reporting delineated in reference (a).

(f) Ensure that GOCO pest management programs are reviewed every three years.

(g) Ensure that installation pest management programs are reviewed every three years.

(h) Provide guidance and training on selection, procurement, storage and use of preservative (pesticide)-treated wood commodities.

(i) Cooperate with other organizations on applied research, development, testing, and evaluation of pesticides, application equipment, and management procedures for applicability to shore installation programs.

(j) Provide BRAC support including caretaker IPM plans and specifications for affected shore installations.

(k) Coordinate Applied Biology/pest management oversight with appropriate Navy Regional Commands.

(l) Monitor Homeland Security aspects of pesticide/pesticide dispersal equipment security.

(m) Recommend programs, in compliance with reference (i), to remove feral cats and dogs from installations.

(n) Assist installations in developing Cooperative Agreements with County or State mosquito abatement districts. Coordinate these services with BUMED. (Cooperative Agreements with County or State abatement districts are the preferred method for obtaining mosquito control services, when practical.)

(o) Provide installations with guidance on EPA notices canceling pesticides or pesticide uses.

17-5.3 BUMED shall:

(a) Provide technical guidance, recommendations, and on-site assistance to shore and afloat commands on all matters relating to disease vectors and other medically important pests. Coordination shall be with the installation IPM Coordinator, as well as Preventive Medicine authorities.

(b) Monitor and evaluate vector surveillance and control programs, maintain safe pest control functions, and provide technical guidance for disease vector surveillance, vector control, safety and occupational health issues. Coordinate with the cognizant Army Veterinarian on food inspections and vector-borne disease threats.

(c) Conduct evaluation and testing studies in vector ecology, surveillance, prevention, and control, including ground and aerial dispersal methods, for contingency operations.

(d) Provide training, certification, and recertification of vector control specialists and other medical department personnel and provide initial training and certification of civilian applicator personnel and non-medical department personnel per COMNAVFACENGCOM and DOD standards.

(e) Provide specialized, area-wide operational services including contingency response, medical entomology information, vector-borne disease assessments, and emergency disease vector control in the event of vector-borne disease outbreaks, disasters, or other situations where vector control is beyond the capability of local commands.

(f) Define and coordinate research, development, testing, and evaluation requirements for vector biology and control.

(g) Coordinate pest management guidance with the Naval Exchange Service Command (NEXCOM).

(h) Provide an industrial hygienist, where requested, to thoroughly evaluate processes in order to accurately identify and quantify potential human health hazards.

17-5.4 Commanders and COs of shore installations shall:

(a) Coordinate with CNIC and Regions to budget for pest management program operations and facilities in compliance with legal and DOD requirements.

(b) Officially designate, by letter, an IPM Coordinator to be responsible for annual IPM plan reviews and oversight of the installation program including Public Works in-house and outsourced operations, non-appropriated fund activities such as golf operations and clubs, natural resources, agricultural/range/forest outleasing, purchase card use, self-help, tenant command contracts, retail outlets (Navy Exchange and commissary) and outdoor applications by privatization partners. The installation IPM Coordinator will work closely with Preventive Medicine authorities.

(c) Develop, implement, and maintain a written IPM plan outlining IPM strategies, and documenting pest management operations.

(d) Maintain records of all pesticide use on the installation and electronically submit this data to a NAVFAC pest management consultant monthly, as a minimum. Exclude pesticides used for personal relief.

(e) Annually, provide a list of pesticides proposed for use during the next fiscal year for review and approval by a NAVFAC pest management consultant. Ensure that contractors for commercial pest control services provide the same information as required for in-house services. This list must be submitted no later than 15 September.

(f) Ensure that contract specifications that include the use of pesticides are approved by a NAVFAC pest management consultant prior to advertisement for bid.

(g) Ensure that the installation IPM plan and program is in compliance with all applicable environmental protection statutes. Significant references include:

- Hazard Communication (29 CFR 1910);
- National Oil and Hazardous Substance Pollution Contingency Plan;
- Hazardous Wastes (disposal of excess and waste pesticides) reference (d);
- Pretreatment or NPDES permit requirements (wastewater discharged from pesticide mixing facilities);
- Other Federal, State or local requirements.

(h) Ensure that an IPM program, minimizing pesticide use, is implemented.

(i) Immediately report lost or stolen pesticide dispersal equipment through your chain of command, the Federal Bureau of Investigation and the NAVFAC Pest management consultant.

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CHAPTER 18

INSTALLATION RESTORATION

18-1 Scope

This chapter discusses the Navy's Installation Restoration (IR) Program, including requirements, procedures, and responsibilities. The purpose of the IR Program is to identify, investigate and clean up or control releases of hazardous substances (HS) from past waste disposal operations and past HM spills at Navy activities. The Munitions Response Program is discussed in Chapter 19.

The IR Program provides for compliance with the procedural and substantive requirements of the CERCLA (commonly referred to as Superfund), as amended by the SARA, as well as regulations issued under these acts. Although the IR Program is primarily intended to clean up past releases of HS, it may address the cleanup of past releases of any pollutant and/or contaminant that endangers public health, welfare or the environment, including petroleum, oil, and lubricant products. Cleanup of past contamination from underground storage tanks and corrective action for past contamination at RCRA sites may also be part of the IR Program.

This chapter provides guidance on the investigation and cleanup of past HW disposal sites located within Navy installations, sites that have been contaminated by the migration of HS from Navy installations, and non-government-owned sites that have been contaminated by the disposal of Navy-generated waste and other HS for which the Navy is a potentially responsible party (PRP). In general, past HW disposal activities are those that occurred prior to October, 1986 when SARA was enacted.

The IR Program is limited to the United States, its territories and possessions, and does not apply in foreign countries.

This chapter implements two E.O.'s:

– E.O. 12088 of 13 October 1978, Federal Compliance with Pollution Control Standards, requires each Executive Agency to comply with applicable pollution control standards. Compliance with applicable pollution control standards means conforming to the same substantive, procedural, and other requirements that would apply to a private person.

– E.O. 12580, Superfund Implementation delegates the President's authority under CERCLA and SARA to various Federal agencies, including DOD.

18-1.1 References. The Navy Environmental Restoration Program (NERP) Manual, of August 2006, provides detailed guidance on the execution of the IR Program at Navy/Marine Corps installations. Other references are:

(a) 40 CFR 302, EPA Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA;

(b) 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan;

(c) DON Environmental Policy Memorandum 98-04 of 29 Apr 98, Implementation Guidance for Technical Assistance For Public Participation (TAPP) For Community Members of Restoration Advisory Boards (RABs) And Technical Review Committees;

(d) 29 CFR 1910.120, OSHA Regulations on Hazardous Waste Operations and Emergency Response;

(e) 40 CFR 373, EPA Regulations for Real Property Transactions under CERCLA;

(f) Navy Policy on the Use of Background Chemical Levels, 30 Jan 04;

(g) CNO, Policy on Sediment Site Investigation and Response Actions, 08 Feb 02;

(h) CNO, Policy for Optimizing Remedial and Removal Actions Under the Installation Restoration Program, 23 Apr 04;

(i) CNO, Policy for Conducting Five-Year Reviews Under the Installation Restoration Program, 21 May 04;

(j) CNO, Policy on Natural Resource Injury and Damages in the Installation Restoration Program, 21 Dec 01;

(k) Navy Policy for Conducting Human Health Risk Assessments Under the Environmental Restoration Program, 12 Feb 01;

(l) Navy Policy for Conducting Ecological Risk Assessments, 4 Apr 99;

(m) Department of the Navy Environmental Policy Memorandum 95-04, Guidance for Environmental Restoration Program at Active Bases, of 26 Oct 95;

(n) CNO ltr of 9 February 1994, Establishment of Restoration Advisory Boards (RABs);

(o) Under Secretary of Defense Memorandum of 27 Feb 98, Policy Concerning Cost-Recovery/Cost Sharing Activities Under the Defense Environmental Restoration Program (DERP).

18-2 Terms and Definitions

18-2.1 Defense Environmental Restoration Account (DERA)/ Environmental Restoration, Navy (ER,N). Section 211 of SARA established DERA to pay the cost of DOD responses to clean up HS sites. Funds from DERA were transferred to the Navy ER,N account for uses consistent with the DERP.

18-2.2 Discharge. For purposes of the NCP, discharge, as defined by section 311(a)(2) of the CWA, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, not covered by a permit under section 402 of the CWA. For purposes of the NCP, discharge also means threat of discharge.

18-2.3 Facility. As defined under CERCLA section 101(9), any building, structure, installation, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft; or any site or area where a HS has been deposited, stored, disposed of, placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

18-2.4 Federal Facility Agreement (FFA). A negotiated legal agreement between the Navy and the EPA governing the CERCLA and RCRA administrative process for cleanup at NPL sites. The provisions of these agreements are factors in setting project execution priorities through risk management, and are tools for formalizing commitments, making selection of remedial action (RA) less adversarial. States may participate in the FFA at their discretion.

18-2.5 Federal Facility State Remediation Agreement (FFSRA). A negotiated non-regulatory legal agreement governing the CERCLA and RCRA administrative process for cleanup at certain non-NPL sites. As with FFAs, provisions of FFSRAs are factors in setting project execution priorities through risk management, and are also tools for formalizing commitments, making selection of RA less adversarial. FFSRA are sign by the Chief of Naval Operations, Environmental Readiness Division, (CNO N45).

18-2.6 Five-Year Review. If a RA results in HS, pollutants, or contaminants remaining at the site above levels allowing unlimited use and unrestricted exposure that remedy must be reviewed not less often than every 5 years thereafter.

18-2.7 Hazardous Substances. For purposes of the IR Program, HS is as defined in CERCLA section 101(14) and designated under reference (a). This includes materials that, because of its quantity, concentration, or physical, chemical or infectious characteristics, may pose a hazard to human health or the environment when released or spilled.

18-2.8 Imminent Threat. A threat posed by a site that is greater than applicable human health or environmental criteria before implementation of an effective RA or an operable unit (OU) thereof.

18-2.9 Installation. The real property owned, formerly owned, or leased by the Navy, including a main base and any associated contiguous real properties identified by the same real property number.

18-2.10 Land Use Controls (LUCs). LUCs include engineering controls (ECs) and institutional controls (ICs). ECs are remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs may include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile, and monitoring wells. ICs are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. ICs include easements, deed restrictions, zoning, and permits.

18-2.11 Lead Agency. The agency that provides the on-scene coordinator (OSC)/remedial project manager (RPM). The OSC/RPM is the person responsible for planning and implementing response actions under the NCP. As delegated by E.O. 12580, DON is always the lead agency for response actions on Navy and Marine Corps real property.

18-2.12 Long Term Management (LTMgt). LTMgt is the period of site management (maintenance, monitoring, record keeping, five-year reviews, etc.) initiated after the RA objectives have been met, but HS, pollutants, or contaminants remain on site and are above levels that would allow for unlimited use and unrestricted exposure.

18-2.13 National Priorities List (NPL). The NPL is EPA's list of the nation's highest priority sites that need to be cleaned up. The EPA bases this list on a site's threat to the public health, welfare, or the environment using the Hazard Ranking System (HRS). Sites receiving scores above 28.5 are put on the NPL.

18-2.14 Operable Unit (OU). A discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of OUs, depending on the complexity of the problems associated with the site. OUs may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.

18-2.15 Preliminary Assessment (PA). A PA is a review of existing site information to determine if a release may require additional investigation or action. A PA may include an on-site reconnaissance if appropriate.

18-2.16 Public Health Assessment. A public health assessment is the evaluation of data and information on the release of HS into the environment in order to assess any current or future impact on public health, develop health advisories or other recommendations, and identify studies or actions needed to evaluate and mitigate or prevent human health effects. A public health assessment is only required for NPL sites.

18-2.17 Proposed Plan. A brief document which identifies the preferred remedial alternative for the site and describes the other remedial actions that were proposed and analyzed for site. The proposed plan is made available for public comment.

18-2.18 Record of Decision (ROD)/Decision Document. ROD is the official term used by CERCLA and the NCP for the documentation of a final remedial response action decision at an NPL site. It describes the remedy selection process and the remedy method selected. . For non-NPL sites, the term “Decision Document” is used. The Decision Document is developed in the manner as a ROD. The Installation Command Officer (ICO) must sign the Decision Document before the initiation of remedial actions.

18-2.19 Release. As defined by section 101(22) of CERCLA, release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS or pollutant or contaminant), but excludes any release that results in exposure to persons solely within a workplace, or with respect to a claim that such persons may assert against the employer of such persons, emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release of source, byproduct, or special nuclear material from a

nuclear incident or any processing site, under conditions specified in CERCLA, and the normal application of fertilizer. For purposes of the NCP, release also means threat of release.

18-2.20 Remedial Action (RA). Action consistent with permanent remedy taken instead of, or in addition to, removal actions to prevent or minimize the release of HS. RA covers two periods of activity at the site:

a. **RA Construction (RA-C).** The designed remedial system is constructed at the site during this phase. This phase also may include any construction related to the implementation of land use controls.

b. **RA Operations (RA-O).** RA-O (formerly Long-term Operation (LTO)) is that period of Operation and Maintenance (O&M) required after the RA-C is completed but the RA objectives have not yet been met (RC has not been achieved). During the RA-O phase, the remediation system is operated or chemical or biological processes are occurring leading to the cleanup objective identified in the ROD or Decision Document. Monitoring programs on a site during the RA-O phase are part of the RA-O. They are not LTMgt.

18-2.21 RA Objectives. RA Objectives are site-specific goals that are formed based on the contaminants of concern, the impacted media, fate and transport of the contaminants of concern, and those potential exposure routes, receptors, and preliminary remediation goals identified in the conceptual site model.

18-2.22 Remedial Design (RD). RD includes preparation of technical work plans, drawings, and specifications in order to convert the conceptual design for the remedy selected for a site from the feasibility study (FS) into a full-scale detailed design for implementation.

18-2.23 Remedial Investigation/Feasibility Study (RI/FS). The RI/FS is an extensive technical study conducted to determine the nature and extent of the threat presented by a release and, where appropriate, to evaluate proposed remedies. The FS serves as the mechanism for the development, screening, and detailed evaluation of potential remedial alternatives, including no further action.

18-2.24 Remedy in Place (RIP). This milestone is achieved when the construction of a long-term remedy is complete and the remedy is operating as planned to meet project remedial action goals (RAOs) in future, or a short-term has been successfully implemented and the final documentation is being prepared. Determination of achieving the RIP milestone is a Navy decision and regulatory concurrence for this milestone is not needed.

18-2.25 Removal Action. A removal action is a response implemented in an expedited manner to address releases or threatened releases of HS that require prompt action.

18-2.26 Reportable Quantity. The quantity of an HS that must be reported if released. CERCLA section 102 requires EPA to establish and revise a list of HS and their associated reportable quantities. Reference (a) contains this list.

18-2.27 Response Complete (RC). This milestone signifies that the remedial action objectives have been met and that the RA-O phase has achieved cleanup goals specified in the ROD or Decision Document.

Formal documentation for the RC milestone is essential to ensure recognition of completion of cleanup goals at the site. Details about documenting completion of the remedial action are provided in Section 18-3. Prior to claiming completion of the RC milestone, regulatory concurrence of this documentation is required.

18-2.28 Restoration Advisory Board. A group established to serve as a focal point for the exchange of cleanup information between the Navy, the regulators, and an installation's local community.. Members of the RAB include the Navy, EPA officials, appropriate State and local authorities, Federal and State natural resources trustees, and representatives of the affected community.

18-2.29 Site. A location on or off an installation's property where HS has been deposited, stored, disposed, or placed, or has otherwise come to be located, due to installation activities before October 1986, the date Congress enacted SARA. Such areas may include multiple sources and may include the area between sources. This should not be confused with the EPA practice of listing an entire installation on the NPL. An NPL installation will generally have several discrete sites.

18-2.30 Site Closeout (SC). This milestone signifies that the Navy has completed active management and monitoring at a site, the remedy is protective of human health and the environment, no restrictions on future land use are needed for this site, and no additional funds are expected to be expended at this site. As such, SC is an important milestone; but, unlike RIP or RC, it is not a DoD metric for measuring progress of the IR program.

18-2.31 Site Inspection (SI). An SI is an on-site inspection to determine whether there is a release or potential release and the nature of the associated threats.

18-2.32 Solid Waste Management Unit (SWMU). For the purposes of RCRA corrective action, any unit in which an installation has placed wastes at any time, regardless of whether the unit was designed to accept solid or HW. Such units could include old landfills, wastewater treatment tanks and leaking process or waste collection sewers.

18-2.33 Stakeholder. Interested parties including individual residents who live on or near the installation; representatives of citizen, environmental, and public interest groups whose members live in the vicinity of the installation; workers involved or affected by installation operations; elected and appointed local government officials and representatives of Federal and State regulatory agencies. This chapter uses the term stakeholder in the context of RABs.

18-2.34 Uncontrolled HW Site. An area identified as such by a governmental body, whether Federal, State, local or other, where an accumulation of HS creates a threat to the health and safety of individuals or the environment or both.

18-3 Requirements

18-3.1 The IR Process. DON is the lead agency to respond to Navy HW sites following the provisions of E.O. 12580 to CERCLA and the NCP. However, EPA and states also have authority to impose corrective action under RCRA. As a matter of DON policy, CERCLA is the preferred process for conducting cleanups. FFAs usually specify that cleanups are to be accomplished under CERCLA, with RCRA as a potential Applicable or Relevant and Appropriate Requirements (ARAR). The Navy should

attempt to incorporate the regulator's substantive requirements to the maximum extent possible within the Navy's CERCLA program, and attempt to arrive at compromises that respect both parties' claims of authority. More information is provided in the NERP manual.

a. **The CERCLA Process.** The NCP sets forth general procedures for initiating and carrying out the remedial process under the IR Program. Below are the Navy IR process phases and milestones for implementing these procedures. They are also shown in Figure 18.1.

(1) Site discovery and notification

(2) Preliminary Assessment (PA)

(3) Site Inspection (SI)

(4) Remedial Investigation/Feasibility Study (RI/FS)

(5) Record of Decision (ROD)

(6) Remedial Design (RD)

(7) Remedial Action Construction (RA-C)

(8) Remedy in Place (RIP)

(9) Remedial Action Operation (RA-O)

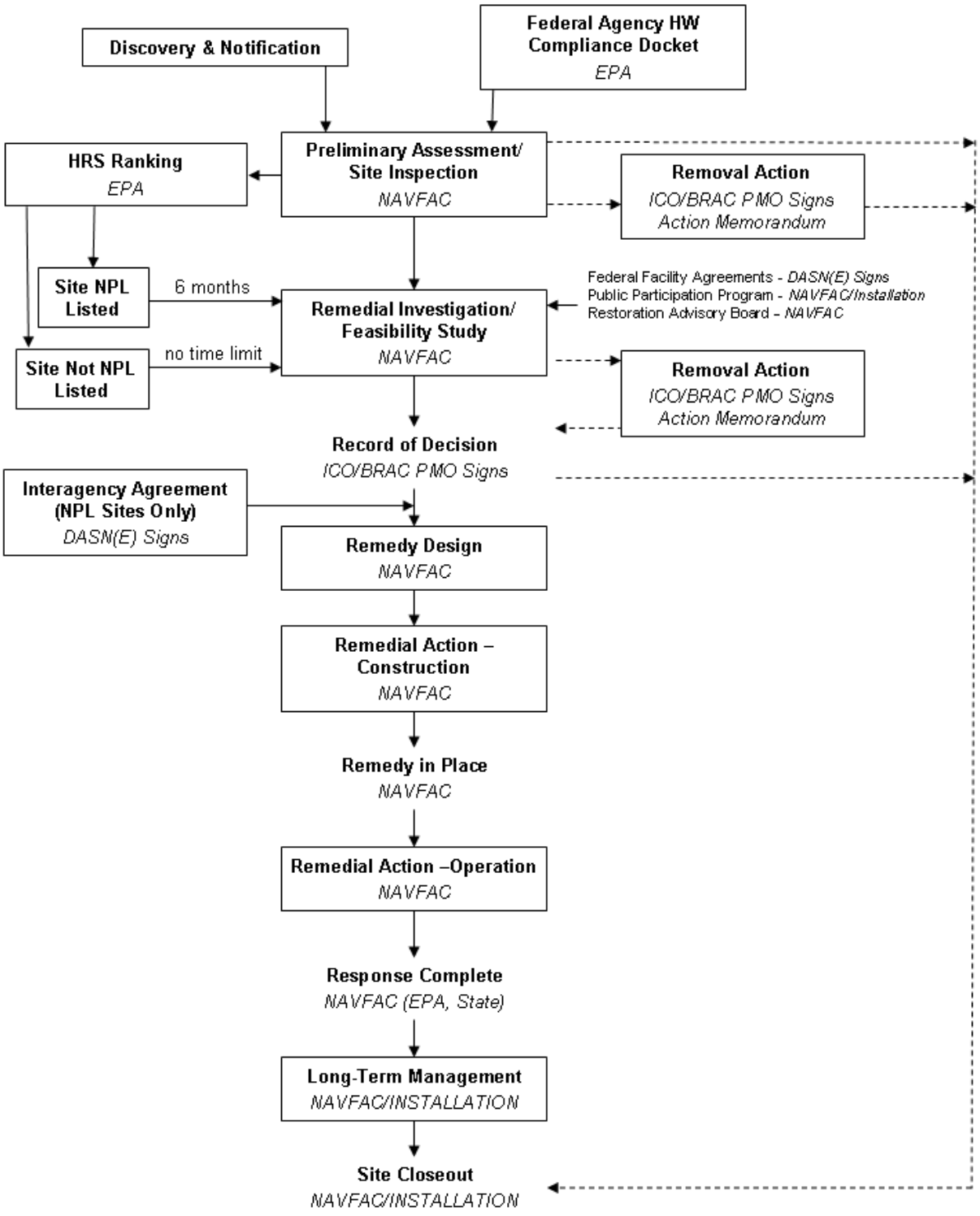
(10) Response Complete (RC)

(11) Long-term management (LTMgt)

(12) Site Closeout (SC)

EPA, appropriate State and local officials, and the public must have an opportunity to review and comment on assessments/studies and proposals for removal/remedial actions. In addition, for sites on the NPL, the Navy shall negotiate with State and Federal regulators early in the study process.

Figure 18.1 – Navy IR Process



b. **Knowledge of a Release.** An installation must report any release or threatened release of a HS to EPA, the State, and appropriate local authorities. Installations must also report releases, or threatened releases, to the chain of command and the REC using the reporting format contained in Appendix I. In addition, if the release exceeds the reportable quantity as defined under CERCLA, the installation must also notify the National Response Center (NRC) immediately at 1-800-424-8802 or 202-267-2675. If notification of the NRC is not practical, the installation should notify the regional EPA-designated OSC or the Coast Guard.

c. **Federal Agency HW Compliance Docket.** CERCLA requires that EPA maintain a Federal Agency HW Compliance Docket that contains information regarding Federal facilities that manage HS or from which HS may be or have been released. A State governor may petition EPA to add a facility to the docket. The docket lists all installations that have submitted IR information to EPA.

d. **Administrative Record.** The NCP requires the establishment of an administrative record for all CERCLA sites, (reference (b)). The Administrative Record contains those documents which form the basis for selection of a response action. The lead agency (Navy in this case) must establish an administrative record and make it available to the public at the start of the remedial investigation for remedial actions, and at the time of the engineering evaluation/cost analysis for removal actions.

e. **Public Participation.** The function of public participation activities is to inform the community of planned and ongoing activities, give it an opportunity to comment on and provide input to technical decisions, and allow it to address environmental concerns as early as possible during the remedial process. Navy policy requires opportunities for public participation to begin at initiation of the IR process and continue through cleanup. Whenever possible and practical, a RAB will be established for the purpose of enhancing community participation in the review and comment on actions and proposed actions respecting releases or threatened releases at the installation at all active bases and bases subject to closure under base closure law. The provision of TAPP funding may enhance the effectiveness of RABs. Department of the Navy guidance on TAPP is provided at reference (c).

f. **Protection of Health and Safety.** Response actions under the NCP must comply with the provisions for the protection of the health and safety of workers engaged in HW operations found in reference (d). These provisions include requirements for: developing a site health and safety plan; establishing site access control; enforcing standard operating safety procedures; implementing medical surveillance procedures; providing for environmental and personnel monitoring; providing appropriate personal protective equipment; and establishing emergency procedures. The NERP Manual provides detailed requirements for the protection of worker health and safety and proper personnel training.

g. **Public Health Assessment.** Agency for Toxic Substances and Disease Registry (ATSDR) must perform a public health assessment for each facility listed or proposed for inclusion on the NPL. ATSDR will perform the assessment using available information from IR studies and from site visits. To the maximum extent possible, ATSDR will attempt to complete a public health assessment before the completion of the RI/FS.

h. **ROD/Decision Document.** The purpose of a ROD or decision document is to document the selection of a site-specific remedy. To be consistent with the NCP, the selected remedy must be protective of human health and the environment, attain all State and Federal applicable or relevant and appropriate requirements for that site, be cost-effective, and use permanent treatment technologies or resource recovery

technologies to the maximum extent practicable. The ROD or decision document should also indicate the remediation goals that the remedy is expected to achieve.

As required under CERCLA, section 117(b), the Navy must publish notice of the final ROD and make it available to the public in the administrative record before adopting any plan for remedial action. The ROD must document any significant changes from the proposed plan and respond to all comments, written and oral, received during the comment period.

At non-NPL sites, the same procedure used for developing and signing the ROD is used to develop a decision document, except that EPA's concurrence is not required.

After the closure of the public comment period and after addressing all significant comments or issues, the ROD or decision document is signed.

i. **Interagency Agreement (IAG)/FFA.** CERCLA 120(e) requires Federal agencies to enter into an IAG with EPA within 180 days after completion of each RI/FS for an NPL site. The IAG addresses the expeditious completion of all necessary remedial actions. To expedite the cleanup process, DON policy requires entering into an FFA with EPA, and the State where possible, soon after an installation is listed on the NPL. The purpose of an FFA is to define the procedural framework and schedule for developing, implementing, and monitoring response actions at the site earlier in the process than an IAG. An FFA becomes an IAG for an OU or site cleanup at an installation once the ROD is signed and new schedules are negotiated for the actual RA. The law does not require an FFA. However, DOD and DON policy requires them unless they are not advantageous to the Navy.

j. **RD/RA.** After the ROD is signed, Navy will initiate the RD/RA for the selected remedy. The RD converts the conceptual design for the selected remedy into a final design for implementation. The RA commences after completion of the RD with the execution of the RD by in-house forces, or the award of a contract to construct or implement the selected alternative

k. **Remedial Action Completion or Response Complete.** The Navy should prepare a remedial action completion report when all remedial action objectives have been met, and no significant threat to public health or the environment exists. The Navy should seek written EPA and State concurrence on this report. Regulatory concurrence or buy-in on this report confirms achievement of the RC milestone. A Final RACR should be prepared once the remedial action objects have been met at the last site or OU of an installation. The Final RACR should provide a summary and reference for all the previous RACRs and for any NFA ROD(s) for the installation. The individual RACRs or Final RACR for an installation provides the basis for partial or full deletion from the NPL.

l. **NPL Delisting.** The NCP, reference (b), part 425(e), states that the EPA may delete a site or re-categorize it on the NPL where no further response is appropriate. The EPA, using the Final RACR prepared by the Navy, and in consultation with the State, will determine whether the NPL site has met the requirements, and if it has, will prepare a notice of intent to delete. The EPA will obtain State concurrence with the deletion notice before making the notice available to the public. The EPA will also make the final deletion package available to the public, which will contain the response to public comments received. All sites within a federal installation must have achieved RC before de-listing from the NPL, although partial de-listings are possible.

m. **Site Closeout.** This milestone signifies that the Navy has completed active management and monitoring at a site, the remedy is protective of human health and the environment, no restrictions on future land use are needed for this site, and no additional funds are expected to be expended at the site. This milestone can be achieved at any stage of the remediation process. However, there are some sites that will achieve protectiveness of human health and the environment while never achieving the SC milestone. These are sites where contaminants are left in place, such as a landfill, which require funds to ensure the protectiveness of the remedy.

n. **Five-year review.** Five-year reviews are required where a selected RA results in HS, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure. The first 5-year review clock for a site is triggered by the on-site mobilization date for RAs that require a RA-C phase. For remedies that do not require a RA-C phase, the trigger is the ROD/decision document signature date.

o. **Real Property Transactions and Management.** As Navy installations are closed and realigned, IR Program efforts must continue. The NAVFACENGCOM shall identify IR Program requirements and complete them in accordance with CERCLA, SARA, Community Environmental Response Facilitation Act (CERFA) and the NCP. Congress has established guidelines for funding the necessary investigations and cleanups and has similarly established a specific fund account for IR Program work at BRAC installations.

Reference (e) requires, per CERCLA section 120(h)(1), that all Federal agencies entering into a contract for the sale or other transfer of real property include a notice that identifies whether HS were stored on the property for 1 year or more, or were released or disposed of on the property. This notice must identify the type and quantity of such HS and the time at which such storage, release, or disposal took place.

CERFA expanded CERCLA section 120(h) to require that, before termination of Federal activities on any real property owned by the government and subject to base closure, the head of the agency with jurisdiction over the property must identify the real property on which no HS and no petroleum products or their derivatives were stored for 1 year or more, known to have been released, or disposed of. The Navy will identify uncontaminated property based on an investigation of the real property. It must obtain concurrence with the identification from EPA for NPL sites. For non-NPL sites, the Navy must provide the State 60 days for review and comment. If the Navy receives no comments, it may deem concurrence.

For bases subject to closure or realignment under a base closure law, the CERFA identification must be made, and concurrence must be obtained, within either: 18 months of the date by which a joint resolution disapproving the closure or realignment must be enacted and such a joint resolution has not been enacted or 18 months of the date on which the real property is selected for closure or realignment.

p. **Retention of Records.** CERCLA section 103(d)(2) requires that any person responsible for providing notification of known, suspected, or likely releases should also retain records of the facility and the HS release for 50 years. The records include information on the location, title, and condition of the facility and the identity, characteristics, quantity, origin, or condition (including containerization and previous treatment) of any HS contained or deposited on the facility. It is unlawful to destroy, mutilate, conceal, or falsify such records. It is possible, under some circumstances, to obtain a waiver from these requirements by applying to EPA.

q. **The RCRA Process.** RCRA section 3004(u) requires installations seeking or renewing a permit for a Treatment, Storage or Disposal Facility to take corrective action for past releases of HW or constituents from any SWMU at the facility. Permits issued by EPA (or a State with RCRA authority) will contain schedules of compliance for such correction.

Additional RCRA corrective action requirements include:

- Section 3004(v), requires corrective action be taken for releases of HW that have migrated beyond the facility's border.

- Section 3008(h), allows EPA to issue an order requiring corrective action to address releases of HW, whether or not from a SWMU, at facilities authorized to operate under interim status.

- The following general procedures are set forth under the Corrective Action provisions of RCRA:

  - RCRA Facility Assessment (RFA). The RFA is similar to the CERCLA PA/SI.

  - Interim Measures. Interim Measures are similar to Removal Actions under CERCLA.

  - RCRA Facility Inspection (RFI). The RFI is similar to the CERCLA RI.

  - Corrective Measures Study (CMS). The CMS is similar to the CERCLA FS.

  - Remedy Selection. Remedy Selection under RCRA is essentially the same as Remedy Selection under CERCLA.

  - Corrective Measures Implementation (CMI). The CMI is similar to RD/RA under CERCLA.

The Navy must give State and local officials and the public opportunity to review and comment on assessments/studies and proposals for Interim Measures/CMI. In addition, the Navy may negotiate FFSRAs with State regulators early in the IR study process.

18-4 Navy Policy

18-4.1 General. CERCLA is the preferred process for conducting the IR program. The Navy shall comply with all applicable requirements of CERCLA/SARA in carrying out actions under the Navy IR program. All terminology used by the Navy IR Program shall be consistent with that used in CERCLA/SARA and RCRA/HSWA. The Navy shall accomplish all IR response actions per the NCP, following EPA guidance in determining reasonable interpretation and application of the regulations. The Navy shall not adopt any guidelines or rules inconsistent with EPA's guidelines and rules. The Navy strives to clean up sites with higher risk before those with lower risk. The Navy should continually remind regulators and the public of this concept, especially when funding is constrained. NAVFACENCOM shall use references (f) through (l) in executing the IR Program.

Congress provides funding through ER,N. It is DON policy to use ER,N as the exclusive source of funding for IR at active installations. Per reference (m), other types of funding are not authorized instead

of, or to supplement, ER,N funds except where the work is within the scope of MILCON or OM,N funded construction projects as discussed in subsection 18-4.15. The Navy shall maintain an open and continuous dialogue with regulatory agencies and the public on all IR activities. The Navy shall use the Defense/State Memorandum of Agreement (DSMOA) or the Navy cost reimbursement process to provide funds to State regulatory agencies for oversight costs. For sites on an approved base closure list, BRAC funds are used exclusively for cleanup. Generally, all policies that apply to active installation cleanups apply to BRAC cleanups.

ER,N funds can be used for RCRA corrective action as described above for past releases of HW at permitted facilities, or facilities seeking permits, if these are the same types of releases covered by the IR program.

For BRAC installations, the BRAC PMO office administers the Environmental Restoration Program. NAVFACENGCOM RPMs, who are forward deployed, assist in that effort.

18-4.2 Emergency Response. Under CERCLA section 104, E.O. 12580 and the NCP, the Navy has the authority to respond to emergency situations (i.e., those circumstances that may immediately endanger human life, health or the environment) where the release or threatened release is on, or the sole source of the release is from, a Navy facility. If an IR site appears to be causing an emergency situation, the Navy is responsible for taking appropriate action to protect the public and the environment from the threat. The responsibility for responding to emergency situations at IR sites belongs to NAVFACENGCOM through the geographical FEC using ER,N funds.

18-4.3 HRS. Following completion of a PA/SI, the Navy shall prepare a package that includes available information necessary for HRS scoring, and shall forward the package to the EPA.

18-4.4 Administrative Record. CERCLA section 113(k) requires the establishment of an administrative record that will form the basis for the remedy selection. The administrative record shall be initiated as soon as the SI shows that the program will move into the RI/FS phase. The Navy shall establish and maintain the administrative record using ER,N/BRAC funds as appropriate. The Navy shall provide copies of the Administrative Record to the State and EPA as appropriate. NAVFACENGCOM shall ensure that a copy of the administrative record is available in an information repository that is available to the public at or near the site. A notice of the availability is part of the record. The Administrative Record is the basis for actions taken by the Navy and any future legal action concerning the site.

The administrative record is a CERCLA requirement and is not required where the Navy conducts cleanup actions under RCRA corrective action authority.

18-4.5 Public Participation. Navy public participation requirements, described in detail in the NERP Manual, are more comprehensive than the NCP. NAVFACENGCOM is responsible for implementing proactive public information programs that shall include formal Community Relations Plans (CRPs) for all IR sites, whether or not the installations are on the NPL. In addition, the ICO shall appoint a contact or spokesperson for community relations activities that shall be responsible for receiving all inquiries and releasing information concerning the installation's restoration program. This may be the RPM.

18-4.6 RAB and Technical Review Committee (TRC). DON policy, reference (n), is to have a RAB at all installations with cleanup programs, regardless of the cleanup authority (CERCLA or RCRA) under which the cleanup is taking place. Community interest is a condition to establish and maintain a RAB.

If the community does not display an interest in establishing or maintaining a RAB, the Navy shall note this, and re-invested the community interest in the RAB every five years, until site close out.

By increasing the diversity and number of community representatives, establishing a Community Co-Chair, and opening the meetings to the public, the RABs shall ensure that all stakeholders have an increased opportunity to actively participate in the timely review of IR documents and plans and to present various points of view for careful consideration. At base closure installations, RABs serve to help facilitate accelerated cleanup and property transfer. RABs shall not make decisions on environmental restoration activities as a group, but shall provide information, suggestions, and community input for use by the Navy in making decisions on actions and proposed actions concerning releases or threatened releases. The Navy does not intend that Federal Advisory Committee Act requirements shall apply. RABs shall not take the place of community outreach and participation activities required by law, regulation or policy. The Navy must still meet all community relations requirements. The NAVFACENGCOM shall be responsible for implementing the RAB. Meetings should be scheduled in facilities convenient for public attendance. The RAB may be adjourned when, in consultation with the community, there is no longer any need for it, i.e., when the IRP at the installation is either complete or all remedies are in-place and operating properly, or, if there is no longer sufficient, sustained community interest in the RAB. ER,N or BRAC funding is used for RAB support, as appropriate.

Some installation may still have active TRCs. SARA (211) requires installation to establish a TRC to facilitate community involvement in the review and comment on technical aspects of response actions and proposed actions with respect to releases or threaten releases at navy Installations. Member of the TRC include the Navy, EPA Officials, appropriates State and local authorities, Federal and State natural resources trustees, and Representatives of the community. Navy policy is to convert all TRCs to RABs.

18-4.7 Health and Safety. The NAVFACENGCOM RPM shall be responsible for ensuring that the requirements for protecting site worker health and safety are being enforced. NAVFACENGCOM shall ensure that a worker health and safety plan is prepared by each contractor and that the contractor follows the plan.

18-4.8 Public Health Assessment. The Navy Environmental Health Center (NEHC) shall coordinate with ATSDR concerning public health assessments. NEHC shall ensure that ATSDR is aware of new NPL listings and coordinate any ATSDR visits to installations with the installation and cognizant NAVFACENGCOM FEC. NEHC shall review public health assessments performed by ATSDR.

18-4.9 FFAs under CERCLA Section 120 and IAGs. The Navy shall enter into FFAs at its NPL sites as early as possible after identifying the requirement for a RI/FS. These agreements have high priority and function to establish roles and responsibilities and improve communications between all parties by allowing EPA and the State to review all work in support of remedy selection. FFAs also establish the procedural framework and establish schedules for the parties involved. At the completion of an RI/FS at an NPL site, the law requires signing the IAG. The previously negotiated FFA shall become an IAG upon incorporation of the statutory requirements after the ROD. There is no IAG requirement for a No Action ROD.

FFAs at NPL sites shall outline the working relationship between the States, EPA, and the Navy. NAVFACENGCOM is responsible for negotiating all FFAs. In developing the Navy's negotiating position, NAVFACENGCOM shall seek the input of the installation and CNO (N45). After coordination, FFAs shall

be forwarded with appropriate endorsements via the Chain of Command and CNO (N45) to the Deputy Assistant Secretary of the Navy (Environment) (DASN (E)) for signature.

18-4.10 ROD/Decision Document. NAVFACENGCOM shall prepare a ROD/decision document at the conclusion of a RI/FS and provide the ROD/decision document and a recommendation of action to the ICO/BRAC PMO. The ICO/BRAC PMO shall carefully review the proposed ROD/decision document. If the ICO/BRAC PMO concurs with the proposed ROD/decision document, then he/she shall sign it. If the ICO/BRAC PMO disagrees or has questions on the ROD/decision document, he/she shall present the issues to NAVFACENGCOM for discussion and resolution.

For NPL sites, the ICO/BRAC PMO forwards the ROD to the EPA regional office for concurrence. Although neither a ROD nor an IAG is required under CERCLA at non-NPL sites, State remediation laws may contain requirements for decision documentation. Where such requirements apply, NAVFACENGCOM shall prepare a decision document for submittal by the installation. If the State remediation law contains no specific requirements for decision documentation, NAVFACENGCOM shall prepare a decision document that contains the elements of a ROD. If the ICO/BRAC PMO concurs with the decision document, he/she shall sign and forward the decision document to the State with a copy to EPA.

18-4.11 IAGs. At the completion of an RI/FS at an NPL site, the law requires signing the IAG. The previously negotiated FFA shall become an IAG upon incorporation of the statutory requirements after the ROD. There is no IAG requirement for a No Action ROD.

18-4.12 RD/RA. The RPM shall oversee coordination of the RD/RA with the installation, EPA, the State, and local officials; maintain the administrative record; participate in community relations; and ensure overall QA/QC. NAVFACENGCOM shall ensure that the construction of the RA meets all specifications and is constructed in a manner that protects human health, welfare, and the environment. Remedy effectiveness should be evaluated at least annually to ensure that it is efficiently making progress towards meeting project goals; optimization opportunities should be identified and implemented.

18-4.13 LTMgt. Where HS, pollutants, or contaminants remain on a site after RC, planning for and conduct of LTMgt is the responsibility of NAVFACENGCOM using ER,N funds for a period of five years after the last site on an installation reaches RC. After that time, LTMgt will be provided by the installation using Operation and Maintenance, Navy (OM,N) funds. The purpose of LTMgt is to ensure the site or the OU remains protective of human health and the environment. For sites on active installations, NAVFACENGCOM will develop and implement a LTMgt Plan that identifies the specific requirements for each site requiring LTMgt. Prior to handover of the LTMgt responsibility to the ICO, NAVFAC will provide the LTMgt Plan and cost data to allow for timely budgeting of any funds required.

18-4.14 Five-Year Review. Five-year review responsibility for the whole installation will remain with NAVFACENGCOM using ER,N funds until five years after the last site at the installation achieves RC. The installation becomes responsible for conducting and funding five-year reviews using installation OM,N funds after that period of time.

Within the five-year span following final site RC, NAVFACENGCOM will include the schedule and cost estimates for conducting subsequent five-year reviews in the LTMgt Plan provided to the ICO. It is recommended that the ICO use NAVFACENGCOM for subsequent five-year reviews.

18-4.15 Remedy Optimization. NAVFACENGCOM is responsible for identifying and implementing remedy optimizations using ER,N funds. Once the ICO becomes responsible for the LTMgt, the installation must use OM,N funds for opportunities to reduce remaining costs.

18-4.16 Fines and Penalties. The ICO shall not pay fines and penalties assessed concerning environmental restoration work that is currently ER,N funded or planned for future ER,N funding, out of installation operating accounts. Upon receipt of a notice of violation or non-compliance that proposes to assess a fine or penalty relating to work that is ER,N-eligible, and thus under the cognizance of NAVFACENGCOM, the installation shall immediately forward the notice to NAVFACENGCOM for action. Installations shall pay fines and penalties related to ongoing HW operations (actions that are not eligible for ER,N funding) from the installation's operating account.

Where the Navy agrees to pay any fines and penalties arising under ER,N funded work, the Navy will submit these fines/penalties to Congress for authorization in the first available budget window. This is the case for ER,N work conducted under either CERCLA or RCRA. The funding source (i.e., ER,N) drives the notification requirement, not the particular law under which the work is performed.

18-4.17 Construction Projects on Contaminated Sites. Installations shall make every effort to avoid construction projects on contaminated sites. However, there may be times during planning for a project, or after the project commences, when contamination is discovered. In such instances, the following applies:

- If an installation discovers contamination during the planning stage, NAVFACENGCOM may investigate to determine if the site can be cleaned up following IR procedures using ER,N funds. However, the site investigation/clean up must compete with other IR sites based on risk management. In most cases, this will take several years and the site may not be available in time for the project.

- If contamination is discovered during construction and it is IR eligible, NAVFACENGCOM can carry out the site investigation/cleanup using ER,N funds. However, the site will compete with other IR sites based on risk management. If IR funding is not available in time to meet the construction schedule, the installation must use project funds to investigate/clean up the site. If neither IR nor project funding is available in time to meet the construction schedule, the installation must stop the project altogether or re-site it. An installation does not have an option to pay for any DERP eligible work with installation OM,N funds except to accomplish DERP eligible work within the scope of an OM,N funded construction project.

18-4.18 Navy as PRP. Historically, the Navy has contracted with private companies to transport and dispose of HW generated at its installations. Many of the disposal sites selected by contractors are themselves threatening/contaminating the environment and need to be cleaned up. Upon receipt of formal notice from the EPA, State or local authorities that a Navy installation is involved in a site as a PRP, the installation shall notify, by message, its chain of command, the REC, NAVFACENGCOM, cognizant NAVFACENGCOM FEC, OAGC (I&E), OGC (Litigation Office) and CNO (N45). The message shall describe the salient points of the notice. Simultaneously, the installation will mail a copy of the notice and other appropriate documents to the same addressees. NAVFACENGCOM shall take the lead role in negotiating with EPA, the U.S. Attorney's Office, and the PRP Steering Committee. NAVFACENGCOM shall cooperate with the other parties involved in the site response and provide requested information

regarding the Navy's HW sent to that site. NAVFACENGCOM shall report semiannually to CNO (N45), with a copy to the Regional Commander, on the status of Navy involvement in off-station CERCLA sites.

18-4.19 Formerly Used Defense Sites (FUDS). The USACE is responsible for the FUDS Program. The Navy's responsibility for FUDS sites that were formerly Navy sites is informational only. Should local interest arise, Navy installations, in consultation with NAVFACENGCOM, should pass questions regarding the status of FUDS sites to appropriate USACE officials. In special circumstances, USACE can grant authority for the Navy to address FUDS located on property formerly owned or operated by the Navy. This requires CNO (N45) concurrence.

18-4.20 Real Property Transactions and Management. NAVFACENGCOM shall consider the IR Program before any real property transactions and as part of all land management decisions.

a. **Acquisition.** The Navy does not acquire known contaminated property without careful consideration of the cleanup liability involved. The Navy should acquire contaminated property only in cases of the most critical operational necessity, and only with CNO approval to ensure insertion of incurred cleanup liabilities into the IRP.

(1) From Federal Agencies. Although DOD policy requires that a Component acquiring known contaminated real property will normally assume the responsibility for managing restoration actions at the property, Navy policy is to try to negotiate a transfer agreement that leaves the funding and management of restoration actions of the property with the transferring Component. In either case, transfer agreements must clearly assign continuing responsibility for cleanup after the transfer. Where Navy assumes the funding and management of restoration activities, the transferring Component is responsible for providing the Navy with all reports and a history of restoration actions taken prior to the transfer of the property, and if appropriate, for transferring the cleanup funding as planned for the property in the Future Years Defense Program. The Navy will not accept property from a non-DOD Federal agency unless the agency certifies it has met the requirements of CERCLA section 120(h) and provides supporting reports and documentation.

(2) From Private Parties. Acquisition of contaminated property from private parties is not encouraged. Where such acquisition is operationally necessary, Navy should negotiate cleanup costs as an offset to the purchase price. Navy must carefully balance operational requirements for the property against any cleanup liability that will come with it.

b. **Lease/Transfer/Disposal.** For non-BRAC property, NAVFACENGCOM shall prepare an Environmental Condition of Property (ECP) for all leases, easements, transfers, and disposals of Navy real property. Where appropriate, an ECP should be prepared for other actions involving the use of real property, e.g., licenses, depending on such factors as proposed use, the term of the use, and the presence of any contaminants on the property.

For BRAC property, the BRAC PMO shall prepare a Finding of Suitability for Transfer (FOST) or Lease (FOSL).

In the preparation of these documents, the Navy shall consult with Federal, State, and local regulators as necessary and appropriate, e.g., EPA where parcel involved is part of an NPL site.

c. **Contamination on Navy property scheduled for non-BRAC disposal.** The Navy shall clean up contamination on Navy property scheduled for non-BRAC disposal using ER,N funds following the normal ER,N prioritization process of worst-first/risk management. ER,N-funded cleanup activities will not be accelerated solely to accommodate the property disposal schedule

18-4.21 National Environmental Policy Act. IR Program actions that follow the NCP and fulfill public participation requirements are deemed to have complied with NEPA.

18-4.22 Government-Owned/Contractor-Operated Plants. The Navy's liability and responsibility for cleanup of sites at GOCO facilities flows from its status as owner of the facility. Past and present contractors share this liability since they are operators or generators at these facilities. Absent special contractual provisions to the contrary, Navy policy shall be to require GOCO contractors to pay for all cleanup costs associated with their operation of Navy facilities.

Navy actions to fulfill its CERCLA responsibilities shall be consistent with its contractual requirements with the GOCO contractor. Failure to coordinate may result in a claim by the operating contractor under a Navy contract or loss of potential claims by the Navy against the operator.

The following policy applies to implementation of the IR program at GOCOs:

- A PA/SI shall be done by NAVFACENGCOM at Navy GOCOs using ER,N funds. NAVFACENGCOM shall coordinate with the corresponding Echelon 2 Command before starting the study.

- Once PA/SI has been completed, it should provide the results to the Echelon 2 Command for action. If the PA/SI recommends additional follow-up work, the Echelon 2 Command shall immediately initiate and document discussions with the contractor pertaining to contractor responsibility for and participation in any cleanup efforts. It is Navy policy, reference (o), to identify, investigate and pursue cost-recovery/cost-sharing activities from DOD contractors or other parties that contribute to environmental contamination at DOD sites. Since the contractor may be liable for the cleanup, the Echelon 2 command shall offer the contractor the opportunity to conduct any follow-up studies. To ensure that any work done by the contractor is consistent with the requirements of CERCLA, the NCP and the IR Program, NAVFACENGCOM or its designee shall serve as the Echelon 2 Command's technical representative and shall review and approve all phases of the work, including submittals.

- If the contractor declines to perform the follow-up studies, the Echelon 2 Command shall document that response and request NAVFACENGCOM to conduct the work under the IR Program. NAVFACENGCOM shall use ER,N funds and identify all costs associated with the follow-up studies for cost sharing or future cost-recovery actions, if such action is appropriate.

- Similar scenarios as described above shall be followed for any RD/RAs, including removal actions. The Navy shall pursue cost-sharing/cost-recovery actions against the contractor where appropriate.

- All actions (i.e., studies and cleanups) done at GOCOs on Navy property shall be consistent with CERCLA and the NCP. Administrative records and CRPs shall be prepared at all GOCOs. RABs are recommended but not mandatory unless the Navy is using ER,N funding to conduct the studies and cleanup. If EPA places a GOCO on the NPL, all timetables associated with CERCLA section

120 apply and the Navy shall conform. NAVFACENGCOM shall handle negotiations concerning necessary FFAs.

18-4.23 State Laws. Navy policy is to comply with all State laws that are consistent with the CERCLA, SARA and the NCP. In States with a mini-superfund law, the Navy may find it advantageous to negotiate a FFSRA for non-NPL sites, which spells out the responsibilities of each party to the cleanup. When cleaning up sites under the RCRA corrective action program, the Navy will follow laws and regulations for States that have received primacy.

18-4.24 Coordination with Other Environmental Regulations. Although CERCLA section 121(e) exempts IR Program actions occurring entirely on-site that are consistent with CERCLA section 121 from obtaining Federal, State, or local permits, interagency coordination is often required to ensure consistency with applicable or relevant and appropriate requirements (ARARs) or other environmental laws. RPMs shall solicit early involvement of other Navy specialists including natural and cultural resources personnel to ensure identification and completion of the Endangered Species Act, section 7 consultations, National Historic Preservation Act, section 106 consultations, and related requirements. These requirements may occur at any phase of an IR Program investigation including PA/SI, RI/FS, removal action, interim action, or RA.

18-4.25 Training. SARA requires HW site training. The federal government issued requirements in reference (d). All Navy and contractor employees working on-site and exposed to HS, health hazards or safety hazards, and the supervisors and management personnel responsible for the site, must receive training before they are permitted to engage in cleanup operations. These requirements are summarized below:

- All employees exposed to HS, health hazards, or safety hazards shall have 40 hours of off-site instruction and 3 days of field experience. Training shall be as practical as possible and include hands-on use of equipment and exercises designed to demonstrate and practice classroom instruction.

- On-site management personnel and supervisors of personnel engaged in HM operations must receive training equal to the above, plus eight additional hours on managing such operations.

- The Navy shall provide employees and managers with eight hours of refresher training annually.

Chapter 28, Appendix P, and the NERP Manual provide additional details of required and recommended IR training for staff and visitors to IR sites.

18-5 Responsibilities

18-5.1 CNO (N45) shall serve as the IR Resource and Assessment Sponsor, overall Navy program manager and advisor for the Navy in matters related to the IR Program, including, but not limited to:

(a) Develop IR policy and guidance.

(b) Provide oversight for IR execution by NAVFACENGCOM.

(c) Coordinate the IRP requirements with, and provide support to, DASN (E).

(d) Review and forward FFA to DASN (E) for signature.

(e) Review and sign FFSRA.

(f) Coordinate with other Military Service Headquarters and the OSD with respect to IR.

18-5.2 BSOs / Other than NAVFACENGCOM shall:

(a) Pass IR Program information and guidance to their installations.

(b) Ensure that subordinate installations fulfill their responsibilities under the Navy IR Program and appoint an IR coordinator, as necessary.

(c) Ensure that installation budgets reflect resource requirements to support the IR Program for any LTMgt requirements five years after the last site on an installation reaches RC.

(d) Ensure that subordinate commands review all facility siting proposals against the requirements of the IRP, especially where an IRP decision document has identified or put in place land-use restrictions.

(e) Obtain CNO approval before acquiring known contaminated property from another DOD Component, other federal agency, or private party.

18-5.3 NAVFACENGCOM shall:

(a) Execute the IR Program for CNO N45.

(b) Update the IR database at least semi-annually.

(c) Ensure cognizant NAVFACENGCOM FECs coordinate overall IR Program with ICOs.

(d) Provide program and technical support as directed by CNO. Also provide site specific technical, progress, and budgeting information to satisfy program reporting requirements.

(e) Develop and support ER,N resource requests and manage funds allocated for program execution.

(f) Resolve issues and problems associated with conduct of the IR Program, and raise the issues to CNO where necessary.

(g) Perform IR studies and RA projects and prepare SC documentation by contract, in-house effort, or combination.

(h) Identify and train RPMs.

(i) Negotiate FFAs on behalf of DON. Forward draft final proposed FFAs to CNO for review and submission to DASN (E) for signature. When substantial changes to model language or

policy are contemplated, these should be referred to OAGC (I&E) and CNO (N45) as early as possible after they are identified.

(j) Negotiate FFSRAs on behalf of DON. Forward draft final proposed FFSRAs to CNO N45 for signature. When substantial changes to model language or policy are contemplated, these should be referred to OAGC (I&E) and CNO (N45) as early as possible after they are identified.

(k) Participate in remediation planning meetings with other PRPs and agencies, forward proposed remediation agreements to CNO and OGC (Litigation Office) for review and comment, sign and administer the agreements and disseminate information to all interested parties at all stages of the process.

(l) Represent the Navy in matters relating to the assessment of fines and/or penalties associated with IR program.

(m) Develop and perform site-specific projects to assess and control contamination from past HW sites.

(n) Ensure that IR work plans and ecological risk assessments are reviewed by health and safety and natural resources professionals familiar with the site.

(o) Track project progress to meet schedule requirements.

(p) Coordinate, at all stages, with ICOs and regulatory agencies before initiating projects.

(q) Fulfill public participation responsibilities, including RAB and CRP actions.

(r) Prepare the ROD and/or decision document and forward to the ICO with a recommended alternative.

(s) Maintain administrative record files and distribute copies as required.

(t) Prepare project plans, reports, and contract documents; coordinate review and comments; and distribute final documents to the appropriate installation for ICO signature, as necessary.

(u) Provide technical and financial oversight during project performance.

(v) Provide IR study results to installation planning, real estate and natural resources personnel and work with acquisition project managers to ensure that HS site conditions are taken into account by other Navy programs and projects.

(w) Validate installation facility planning proposals against IRP site installation or land-use restrictions.

18-5.4 BUMED (through the NEHC) shall:

(a) Coordinate with ATSDR concerning ATSDR's legally mandated health-related activities, including public health assessments, public health consultations, health surveys and investigations, toxicology databases, emergency response and health education.

(b) Review public health assessments, consultations, surveys, and DOD-specific toxicological profiles.

(c) Provide health/medical evaluation of risk assessments and other cleanup program documents including work plans, sampling plans, remedial investigation documents, FS documents, quality assurance plans (QAPs), and health and safety plans as requested by NAVFACENGCOM.

(d) Provide technical support for risk communication and other health related training courses.

(e) Conduct risk assessments as required.

(f) Provide assistance in developing ARARs for cleanup program activities.

(g) Assist NAVFACENGCOM and installations in preparing for public meetings and respond to community concerns regarding health and safety aspects of projects.

18-5.5 COs shall:

(a) Notify Federal, State and local officials and the chain of command upon discovery of a release.

(b) Meet all applicable statutory and regulatory requirements including, but not limited to, safety and health, training (for installation personnel), and natural resources during site assessment and response actions.

(c) Forward, or authorize NAVFACENGCOM to forward, all final primary documents to the EPA and State regulatory agencies prior to deadlines in either FFAs or State agreements/orders.

(d) Be responsible for any required OM,N funding and support for LTMgt at sites commencing five years after the site has reached RC.

(e) Ensure that installation OM,N funds are not used to perform work that is eligible for ER,N funding.

(f) In conjunction with the cognizant NAVFACENGCOM FEC, select the remedy and sign the decision documents for all IR Program sites.

(g) Notify appropriate commands of any EPA or State notice of PRP action, and support PRP response.

(h) Consider IR Program site conditions or land-use restrictions before land use planning, development, or operation, especially for MILCON and special project development. Ensure that the shore facilities planning process incorporates a review of the IR efforts being done at the installation.

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CHAPTER 19

MUNITIONS RESPONSE

19-1 Scope

This chapter identifies the requirements, responsibilities, and procedures for the Navy's Munitions Response Program (MRP). The MRP provides for compliance with the National Defense Authorization Act of 2000 requiring DOD to establish a program addressing military munitions as part of the DERP. The DERP Management Guidance, reference (a), establishes the programmatic requirements for the MRP.

The purpose of the MRP is to address munitions and explosives of concern (MEC) and munitions constituents (MCs) used or released on sites from past operations and activities. MEC includes Unexploded Ordnance (UXO), discarded military munitions (DMM), and MC in high enough concentrations as to present an explosive hazard. The policies and procedures from the IR program apply to sites under this program, however, the MRP accounts for unique explosives safety hazards associated with these sites. The investigation and cleanup of past contamination of MEC and MC will be conducted in a manner consistent with the IR Program (Chapter 18) and integrates explosives safety requirements, references (b) and (f).

The MRP applies to munitions response sites (MRSs) or Areas of Concern (AOCs) known or suspected to contain MEC and MC that are located at:

– Former ranges and disposal sites at active, BRAC, and non-BRAC closure installations.

The MRP is limited to the United States, its territories and possessions, and does not apply in foreign countries. This chapter does not specifically address response actions for sites containing chemical warfare material (CWM). RPMs that encounter CWM should immediately contact the Navy Ordnance Safety and Security Activity (NOSSA) for assistance. The U.S. Army's Non-Stockpile Chemical Material Program Office, Aberdeen, Maryland is the executive agent and should be the first responder for CWM.

19-1.1 References. Refer to Chapter 18 for additional guidance. Other references are:

(a) Management Guidance for the Defense Environmental Restoration Program, ODUSD(I&E), September 2001;

(b) Ammunition and Explosives Safety Ashore, OP 5, 7th edition (series);

(c) CNO (N45) Letter 5090 Ser N45C/6U838228 of 6 Nov 2006, Policy Letter Range Sustainability Environmental Program Assessment Implementation Policy;

(d) Navy MRP Guidance, CNO (N45C), 30 June 2005;

(e) OPNAVINST 8020.15/MCO 8020.13, "Explosives Safety Review, Oversight, and Verification of Response Actions Involving Military Munitions," 4 October 2003;

(f) NOSSAINST 8020.15, "Military Munitions Program Oversight," 8 March 2004;

(g) National Defense Authorization Act (NDAA) for Fiscal Year 2002, 10 USC § 2710;

(h) Munitions Response Site Prioritization Protocol, October 2005, 32 CFR Part 179;

(i) National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR 300;

(j) DON NERP Manual, August 2006.

19-2 Terms and Definitions

19-2.1 After Action Reports (AARs). A document required by reference (b), (e), and (f) to be submitted to the NOSSA within six months of the completion of a munitions response. The AAR documents that the explosives safety aspects of the response have been completed as outlined in the approved Explosive Safety Submission (ESS) and addresses the MEC found, effectiveness of the response techniques, any land use controls, long-term management provisions for the residual risk, and other pertinent information.

19-2.2 Discarded Military Munitions. Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental law and regulations.

19-2.3 Explosives Safety Submission. A document required by reference (b), (e), and (f) to be submitted and approved by NOSSA prior to the initiation of any munitions response activities (excluding explosives or munitions emergency responses) that involve explosives, intentional physical contact with MEC or ground disturbing or other intrusive activities in areas known or suspected to contain MEC. The ESS addresses the explosives safety aspects of a munitions response including, but not limited to, site location, response techniques, the munition with the greatest fragmentation distance, explosives safety arcs or exclusion zones, site conditions, and other pertinent information.

19-2.4 Military Munitions. All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DOD, USCG, DOE, and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, except that the term does include non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954, as

amended, have been completed.

19-2.5 Military Munitions Burial Site. A site where military munitions were intentionally buried, with the intent to abandon or discard. This term includes burial sites used to dispose of military munitions in a manner consistent with applicable environmental laws and regulations or the national practice at the time of burial. It does not include sites where munitions were intentionally covered with earth during authorized destruction by detonation, or where in-situ capping is implemented as an engineered remedy under an authorized response action.

19-2.6 Munitions and Explosives of Concern. MEC consists of the following:

Military Munitions that are:

– UXO;

– DMM;

– MCs present in high enough concentrations as to pose an explosive hazard.

19-2.7 Munitions Constituents. Any materials originating from UXO, DMM, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

19-2.8 Munitions Response. Response actions that include investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by UXO, DMM, or MC.

19-2.9 Munitions Response Site. A discrete location that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges, munitions burial areas, and explosive processing facilities. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions.

19-2.10 Unexploded Ordnance. Military munitions that:

– have been primed, fused, armed, or otherwise prepared for action;

– have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and

– remain unexploded either by malfunction, design, or any other cause.

Additional terms and definitions may be found in NOSSAINST 8020.15, reference (f).

19-3 Requirements

19-3.1 Military Munitions Response Program Process. The MRP focuses on protecting human health and the environment from hazards and risks associated with MEC and MC. The MRP cleanup process follows the CERCLA process outlined in Chapter 18. Additionally, MRP incorporates unique explosives safety requirements that may occur during the munitions response process as outlined in reference (e) which includes a flowchart and reference (f). Specific roles and responsibilities are found in 19-5.

19-3.2 Inventory. The FY-02 NDAA, reference (g), requires that DOD and its components develop and maintain an inventory of sites known or suspected to contain UXO, DMM, and MC. This inventory of munitions response sites is updated annually, provided to ODUSD (I&E), and is shared with public stakeholders and regulators to ensure that all MRSs are identified.

19-3.3 Site Priority. Using the Munitions Response Site Prioritization Protocol (MRSPP), reference (h), the Navy shall assign a relative priority to each munitions response site in the inventory. The MRSPP process requires consultation with federal agencies, Indian Tribes, states, and public stakeholders. Site priorities will be annually reviewed and updated based on new information and site conditions. An independent QA panel led by CNO (N45) shall be established to review all prioritization decisions to ensure consistent and appropriate application of the MRSPP.

19-3.4 Sequencing. Sequencing of sites shall be developed in consultation with appropriate regulators and stakeholders. Typically, higher priority sites are addressed before lower priority sites. If sequencing results in a lower priority site being addressed before a higher priority site, the Navy shall provide specific justification for this action. Information that influences the sequencing of a site shall be included in the Administrative Record and the Information Repository.

19-4 Navy Policy

19-4.1 General. CERCLA is the preferred regulatory process for conducting the munitions response program. An installation shall comply with all applicable requirements of CERCLA/SARA in carrying out actions under the Navy MR program. Installations shall accomplish all MR actions per the NCP, reference (i). The Navy shall not adopt any guidelines or rules inconsistent with EPA's guidelines and rules. Additional MRP guidance is found in the NERP Manual, reference (j).

Congress provides MRP funding through ER,N. It is Navy policy to use the ER,N Munitions Response program element as the funding source for munitions responses at active installations and other non-BRAC sites where Navy is responsible for MR funding. The BRAC PMO is responsible for funding BRAC MRP sites. Funding for both ER,N and BRAC MRP sites must be uniquely identified and reported to ODUSD(I&E) annually.

The Navy shall maintain an open and continuous dialogue with regulatory agencies and the public on all MRP activities. The Navy shall use the DSMOA or the cost reimbursement process to provide funds to State regulatory agencies for oversight costs.

NAVFACENGCOM is the Navy's agent for executing the ER,N MR program element with program

oversight by CNO (N45). NAVFACENGCOM has delegated the day-to-day operation of the MRP to the NAVFACENGCOM FECs.

For BRAC installations, the BRAC PMO office administers the Environmental Restoration Program. NAVFACENGCOM RPMs, who are forward deployed, assist in that effort.

In most cases, sites known or suspected to contain MEC should not be released from Navy control until a munitions response consistent with the reasonably anticipated land use is completed in accordance with a DDESB approved ESS.

19-4.2 DOD MRP Eligibility Criteria. Additional MRP eligibility criteria supplement those found in Chapter 18 (refer to DERP Mgt Guidance). The MRP is limited to the United States, its territories and possessions, and does not apply in foreign countries.

a. **MRP Activities.** Response activities (i.e., identification, investigation, removal actions, remedial actions, or a combination of removal and remedial actions) to address MEC/MC under the MRP can be conducted where sites or AOCs are known or suspected to contain MEC and MC that are located at:

- Former ranges and disposal sites at active, BRAC, and non-BRAC closure installations.

The following criteria will be used for inclusion of water sites or AOCs, reference (d):

- Shallow water areas where munitions releases are known or suspected to have occurred prior to 30 September 2002, where Navy actions were responsible for the release, and where the site or AOC is not:
  - covered by water deeper than 120 feet;
  - part of, or associated with, a designated operational range;
  - a designated water disposal site;
  - a FUDS;
  - a result of combat operations;
  - a maritime wreck; or
  - an artificial reef.

The MRP does not apply to sites or AOCs that are:

- operational ranges which are covered by the Range Sustainability Environmental Program Assessment Implementation Policy, reference (c);
- a FUDS;

- an active munitions demilitarization facility;

- an active waste military munitions treatment or disposal unit that operated after 30 September 2002;

- a site that is currently being addressed as part of the IR Program in accordance with Chapter 18;

- a result of combat operations or acts of war, or

- indoor firing ranges.

Consult CNO (N45) for specific guidance regarding munitions burial sites located on an operational range.

b. **IRP Activities.** Response activities to address MEC/MC under the IRP can be conducted where:

- The release occurred prior to 30 September 2000; and

- The release is at a site that is not a FUDS, not an operational range, not an active munitions demilitarization facility, and not an active WMM treatment or disposal unit; and

- The site was identified and included in the NORM database prior to 30 September 2000, and was not classified as RC.

c. **Supplemental Navy Eligibility Guidance.** The Navy adheres to the above DOD MRP/IRP eligibility criteria. In addition, small arms ranges already identified as part of the IR program as of 30 September 2002 may remain in the IR program or be moved to the MR program at the discretion of the IR Manager.

19-4.3 Explosives Safety and Chemical Warfare Material Hazards. Munitions response sites present the potential for explosives hazards; therefore, explosives safety procedures and requirements must be included within the CERCLA process. In addition, unique hazards from chemical warfare materials may be present on some sites. The Army is the executive agent for handling chemical warfare responses and should be consulted for technical assistance. Sites known or suspected to contain chemical warfare materials should be immediately reported to NOSSA who will coordinate Army assistance, as required.

a. An ESS must be submitted and approved prior to implementing any munitions response actions that include explosive storage, intentional physical contact with MEC or any intrusive or ground disturbing activities in the areas known or suspected to contain MEC, references (b) and (f).

b. Installations shall prohibit and prevent unauthorized access to munitions response sites (MRS) and limit access to munitions response sites by authorizing personnel entry to Navy property only after full consideration of the type, amount, and location of MEC present and their planned activities, reference (b).

19-4.4 Priority. The RPM in consultation with appropriate regulators and public stakeholders will apply the MRSPP to all MRP sites to determine a relative priority for each site in the inventory. Sufficient data to apply one or more of the three MRSPP hazard evaluation modules may not be available until after completion of a Preliminary Assessment or Site Inspection. However a MRS must be prioritized as soon as there is sufficient information to evaluate at least one of the three modules that comprise the MRSPP (protocol). The module producing the highest hazard ranking will determine the overall site priority. The site priority may change when additional data are collected and until all three modules can be evaluated. Module(s) for which there are insufficient data will be assigned a status of "evaluation pending." MRSPP should be applied as MRP sites are added to the inventory. Each site priority must be reviewed at least annually and the protocol reapplied as necessary to reflect new information. Reapplication of the protocol is required under the following circumstances:

- upon completion of a response action that changes MRS conditions in a manner that could affect the evaluation under the protocol;

- to update or validate a previous evaluation at a MR site when new information is available;

- to update or validate the priority assigned where that priority has been previously assigned based on evaluation of only one or two of the three evaluation modules; or

- to categorize a MR site previously classified as evaluation pending.

Documentation of scores and any adjustments shall be included in the Administrative Record.

a. **Quality Assurance.** An independent QA panel will be established and led by CNO (N45). The panel will also include representatives from NAVFAC headquarters and the FEC under whose jurisdiction the site is located. As appropriate, a representative from the Marine Corps and the BRAC PMO will be included in the QA Panel. The panel shall review all prioritization decisions to ensure appropriate and consistent application of the MRSPP. The panel may not include any member that originally scored the site. The QA Panel may adjust a MRS priority but must provide rationale for the change with feedback to the RPM. The RPM shall solicit comments on any changes to the site priority from appropriate regulators and public stakeholders involved in determining the original priority, include all comments in the Administrative Record, and provide changes in priority to ODUSD(I&E).

b. **Sequencing.** Sequencing for funding of sites shall be developed in consultation with appropriate regulators and stakeholders. Typically, higher priority sites are addressed before lower priority sites. If sequencing results in a lower priority site being addressed prior to a higher priority site, the Navy must provide justification for the sequencing decision.

19-4.5 Restoration Advisory Board. Where a RAB has already been established for the IR Program, its roles and responsibilities shall include the MRP. If no RAB exists, one should be considered for the MRP. See additional guidance in Chapter 18.

19-4.6 Change in Land Use. Once a response action at the MRP site has been completed to the level agreed to in the ROD and the current remedy remains protective, Navy will not fund or conduct additional MR actions solely to accommodate a change in land use not reasonably anticipated at the time of remedy selection.

19-4.7 Recurring Review. The Navy will conduct recurring reviews whenever a site cannot achieve unrestricted land use. The review verifies continued protectiveness of the remedy and evaluates the efficacy and cost-benefit of new technology application. This evaluation includes a determination whether the new technology will reduce lifecycle management costs sufficiently to justify additional munitions response actions.

19-4.8 Training. All personnel authorized for access to munitions response sites must be appropriately trained on MEC and MC health risks and explosives safety hazards, reference (b).

19-5 Responsibilities

19-5.1 CNO (N45) shall serve as the MRP Resource and Assessment Sponsor, overall Navy program manager and advisor for the Navy in matters related to munitions response, including, but not limited to:

(a) Oversight for MRP execution;

(b) Developing MRP policy and guidance;

(c) Chairing the MRSPP QA Panel;

(d) Coordinating requirements and communication, and providing an advisory role between ASN (I&E) and NAVFAC; and

(e) Coordinating with other Military Service Headquarters and the OSD with respect to MRP.

19-5.2 BSOs/Other Than NAVFACENGCOM shall:

(a) Ensure that subordinate installations identify and forward MR Program requirements to CNO (N45);

(b) Provide program information and guidance to their installations;

(c) Ensure that subordinate installations coordinate MRP site remediation planning, programming, budgeting, and execution with their cognizant NAVFACENGCOM FEC;

(d) Ensure that subordinate installations fulfill their responsibilities under the Navy MRP;

(e) Ensure that installations with MRP sites meet public participation and other legal requirements;

(f) Ensure that installation budgets reflect resource requirements to support the MRP;

(g) Ensure that subordinate commands review all facility siting proposals against the requirements of the MRP, especially where an MRP decision document has identified or put in place land-use restrictions; and

(h) Obtain CNO (N45) approval before acquiring property known to be contaminated with MEC, MC or other hazardous wastes from another property land owner.

19-5.3 NAVFACENGCOM shall:

(a) Execute the MRP for CNO (N45);

(b) Update the MRP database at least semi-annually;

(c) Ensure cognizant NAVFACENGCOM FECs coordinate overall MRP activities with installation commanders and the BRAC PMO;

(d) Provide program and technical support as directed by CNO (N45), and provide site-specific technical, progress, and budgeting information to satisfy program reporting requirements;

(e) Develop and support ER,N resource requests and manage funds allocated for program execution including sequencing munitions response sites based on MRSPP results and other relevant factors;

(f) Resolve issues and problems associated with conduct of the MRP, and raise the issues to CNO (N45) where necessary;

(g) Perform MRP studies and Response Actions and prepare Site Closeout documentation by contract, in-house effort, or in combination;

(h) Prepare and submit ESSs and other explosives safety documentation required by references (b) , (e), and (f);

(i) Coordinate with NOSSA to schedule explosive safety audits of MRP projects;

(j) Identify and train RPMs;

(k) Participate in MR remediation planning meetings with other PRPs and agencies, forward proposed remediation agreements to CNO (N45) and OGC (Litigation Office) for review and comment. Sign and administer the agreements and disseminate information to all interested parties at all stages of the process;

(l) Represent the Navy in matters relating to the assessment of fines and/or penalties associated with MRP programs;

(m) Develop and perform site-specific projects to assess and control contamination in conjunction with installations;

(n) Ensure that MRP work plans and ecological risk assessments are reviewed by health and safety and natural resources professionals familiar with the site;

(o) Track project progress to meet schedule requirements;

(p) Coordinate, at all stages, with installation COs, the BRAC PMO and regulatory agencies, as appropriate, before initiating MR projects and through project completion and LTMgt;

(q) Support the installation in fulfilling public participation responsibilities as requested, including RAB and CRP actions, and installation-specific CRP;

(r) Prepare the ROD and/or decision document and forward to the installation CO or BRAC PMO with a recommended alternative;

(s) Maintain administrative record files and distribute copies as required;

(t) Prepare MRP project plans, reports, and contract documents; coordinate review and comments; and distribute final documents to the appropriate installation and Echelon 2 Command;

(u) Provide technical and financial oversight during project performance;

(v) Provide MRP study results to planning, real estate, and natural resources personnel and work with acquisition project managers to ensure that MEC and MC site conditions are taken into account by other Navy programs and projects before irreversible decisions are made, and

(w) Validate installation facility planning proposals against MRP or land-use restrictions.

(x) Participate as member of the MRSPP QA Panel.

19-5.4 Navy Ordnance Safety Support Activity. In the MRP, NOSSA provides an explosives safety oversight role. NOSSA shall:

(a) Maintain an archive of MR site-related documents;

(b) Review MR notification reports;

(c) Review and approve ESSs prepared by NAVFACENGCOM FEC and submit the approved ESSs to DOD Explosives Safety Board (DDESB);

(d) Review AARs and submit to DDESB, as appropriate;

(e) Review explosive mishaps reports and EOD incident reports;

(f) Conduct audits to ensure compliance with explosives safety requirements at MR sites;

(g) Provide formal verification that the final response action was completed in accordance with approved explosives safety documentation;

(h) Provide explosives safety oversight for all munitions response actions with BSOs, NAVFACENGCOM, BRAC PMO, Installations, and Activities, and

(i) Review proposed language for deeds, activity master plans, or other land use controls in collaboration with BSOs, NAVFACENGCOM, Installations, and Activities.

19-5.5 COs of shore activities shall:

(a) Notify Federal, State, and local officials and the chain of command upon discovery of a release of MEC or MC;

(b) Meet all applicable statutory and regulatory requirements including, but not limited to, safety and health, training (for installation personnel), and natural resources during site assessment and response actions;

(c) Provide necessary review and comment on MRP plans of action, reports, etc. to the cognizant NAVFACENGCOM FEC;

(d) Forward, or authorize cognizant NAVFACENGCOM FEC to forward, all final primary documents to the EPA and State regulatory agencies prior to deadlines in either FFAs or State agreements/orders;

(e) Fund MRP eligible work with ER,N funds only, since installations are specifically forbidden to use installation O&M funds to perform work that is eligible for ER,N funding.;

(f) Provide logistic support for MRP projects at their installation;

(g) Provide support for periodic meetings with the RAB on MRP sites;

(h) Provide information as required for updating project exhibits to cognizant NAVFACENGCOM FEC for MRP sites;

(i) Prepare and implement a public participation program, including a CRP, for MRP sites;

(j) In conjunction with the cognizant NAVFACENGCOM FEC, select the remedy and sign the decision documents for all active MRP sites;

(k) Participate in negotiations of FFAs and State agreements;

(l) Notify appropriate commands of any EPA or State notice of PRP action, and support PRP response;

(m) Consider MRP site conditions or land-use restrictions before land use planning, development, or operation, especially for MILCON and special project development. Incorporate MRP review into the shore facilities planning process;

(n) Place appropriate information in the information repository;

(o) Inform the public of the availability of Navy funding for TAPP, and

(p) Establish, in coordination with affected parties (e.g., the current owner; in the case of BRAC property, the prospective transferee), clearly defined and enforceable LUCs when appropriate. Implement LUCs through established real estate and land use management mechanisms and ensure LUCs remain effective

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CHAPTER 20

NOISE PREVENTION ASHORE

20-1 Scope

This chapter identifies requirements and responsibilities for reducing environmental noise from Navy shore operations. Navy policy is to comply with applicable provisions of the Noise Control Act and Federal, State, and local noise control regulations. The requirements of this Chapter apply within the United States, Commonwealth of Puerto Rico, Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands. Shipboard noise abatement is addressed in Chapter 22. Navy noise abatement for activities in foreign countries is provided in Chapter 21.

20-1.1 References. Relevant references are:

(a) DODI 4165.57, November 8, 1977;

(b) DODI 4715.13 of 15 Nov 2005, DOD Noise Program;

(c) OPNAVINST 11010.36B of 20 Dec 2002, Air Installations Compatible Use Zones; (NOTAL)

(d) OPNAVINST 5100.23G, NAVOSH Program Manual. (NOTAL)

20-2 Legislation

20-2.1 The Noise Control Act. The Noise Control Act provides that Federal performance standards shall be incorporated into the design of certain new vehicles, railroad equipment, and products to reduce noise emissions. Retrofit modifications are not prescribed for existing noise sources. Military aircraft, combat equipment, and weapon systems are exempt from new product design standards. State and local laws may prescribe maximum noise levels across property lines. Boundary noise limits are attainable by a variety of structural and natural noise path barriers and by source design modifications.

20-3 Terms and Definitions

20-3.1 Air Installations Compatible Use Zones (AICUZ). According to reference (a), the AICUZ for each military air installation shall consist of (a) land areas upon which certain uses may obstruct the airspace or otherwise be hazardous to aircraft operations, and (b) land areas that are exposed to the health, safety or welfare hazards of aircraft operations.

20-3.2 Environmental Noise. The intensity, duration, and character of sounds from all sources.

20-3.3 Low-Noise-Emission Product. Any product that emits noise at a Sound Pressure Level less than at least one-half the levels specified in noise emission standards under regulations applicable to that type of product under the Noise Control Act, Section 6, at the time of procurement.

20-4 Requirements

20-4.1 General Requirements. Noise control and abatement programs shall be developed according to the policies and requirements of reference (b).

20-4.2 Air Installations Compatible Use Zone. The AICUZ was established by reference (c) to work with local communities in fostering compatible land use development in the vicinity of military installations. Its objectives are to assess the impact of aircraft operations with regard to aircraft noise sources and accident potential produced by existing and proposed actions both on and off-base ensure local land use development is compatible with the installation's mission, and to minimize noise impacts whenever practicable through implementation of operational alternatives that do not degrade mission requirements or aircraft safety to identify and address incompatible development in areas that are in the vicinity of air installations.

20-5 Navy Policy

20-5.1 General. Noise control and abatement programs shall provide:

- Maintenance of an active program to protect both on and off base personnel from hazardous noise levels in coordination with Navy criteria and other Federal agencies.

- Procurement, whenever feasible, of low noise-emission products.

- Sound attenuation, whenever feasible, of Navy owned/operated housing, schools and hospitals affected by noise from military operations.

- Locating of noise-sensitive housing and other developments away from major noise sources.

- Coordination with local, state, and regional governments and local community groups to identify and address local noise problems.

20-5.2 Workplace Noise. Policy and procedures for noise measurements, exposure assessments and noise protection or abatement in the workplace are addressed in reference (d).

20-5.3 Aviation Noise Suppression

a. The Navy shall consider ameliorating options such as remote siting, sound suppression equipment, and sound barriers, when developing new aircraft related systems, such as engine test stands.

b. The Navy shall include suitably quiet associated ground support equipment (e.g., starters, hush houses) in procurement (Aircraft Procurement, Navy (APN) funds) of new jet or other aircraft systems.

20-5.4 Restricting Noisy Operations. To the maximum extent practicable, Navy shore activities shall limit the use of power tools, machinery, construction equipment, or other noisy devices to normal working hours.

20-5.5 Training

a. Navy personnel engaged in processes that result in environmental noise at shore activities shall receive training on noise pollution reduction.

b. FEC base development, environmental engineers, and environmental planners shall receive training on noise pollution prevention programs.

20-6 Responsibilities

20-6.1 NAVFACENGCOM shall, if requested, act as technical consultant to CNIC, BSOs and activities regarding noise abatement, suppression, and development of compliance strategies.

20-6.2 BSOs shall:

(a) Initiate procurement procedures that ensure products and equipment not designed for combat use meet Federal noise standards.

(b) Identify research requirements to define and study noise pollution problems unique to the Navy and coordinate such research with other DOD components, Defense Noise Working Group (DNWG), and with FAA, EPA, and other federal agencies as may be appropriate.

(c) Ensure that ground equipment associated with procurement of new and/or follow-on jet aircraft contain necessary noise suppressers.

20-6.3 COs of shore activities shall:

(a) Comply with the policies in this Chapter.

(b) Comply with applicable Federal, State, and local control and abatement laws and regulations.

(c) Cooperate with Federal, State, and local noise pollution regulatory officials.

(d) Eliminate or reduce noise through engineering controls where feasible per reference (d).

(e) Periodically verify and record that environmental noise levels are consistent with the command noise control and abatement program.

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CHAPTER 21

OVERSEAS ENVIRONMENTAL COMPLIANCE ASHORE

21-1 Scope

This chapter provides environmental guidance for Navy installations outside the U.S., its territories and possessions, but not to ships, aircraft, and operational and training deployments outside the U.S. Specifically, this chapter does not apply to:

– U.S. military ship and aircraft operations governed by other DOD policies and directives and applicable international agreements.

– Facilities and activities covered under E.O. 12344, the Naval Nuclear Propulsion Program (NNPP), and conducted under 42 USC 7158.

– Facilities located in Antarctica.

Since this chapter applies only to overseas installations, the format is different than the majority of the chapters of this instruction. Each section covers the appropriate legislation, requirements, policy, and training while the Navy policy subsection is divided by environmental media. Responsibilities are summarized by command at the end of the chapter.

21-1.1 References

(a) DODI 4715.5 Management of Environmental Compliance at Overseas Installations, 22 April 1996, (http://www.dtic. mil/whs/directives/);

(b) Final Governing Standards (FGS) as developed by Lead Environmental Components (LEC) for each country with significant DOD installations (NOTAL), (https://www.denix.osd.mil/denix/DOD/Library/Intl/FGS/final-gov-stds-DOD.html);

(c) DOD Overseas Environmental Baseline Guidance Document, DOD Publication 4715.05-G, of 01 May 2007; (NOTAL), (https://www.dtic.mil/whs/directives/corres/pub1.html);

(d) E.O. 12088, 13 October 1978, Federal Compliance with Pollution Control Standards. Requires, in part, that the Head of each Executive agency constructing or operating Federal facilities outside the United States to ensure that such construction or operation complies with environmental pollution control standards of general applicability in the host country or jurisdiction;

(e) OPNAVINST 5510.155C, Classified Supplement to the Manual for Disclosure of Classified Military Information to Foreign Governments and International Organizations, (NOTAL);

(f) DODI 4715.8 Environmental Remediation for DOD Activities Overseas, 2 February 1998, (http://www.dtic.mil/whs/ directives/);

(g) E.O. 12114, 4 January 1979, Environmental Effects Abroad of Major Federal Actions. Requires, in part, that an environmental review be conducted for major federal actions significantly affecting the environment of a foreign nation not participating with the United States or otherwise not involved in the action.

21-2 Legislation

21-2.1 National Historic Preservation Act (NHPA). With respect to overseas activities, the NHPA requires Federal agencies undertaking actions that may directly and adversely affect property on the World Heritage List or the applicable country's equivalent of the National Register to consider the effect and try to avoid or mitigate any adverse effects.

21-2.2 Toxic Substances Control Act. Provides for the Federal regulation of the manufacture, use, distribution in commerce, and disposal of chemical substances that present a hazard to health or the environment. Overseas installations that export from or import to the U.S. may be subject to TSCA Sections 12 and 13. DOD dependents' schools overseas are subject to the asbestos hazard emergency response requirements in TSCA Subchapter II. Section 12 contains export notification obligations, and export exemptions. Section 13 discusses importer regulations, definitions, and exclusions.

21-3 Terms and Definitions

21-3.1 Environment. The natural and physical environment. It excludes social, economic and/or other environments.

21-3.2 DOD Lead Environmental Component. The Head of a DOD Military Department, Unified Combatant Commander, or subunified commanders specifically designated by DUSD AT&L under the authority of reference (a) to execute the responsibilities associated with DOD installations within a specified foreign nation. Also known as Environmental Executive Agents (EEA), DOD LECs are responsible for environmental matters in foreign countries where DOD installations are located and where the ODUSD(I&E) determines that the DOD presence justifies establishment of FGS. Heads of Military Departments designated as LEC should delegate LEC authority to the Theater Component Commanders after coordination with the relevant Combatant Commander (CCDR). The LEC establishes reference (b) for DOD installations within its geographic area of responsibility in accordance with reference (a). The LEC consults with host nation authorities on environmental issues of concern to the DOD components. The following is a list of LECs for different countries:

COMMAND	COUNTRY
COMNAVREGEUR	Spain, Italy, Greece, Iceland
COMFLTFORCOM	Bahamas, Cuba
COMPACFLT	Diego Garcia
U.S. Forces Japan	Japan
U.S. Forces Korea	Korea

CDRUSAFE	United Kingdom, Turkey, Azores, Ascension Islands, Greenland
CDRAREUR	Germany, Belgium, Netherlands, Romania, Bulgaria
SOUTHCOM	All countries in U.S. Southern Command
CENTCOM	All countries in area of responsibility (AOR), including Egypt and Bahrain

LECs establish reference (b) for DOD installations within their region under reference (a).

21-3.3 Lead Environmental Activity (LEA). The Unified Combatant Commander for military operations and deployments, or in-theater Commander of a DOD Component with primary responsibility for an off installation training exercise. When designated as a Lead Environmental Activity the in-theater Military Department Component Commander may delegate authority via the chain of command to an appropriate flag level commander.

21-3.4 Final Governing Standards. Country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or specific management practices with which installations must comply. Reference (b) are derived from reference (c), host nation substantive pollution control laws of general applicability, applicable treaties and U.S. law with extraterritorial application.

21-3.5 Foreign Nation. A geographic area (land, water, and airspace) that is under the territorial jurisdiction of a foreign government or that is under military occupation by the U.S. alone or jointly with any other foreign government.

21-3.6 Naval Facilities and Installations. For the purposes of this Chapter and determining overseas environmental compliance requirements, naval facilities and installations are real property under the control of or used by the United States Navy, including tenant facilities and installions on Host Nation bases, non-contiguous leased portions such as military housing and family support activities, and non-contiguous bases, piers and ports that may be operated under the auspices of NATO by the Host Nation.

21-3.7 Overseas Environmental Baseline Guidance Document. A current compendium of criteria embodied in DOD Publication 4715.05-G, based on consideration of laws generally applicable to similarly-situated DOD installations within the U.S., that is designated to protect the environment at DOD installations outside U.S. territory.

21-3.8 United States. All States, territories, and possessions of the U.S. and all waters and airspace subject to the territorial jurisdiction of the U.S.

21-4 Requirements

Navy shore activities in foreign nations will comply with applicable reference (b). Where reference (b) has not been issued, Navy installations will comply with reference (c), host nation substantive pollution control laws of general applicability (as required by reference (d)), U.S. law with extraterritorial effect and applicable treaties (including the SOFA and bilateral agreements).

21-5 Navy Policy

21-5.1 Fixed Facilities Provided by the U.S. and Operated by the Navy. In nations where there is a reference (b), all Navy facilities and operations shall comply with reference (b). Where reference (b) have not been issued, Navy shore activities will comply with reference (c), host nation substantive pollution control laws of general applicability (as required by reference (d)), U.S. law with extraterritorial effect and applicable treaties (including the SOFA and bilateral agreements).

21-5.2 Funding of Capital Improvements for Environmental Compliance at Overseas Installations. When capital improvements are required at overseas installations to comply with either the reference (b) or reference (c) and reference (d), as applicable, funding decisions shall be based on a number of considerations including which country provided the facilities in question and provisions of the pertinent SOFA and bilateral agreements. Navy policy is that unless otherwise provided in the pertinent SOFA and bilateral agreements, the host nation is expected to fund environmental compliance projects at facilities that the host nation provides. After consultation or negotiation with the host nation, funding questions may be resolved in a number of ways including the following:

- Pollution abatement improvements may be accomplished as a result of inclusion in bilateral or multilateral negotiations on programs not directly involving environmental compliance.

- In some cases host country provided facilities have been significantly modified by the U.S. to meet operational requirements. When capital improvements are required to meet the environmental standards of general applicability in the host country or jurisdiction, the Navy may negotiate shared contributions for such improvements. It may be done, after consultation with the ambassador, when it is in the best interest of the Navy and does not establish a precedent. The contribution should normally be no more than the proportion of modification attributable to the U.S. Project funding request documents shall indicate the results of negotiations to include the basis for determination of the U.S. share.

- If the host country declines to provide funds for required capital improvements or if negotiations with the host country for shared contributions are unsuccessful, the Navy may, when in the best interests of the Navy and without establishment of precedent, program for required pollution control capital improvement projects. Project funding request documents shall indicate the circumstances under which the projects are submitted.

21-5.3 Facility Visits and Inspections. Federal law and E.O.'s on information and physical security matters, as implemented in Navy regulations and the SOFA and bilateral agreements, shall govern access of host country environmental officials to U.S. controlled fixed facilities.

a. **Sovereign Immunity Policy.** U.S. military aircraft, warships, and auxiliaries (including USNS vessels and afloat prepositioned force ships) enjoy sovereign immunity from interference by foreign governmental authorities. Foreign officials shall not be allowed access to military aircraft, warships, or auxiliaries for purposes of environmental inspections or examination. COs, Masters, and Aircraft Commanders may certify compliance with host country environmental requirements, certification may include a general description of measures taken to comply with environmental requirements. At the discretion of the CO, Master, or Aircraft Commander, foreign authorities may be received on board for purpose of accepting certification of compliance, but under no circumstances may they be permitted to

exercise governmental authority, nor may they inspect the military aircraft, warships or auxiliaries or act as an observer while U.S. personnel conduct such inspections.

b. Installation and regional commanders shall consult with legal counsel, U.S. Embassy officials, the LEC for the host nation, or with the Combatant Commander (CCDR) where no LEC has been appointed, to pre-establish procedures for access by host nation officials. These procedures shall comply with the applicable SOFA and bilateral agreements. Since most facilities are tenants of Host Nation military bases, Host Nation authorities will control access to the Host Nation base with Commanding Officers of U.S. tenant facilities controlling access to U.S. Facilities. Installation commanders shall comply with access procedures so established.

c. Where host nation officials request access in addition to those established through the CCDR, the installation commander shall immediately notify the Navy component commander in theater, the LEC (if applicable) and CNO (N4). The notice shall include the identity of the host nation authority needing access, the extent to which the host nation authority requesting access is delegated national authority for pollution control, the extent of access requested, the date for which access is requested, an explanation why established access procedures (if applicable) are insufficient, the extent to which granting the request would establish precedent and the commander's recommendation whether providing access would be in the best interest of the U.S. Unless otherwise directed, the installation commander may permit access after completing consultation with the environmental LEC, component commander and CNO (N4) or 3 working days after providing notification, whichever is earlier. If access is denied, the installation commander shall notify the same parties and shall ensure that the Chief of Mission with the U.S. ambassador to the country has been notified as well.

d. Access by foreign officials to propulsion plant spaces of nuclear powered ships or to naval nuclear propulsion information (NNPI) is governed by reference (e) and is not authorized without approval by CNO (N00N).

21-5.4 Mobile Sources. Military vessels, aircraft, and vehicles that are operated in a host country and manufactured in the U.S. shall be designed to comply with applicable U.S. or international environmental standards. Reference (b) shall govern the operation and maintenance of mobile sources, other than vessels and aircraft, that are based in a host country where such provisions have been issued. If no reference (b) has been issued, the operation and maintenance of mobile sources, other than aircraft and vessels, based in the host country, shall be governed by applicable provisions of the SOFA and bilateral agreements, reference (c) and reference (d). In particular, reference (d) requires compliance with substantive host nation pollution control laws of general applicability. In most instances, these shall be the pollution control standards observed by the host nation's military forces for similar vehicles. Except for sovereign immune vessels and aircraft and unless otherwise provided in the SOFA and bilateral agreements, transient mobile sources or those sources temporarily within a foreign jurisdiction are subject to that country's standards for the terms and conditions set forth in the clearance for the visit. Although not subject to enforcement by the host nation, sovereign immune vessels and aircraft shall operate under the environmental protection provisions of their visit clearance. Where no specific environmental protection provisions are included in the visit clearance, sovereign immune vessels and aircraft shall comply with the environmental protection standards used by the host nation's military forces to the extent practical.

21-5.5 If an installation commander believes that compliance with a particular reference (b) would seriously impair the installation's operation, adversely affect relations with the host nation or require

substantial expenditure of funds for physical improvements at an installation that has been identified for closure or realignment that would remove the requirement, he or she should seek a waiver to the requirement in accordance with DODI 4715.5. Navy policy is to minimize requests for waivers and to limit the duration of waivers where requested. Requests for waivers are appropriate, for example, where the cost of the project to achieve compliance at a base slated for closure is grossly disproportionate to the period during which environmental benefits would be derived from the project. Where this instruction or instructions by Navy component commanders require measure that are more protective the applicable reference (b), installation commanders shall request a waiver from the LEC before requesting funding for the project.

21-5.6 National Environmental Policy Act. NEPA does not apply overseas; however, E.O. 12144 addresses environmental effects abroad of major Federal actions. See Appendix E.

21-5.7 Pollution Prevention Ashore. E.O. 13423 directs all Federal agencies to implement within the agency sustainable practices for pollution and waste prevention and recycling. This E.O. applies to Federal facilities in the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Navy installations outside of these areas are encouraged to make best efforts to comply with the goals of this order. Navy activities shall prepare pollution prevention plans; plan, program, budget, and allocate funds for P2 projects; and implement CHRIMP as outlined in Chapter 4 and comply with the agency goal to require in agency acquisitions of goods and services (1) use of sustainable environmental practices, including acquisition of bio-based, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and (2) use of paper of at least 30 percent post-consumer fiber content in accordance with E.O.13423

21-5.8 Emergency Planning and Community Right to Know Act. E.O. 13423 directs all Federal agencies to comply with EPCRA. This E.O. applies to Federal facilities in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Navy activities outside of these areas are encouraged to make best efforts to comply with the goals of this order.

21-5.9 Clean Air Ashore. Navy activities shall manage their air programs under reference (b). In addition, activities shall encourage the use of unleaded fuels. Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.10 Ozone Depleting Substances. Navy activities shall manage their ODS as directed in Chapter 8 and reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.11 Water Programs Ashore. Navy activities shall manage their water programs under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.12 Drinking Water Systems and Water Conservation. Navy activities shall manage their drinking water under reference (b) and shall monitor for lead in priority areas as specified in Paragraph 10-5.2.d.). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide

to develop an appropriate program. All NONCONUS water systems serving greater than 25 DOD consumers shall develop a Water System Vulnerability Assessment (WSVA) and ERP update (if required) for internal use only, and provide a semi-annual report in December and June of each year on the status of WSVA and ERP completion to NFESC Code 426. All drinking water treatment/distribution system operators shall be trained per reference (b) and the basic training elements that are specified in paragraph 10-5.1 of this instruction.

21-5.13 Oil Management. Navy activities shall manage their oily wastes and waste oils under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.14 Oil and Hazardous Substances Spills and Contingency Planning. Navy activities shall manage OHS spills and contingency planning under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program. Navy shore activities shall implement the requirements of Chapter 12 regarding internal reporting and drills and exercises.

21-5.15 Polychlorinated Biphenyls Management Ashore. Navy activities shall manage their PCBs under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.16 Hazardous Waste Management Ashore. Navy activities shall manage their HW under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.17 Pesticide Compliance Ashore. Navy activities shall manage their pesticides under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program. Activities that are responsible for pesticide application shall develop pest management plans and ensure that the program addresses pesticide applicator certification and re-certification training, pesticide storage, handing and disposal practices, and pest management operations record-keeping and reporting. Navy shore activities shall implement the requirements of Chapter 12 regarding internal reporting and drills and exercises.

21-5.18 Solid Waste Management and Resource Recovery Ashore. Navy activities shall ensure compliance with solid waste standards under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.19 Cleanup and Restoration. The IR program is limited to the U.S., its territories, and possessions, and does not apply to foreign countries. However, past DOD activities may have caused the need for environmental cleanup and restoration overseas. Cleanup actions shall comply with the provisions of reference (f).

21-5.20 Storage Tanks. Navy activities shall manage their above and underground storage tanks under reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.21 Noise Prevention Ashore. Navy activities shall ensure compliance with the noise abatement measures of reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.22 Environmental Quality Assessment Ashore. Overseas installations shall use environmental audit checklists developed from reference (b). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program. Navy components delegated authority to act as LECs shall develop environmental audit checklists for the nations for which they are responsible.

21-5.23 Natural Resources Management. Navy activities shall program and budget for compliance and ensure compliance with reference (b) and reference (g) for those actions which may have a significant impact. Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.24 Historic and Archeological Resources Protection. Navy activities shall ensure compliance with the historic and archeological resources of reference (c). Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.25 Training. Navy activities shall comply with the training measures outlined in Chapter 28 of this instruction. In addition, Navy components delegated authority to act as LECs shall carry out the training responsibilities established by reference (b) within the host nations for which they are responsible. Prior to the establishment of reference (b), the installation shall use reference (c) and the EQA Guide to develop an appropriate program.

21-5.26 Radon. Navy activities shall manage their radon program in accordance with the Navy Radon Assessment and Mitigation Program (NAVRAMP) as outlined in Chapter 30.

21-6 Responsibilities

21-6.1 CNO (N45) shall:

(a) Ensure BSOs allocate the resources required to achieve and maintain compliance with reference (c) and/or (b).

(b) Provide policy needed to establish and maintain a program for the management of environmental concerns overseas.

21-6.2 Fleet Commanders shall:

(a) Perform the functions required by reference (a) and serve as LEC for specific foreign countries per section 18-3.2 of this manual.

(b) Perform the functions required by reference (a) and serve as LEA when so designated.

21-6.3 CNIC and subordinate commands shall:

(a) Ensure compliance with reference (c) and/or (b) established by the LEC.

(b) Conduct environmental quality assessments at overseas installations in accordance with reference (c) and/or (b).

(c) Program and budget for environmental compliance projects.

(d) Ensure that contracts for services or construction, where performance takes place at an overseas activity, and DOD contracts for the disposal of HW, include provisions requiring a contractor to comply with reference (c) and/or (b). The BSO shall also ensure that contracts are administered to enforce such compliance.

(e) Ensure host-tenant agreements address compliance with reference (c) and/or (b).

(f) Communicate with LECs on environmental issues.

(g) Endorse activity waiver requests from reference (c) and/or (b).

21-6.4 COs of overseas installations shall:

(a) Comply with reference (c) and/or (b).

(b) Develop and conduct training/education programs to instruct required personnel in the environmental aspects of their job.

(c) Perform and document internal installation EQAs annually. The purpose of the internal EQA is to determine the overall compliance assessment status of the installation.

(d) Communicate following the Navy chain of command with the Navy Regional Commander if present or the LEC on environmental issues.

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CHAPTER 22

ENVIRONMENTAL COMPLIANCE AFLOAT

22-1 Scope

22-1.1 General. This chapter defines environmental compliance policies and procedures applicable to shipboard operations. Since this chapter applies only to ships and floating drydocks and covers all media, its format is different from the remainder of the manual. Organization is according to the various pollutants produced aboard ship. Each section lists the applicable legislation, definitions, requirements, policy and training. The end of the chapter contains a summary of responsibilities by command.

Topics covered in this chapter are as follows:

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22-1.2 Applicability

22-1.2.1 This chapter applies to U.S. Navy ships and floating drydocks worldwide. As appropriate, it applies to the boats and other craft carried by these ships. This chapter also applies to those ships under contract to the Commander, Military Sealift Command (COMSC) that are public vessels of the United States (U.S.). Vessels owned or bareboat chartered and operated by the MSC are public vessels. This chapter does not apply to those ships under contract to COMSC that are not public vessels, such as ships that are time or voyage chartered.

22-1.2.2 Ships need only refer to this chapter and chapter 23 (Ocean Dumping) for environmental compliance. If differences in policy exist between this chapter and any other chapter in this instruction, this chapter takes precedence.

22-1.3 References. Relevant references for this chapter are:

(a) DOD Instruction 2005.1-M of January 1977, Maritime Claims Reference Manual; (NOTAL)

(b) DOD Instruction 4715.6 R-1, Regulations on Vessels Owned or Operated by the Department of Defense; (NOTAL)

(c) National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding and Ship Repair (Surface Coating/Painting Operations), 40 CFR 63, SUBPART II; (NOTAL)

(d) Naval Ships' Technical Manual (NSTM), 1 September 1999; (NOTAL)

(e) OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat; (NOTAL)

(f) CNO Policy Letter Ser N452E/8U595418, 6 April 1998, CNO Policy on National Emission Standards for Hazardous Air Pollutants for Shipbuilding and Ship Repair (Surface Coating/Painting Operations);

(g) NAVFACENGCOM Manual of Operation (MO) 909 (Oil Ship Waste Offload Barge); (NOTAL)

(h) DOD Instruction 4715.4 of 1 June 1998, Pollution Prevention; (NOTAL)

(i) NAVSEA PCB Advisories; (NOTAL)

(j) OPNAV P-45-113-3-99, Afloat Medical Waste Management Guide; (NOTAL)

(k) Naval Warfare Publication (NWP) 4-11, Environmental Protection; March 1999; (NOTAL).

(l) Regulations of the United States Navy, 1990, Article 0832;

(m) OPNAVINST 3100.5E of 17 November 1988, Navy Operating Area and Utilization of Continental Shelf Program; (NOTAL)

(n) COMFLTFORCOM msg 071954Z OCT 04, Fleet-Wide Implementation of Protective Measurers Assessment/Protocol (PMAP) DC Application; (NOTAL)

(o) COMFLTFORCOM msg 231614Z MAY 06, SONAR Positional Reporting Systems (SPORTS); (NOTAL)

(p) OPNAVINST 3100.6H, 3 February 2006, Special Incident Reporting (OPREP 3, Navy Blue and Unit SITREP) Procedures; (NOTAL)

(q) NAVMED Publication P-5010-7, Manual for Naval Preventative Medicine, Sewage Disposal Ashore and Afloat. (NOTAL)

22-2 General

22-2.1 Terms and Definitions

22-2.1.1 At Sea. For the purposes of this chapter, the area from the U.S. High water mark seaward to the recognized Exclusive Economic Zones (EEZs) or fishing zones as set out in reference (a). Nothing in this chapter, however, is meant to expand the area where any particular legal requirement applies. "At sea" also includes the airspace above this area.

22-2.1.2 Technical Authority. An Acquisition Official in a technical oversight office responsible for approving systems and equipment for installation on vessels, and administering certification requirements.

22-2.1.3 United States. For the purposes of this chapter, the U.S. includes the Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Marianas Islands.

22-2.2 Navy Policy

22-2.2.1 Environmentally Sound Ships. Protection of the marine environment is mission essential. Navy ships shall conduct operations, in port and at sea, minimizing or eliminating any adverse impact on the marine environment.

22-2.2.2 Shoreside Support to Ships. Compliance with local environmental requirements often requires specialized knowledge, expertise or capability that afloat units may lack. To the maximum extent possible, shore commands, Regional Environmental Coordinators (RECs), and Commander, Naval Installations Command (CNIC) shall provide to afloat units, upon request, such assistance as may be necessary to ensure their environmental compliance.

22-2.2.3 Environmental Inspection of Navy Ships. Within the U.S., Navy ships shall be available for inspection by environmental officials, provided the inspector demonstrates a legitimate basis for requesting access, and subject to the requirements to protect national security information. Section 22-2.2.3.1 addresses access to Navy ships and release of information regarding Navy oil spills. Section 22-2.2.3.2 addresses access to Navy ships for all other environmental purposes.

22-2.2.3.1 Access to Ships and Release of Information During Navy Oil Spills. Effective oil spill planning and response is an important issue for the Navy, for regulatory agencies, and for the public. Navy ships may receive requests from non-Navy entities for access and/or information pertaining to Navy oil spill planning and response. Commanding officers shall consider several factors in responding to these requests. First, they shall quickly provide officials and agencies responsible under law and regulation responding to an actual spill with the necessary access and/or information to minimize environmental damage and Navy liability. Second, they shall ensure all access granted and information disseminated is consistent with Navy information security requirements. Third, they shall ensure that initial information released about oil spills is as accurate as possible and that it is characterized as preliminary and subject to later verification.

a. **Access to Ships**

(1) During oil spill response emergencies, although not mandated by law, commanding officers and masters should allow Federal On-Scene Coordinator (OSC) representatives access to their ships if requested, consistent with information security requirements. The U.S. Coast Guard is designated the Federal OSC for oil spills in the coastal regions of the U.S.

(2) During non-emergency situations, Navy ships are not subject to inspection by Coast Guard, State, or local officials in connection with oil spill planning. Commanding officers shall cooperate, however, with the Coast Guard and civilian authorities regarding oil spill planning and prevention consistent with information security requirements without impeding mission accomplishment. Commanding officers, at their discretion, may invite Coast Guard, State, and local officials aboard their ships for assist visits or other discussions. They shall coordinate requests for such access with the cognizant Navy On-Scene Commander (NOSC) who in most cases is the Navy REC.

b. **Information Dissemination**

(1) Ships shall promptly and accurately respond to Federal, State, and local government requests for information necessary to coordinate spill response and cleanup efforts or to prevent or reduce environmental damage. Ship commanding officers providing initial information should indicate that the information provided is preliminary and is subject to verification or change during subsequent investigation.

(2) Ships should promptly respond to Federal, State, and local government requests for the following preliminary information about Navy oil spills:

- Whether an oil spill has occurred
- The specific source of the spill
- The type of substance spilled
- When the spill occurred
- Where the spill occurred
- The initial indication as to the general nature of the cause of the incident, e.g., whether due to equipment failure, operator error, or undetermined origin
- A preliminary estimate of how much oil was spilled.

Commands providing preliminary information should indicate that the provided information is preliminary and is subject to verification or change during subsequent investigation. Ships receiving requests for investigation reports shall inform requestors that they will forward any Navy investigation reports generated in connection with the spill to the Office of the Judge Advocate General (OJAG). OJAG will control the release of investigation reports.

c. When claims by or against the Navy have been filed or are reasonably anticipated, requests for information pertaining to oil spills shall be referred to the Navy attorney representing the cognizant NOSC.

d. The commanding officer will refer any media requests for information to the public affairs officer on the cognizant NOSC staff.

22-2.2.3.2 Environmental Inspector Access Procedures Within the U.S. If a State or local inspector requests access to inspect a Navy ship, the parties involved shall follow these procedures:

a. The commanding officer shall confirm the inspector's credentials.

b. The inspector shall identify spaces or work sites to which he requests access.

c. The inspector shall make known the nature of the activity to be examined and its relationship to regulations. The commanding officer should consult counsel if there is any question on the applicability of the law or regulation to ships.

d. If the issue is a result of contractor actions aboard ship, a representative of the contractor shall accompany the inspector and ship representative.

e. If practical, the ship shall suggest off-ship alternatives that involve similar operations or training demonstrations conducted ashore.

f. If off-ship alternatives are not practical, commanding officers shall approve inspections that do not involve access by inspectors to classified or restricted information, equipment, technology, or operations.

g. Shipboard air conditioning and refrigeration (AC&R) equipment designed or constructed to general or military specification (GENSPEC/ MILSPEC) requirements on board Navy ships or vessels owned, operated, or bare-boat chartered by the Navy or COMSC are not subject to the requirements of U.S. EPA Clean Air Act regulations on refrigerants. Federal, State and local regulatory personnel have no authority to inspect Navy ships or ship records to enforce these requirements. If regulatory personnel request to board Navy ships for this purpose, do not grant access. Follow the procedures of paragraph 22-2.2.3.4 and notify CNO (N45) by routine message with information copies to the chain of command, should this occur.

22-2.2.3.3 Environmental Inspector Security Clearances. If the inspector requests access to sensitive areas such as spaces containing cryptographic equipment, sonar systems, or naval nuclear propulsion plant spaces (NNPS) or naval nuclear propulsion information (NNPI) and the commanding officer concludes that a legitimate requirement exists for such access, he/she shall forward a message request for access to CNO (N45) with information copies to the fleet commander and type commander, for spaces that would involve access to classified information or CNO (N00N) for NNPS/NNPI. The message shall identify the following:

a. The space to which the inspector wants access

b. The nature of the activity that the inspector wants to examine

c. The classified or restricted information, equipment, or operation to which the inspector would have access during the proposed inspection

d. The proposed alternatives which do not involve such access

e. Reasons why the inspector finds the proposed alternatives unsatisfactory

f. Security clearance information, including name of inspecting official(s), date of visit, name of agency which the official(s) represent, and level, basis, and date of security clearance.

The commanding officer shall inform State or local inspector(s) that the security implications of their request require consideration at Navy headquarters.

22-2.2.3.4 Environmental Inspection Dispute Resolution. If the commanding officer determines that the inspector does not have a requirement for access to the spaces or information cited above, but the inspector does not agree with that determination, the commanding officer shall promptly refer the matter up the chain of command for resolution by CNO (N45/N00N) as described above.

22-2.2.4 Environmental Inspections of Navy Ships Outside the U.S. Navy ships within the territory of foreign countries (internal waters, ports and seas out to 12 nm from land) are not legally subject to enforcement of environmental requirements by these coastal or port states or local authorities. However, they must operate in due regard for that nation's resource-related laws and regulations. Additionally, Navy ships must comply with any environmental regulations established in port visit clearances and the local Status of Forces Agreements (SOFAs).

Environmental officials representing the foreign country or local authority do not have the authority to inspect U.S. Navy ships to determine compliance with that country's laws. If a Navy ship is approached by representatives of a foreign country while in foreign waters with a request to inspect the ship regarding a possible environmental violation, the commanding officer shall refuse to permit the inspection and shall notify the U.S. embassy, CNO (N45/N00N) and the chain of command of the request, the alleged violation, and any amplifying information.

If the ship has violated or is perceived to be in violation of the foreign country's environmental laws or regulations, the country may request the ship to leave port or the ocean area under it's jurisdiction. In this event, the commanding officer shall comply with the request and notify the U.S. embassy, CNO (N45), and the chain of command of this action.

22-2.2.5 Notices of Violations. Ships shall comply with the provisions of appendix B regarding notices of violation or other expressions of environmental regulatory concern.

22-2.2.6 Afloat Environmental Compliance Inspections and Assessments

22-2.2.6.1 The afloat environmental compliance inspection process shall consist of oversight Inspections by the Board of Inspection and Survey (INSURV). INSURV shall conduct environmental compliance oversight inspections for forces afloat as a part of the regular INSURV inspection process using appendix K. These inspections shall include equipment operation, program compliance and effectiveness, and training. The President, Board of Inspection and Survey (PRESINSURV) shall report the status of afloat environmental compliance and effectiveness and issues requiring CNO attention as a part of the periodic briefings to the CNO.

22-2.2.6.2 INSURV will maintain data collected during final contract trials and underway material inspection in the INSURV database for use by type commanders, CNO (N45), NAVSAFECEN, and other Navy environmental protection organizations.

22-2.2.6.3 In the event that a commanding officer may want to evaluate his/her command's environmental compliance practices, the Afloat Environmental Checklist of appendix K will assist in this evaluation.

22-2.2.7 Training

22-2.2.7.1 All hands shall receive environmental training upon reporting aboard (I Division or School of the Boat) and annually thereafter. This training shall include:

a. The Navy's commitment to environmental protection.

b. The command environmental program. This training should include pollution prevention, solid waste handling and minimization, plastic management, protection of marine mammals and endangered marine species, recycling, air pollution (including ozone depleting substances (ODSs)), water pollution, and oil and hazardous substance (OHS) management, handling, minimization, and spill response.

c. The member's responsibility with regard to this program. Ships may accomplish this training with videotapes for general subject matter and by ship's instructors for command specific topics.

22-2.2.7.2 Watch officers responsible for authorizing the overboard disposal of shipboard wastes shall receive training on the prohibited zones for the discharge of shipboard wastes as a part of the qualification for the watch.

22-2.2.7.3 Personnel assigned as Afloat Environmental Protection Coordinator (AEPC), per paragraph 22-2.2.11, shall attend the Naval Occupational Safety and Health and Environmental Training Center (NAVOSHENVTRACEN) offered Afloat Environmental Protection Coordinator Course (A-4J-0021) or, if unable to attend this training, complete the Afloat Environmental Protection Coordinator interactive courseware. The assigned AEPC shall also complete Watchstation 303, Environmental Protection Coordinator, in the Hazardous Material/Environmental Protection Programs Afloat Personnel Qualification Standard (PQS), NAVEDTRA 43528-A. The assigned AEPC shall complete the above requirements within 6 months of assignment. For MSC ships, COMSC shall specify AEPC training requirements

22-2.2.8 Exclusion of Vessel Discharges from National Pollutant Discharge Elimination System (NPDES) Permitting

22-2.2.8.1 Per regulations issued by the U.S. Environmental Protection Agency (EPA), discharges incidental to the normal operation of a vessel do not require a permit under the NPDES program. The following are examples of incidental discharges:

a. Effluent from properly functioning oil/water separators

b. Sewage (when discharge is necessary)

c. Graywater

d. Cooling water

e. Boiler and steam generator blowdown

f. Weather deck runoff, including fresh water washdowns

g. Ballast water

Naval vessels shall not enter into agreements with environmental agencies regarding ship discharges without CNO (N45) approval.

22-2.2.8.2 To promote uniformity in treatment of naval vessel discharges nationwide, CNO (N45) and fleet commanders closely monitor local attempts to impose requirements on ships beyond those specifically provided for by U.S. law or U.S. EPA regulation. Commanding officers or masters shall report any interest expressed by environmental regulators in discharges from U.S. Navy ships or COMSC public vessels, by message to CNO (N45) with information copies to the chain of command.

22-2.2.9 Operation Within Foreign Nation Waters. Navy ships are not legally subject to enforcement of environmental requirements by coastal or port States. When operating in foreign territorial waters, or when visiting foreign ports, Navy ships shall abide by environmental provisions contained in port visit clearances and/or in status of forces agreements (SOFAs) (see figure 22-1). Such conditions will normally be communicated to visiting ships in the Port Guide or the Logistics Request (LOGREQ) reply. The U.S. Government has agreed to these conditions in advance. Navy ship compliance with such requirements is in no way an inappropriate relinquishment of U.S. sovereignty. When port visit clearances and SOFAs either do not exist, or do not provide sufficient guidance, Navy ships should attempt to abide by the corresponding requirement for U.S. waters (0-3 nm) or ports, as delineated in this chapter. In some cases, compliance with the corresponding U.S. requirement will not be feasible overseas, due to lack of offload facilities, environmental services, or some other cause. Where compliance with U.S. requirements is not feasible, Navy ships should operate in a manner consistent with the environmental practices of host nation warships.

22-2.2.10 Prohibited Discharge Zones for U.S. Navy Shipboard Wastes. While transiting National Marine Sanctuaries, ships and submarines shall avoid any adverse impacts on Sanctuary resources and

qualities. Ships and submarines shall minimize, to the maximum extent practicable, any solid waste, sewage, or bilge water discharges. Figure 22-1 provides a summary of pollution control discharge restrictions for ships. Detailed guidance and restrictions are provided in appropriate sections of this chapter.

22-2.2.11 Afloat Environmental Protection Coordinator (AEPC). Commanding officers of ships shall designate a person as the AEPC. The person assigned to this position will be the commanding officer's advisor on the shipboard environmental protection program. This person should be knowledgeable regarding the requirements and responsibilities of this chapter and trained per the requirements of paragraph 22-2.2.7.3.

Figure 22-1 SUMMARY OF NAVY POLLUTION CONTROL DISCHARGE RESTRICTIONS

AREA	SEWAGE ("BLACK WATER")	GRAYWATER	OILY WASTE
0-3 nm	No discharge.	If no pierside collection capability exists, direct discharge permitted.	No sheen. If equipped with OCM, discharge =<15 ppm oil. See notes (1)
3-12 nm	Direct discharge permitted.	Direct discharge permitted.	No sheen. If equipped with OCM, discharge =<15 ppm oil. See notes (1)
12-25 nm	Direct discharge permitted.	Direct discharge permitted.	If equipped with OCM, discharge =<15 ppm oil. Ships with OWS or BWPT but inoperable OCM must process all machinery space bilge water through OWS or BWPT. See note (2)
>25 nm	Direct discharge permitted.	Direct discharge permitted.	Same as 12-25 nm. See note (2)
>50 nm & High Seas	Direct discharge permitted.	Direct discharge permitted.	Same as 12-25 nm. See note (2)
MARPOL "Special Areas" In Effect	Direct discharge permitted.	Direct discharge permitted.	Refrain from discharging any oil or oily waste to the extent practicable without endangering ship or impairing operations. When necessary, same as 12-25 nm. See note (2)
Foreign Countries	Within foreign territorial seas (12 nm), see Visit Clearance or SOFA (as delineated in the Port Guide or LOGREQ reply). If sufficient guidance not available, no discharges within 3 nm when sewage reception facilities available. If not feasible, follow standards observed by host nation warships.	Within foreign territorial seas (12 nm), see Visit Clearance or SOFA (as delineated in the Port Guide or LOGREQ reply). If sufficient guidance not available, follow guidance above. If not feasible, follow standards observed by host nation warships.	Within foreign territorial seas (12 nm), see Visit Clearance or SOFA (as delineated in the Port Guide or LOGREQ reply). If sufficient guidance not available, follow guidance above. If not feasible, follow standards observed by host nation warships.
Comments	Direct discharge allowed within 3 nm under emergency conditions.	The collection of graywater inside 3 nm from shore and prior to pierside may significantly reduce tank capacity and might result in the unnecessary overboard discharge of sewage before reaching pier facilities or unrestricted waters.	State/local rules may vary; check SOPA regulations. Submarines without BWPTs: After allowing adequate separation time, pump non-oily, water phase outside 50 nm, or as far from shore as practicable if the operations or operational capabilities of the submarine would be impaired by this requirement.

Notes:
BWPT - Bilge Water Processing Tank OWS - Oil/Water Separator OCM - Oil Content Monitor
SOFA - Status of Forces Agreement SOPA - Senior Officer Present Afloat WOCT - Waste Oil Collecting Tank
(1) If operating properly, OWS or BWPT discharge will routinely be less than 15 ppm.

(2) Surface ships without an operable OWS must retain oily waste for shore disposal. If operating conditions require at-sea disposal, minimal discharge is permitted beyond 50 nm from nearest land.

SUMMARY OF NAVY POLLUTION CONTROL DISCHARGE RESTRICTIONS (Continued)

AREA	GARBAGE (NON-PLASTICS)	GARBAGE (PLASTICS)
0-3 nm	No discharge.	No discharge.
3-12 nm	Pulped or comminuted food and pulped paper and cardboard waste may be discharged >3nm.	No discharge.
12-25 nm	Bagged shredded glass and metal waste may be discharged >12nm. Submarines see note (4).	No discharge. Submarines see note (6)
>25 nm	Direct discharge permitted. See note (5).	No discharge. Submarines see note (6)
>50 nm & High Seas	Direct discharge permitted. See note (5).	No discharge. Submarines see note (6)
MARPOL "Special Areas" In Effect	Discharge pulped or comminuted food and pulped paper and cardboard waste >3 nm. Discharge bagged shredded glass and metal waste >12nm. Submarines see note (4) **Report all non-food, non-pulped, non-shredded garbage discharges to CNO (N45) upon completion of operations**.	No discharge. Submarines see note (6)
Foreign Countries	Discharge pulped or comminuted food and pulped paper and cardboard waste >3 nm from foreign coasts. Discharge bagged shredded glass and metal waste >12nm. Discharge all other garbage >25 nm.	No discharge
Comments	Garbage discharged should be processed to eliminate floating marine debris. Retain surplus material for shore disposal.	Record-keeping requirements exist for at-sea discharge. Minimal discharge authorized if plastic waste processor inoperable and necessary for safety of ship/ health of crew. Report discharge commencement to appropriate operational commander.

Notes:

(4) Submarines may discharge compacted, sinkable garbage between 12 nm and 25 nm provided that the depth of water is greater than 1,000 fathoms.

(5) Surface ships shall use pulpers and shredders for all discharges of food products, paper, cardboard, glass and metal wastes. Shredded metal and glass must be bagged prior to disposal. Submarines shall discharge compacted, sinkable garbage.

(6) Submarines are required to discharge only the minimum amount practicable, until 31 December 2008. After 31 December 2008 no discharge is permitted.

Figure 22-1 Continued

SUMMARY OF NAVY POLLUTION CONTROL DISCHARGE RESTRICTIONS (Continued)

AREA	HAZARDOUS MATERIALS	MEDICAL WASTES (INFECTIOUS & SHARPS)
0-3 nm	No discharge.	Steam sterilize, store, and transfer ashore. No discharges.
3-12 nm	No discharge.	Steam sterilize, store, and transfer ashore. No discharges.
12-25 nm	No discharge except as permitted by appendix L.	Steam sterilize, store, and transfer ashore. No discharges.
>25 nm	No discharge except as permitted by appendix L.	Steam sterilize, store, and transfer ashore. No discharges.
>50 nm & HighSeas	No discharge unless >200 nm or as permitted by appendix L.	If health and safety are threatened, steam sterilize waste, package and weight for negative buoyancy, log, and discharge. No discharge of sharps permitted.
MARPOL "Special Areas" In Effect	No discharge except as permitted by appendix L.	Steam sterilize, store, and transfer ashore. No discharges. If >50 nm and health and safety are threatened, steam sterilize waste, package and weight for negative buoyancy, log, and discharge. No discharge of sharps permitted.
Foreign Countries	No discharge except as permitted by appendix L.	The packaging, handling, storage, transport, treatment, and disposal of infectious waste shall be as prescribed by applicable visit clearance, SOPA regulations, and port guides
Comments		Dispose of all sharps ashore. Do not incinerate plastic, wet materials. Steam sterilization requirement not applicable to submarines. Other non-infectious waste may be disposed of as garbage and does not require steam sterilization.

Figure 22-1 Continued

22-3 Sewage, Graywater, and Industrial Wastewater

22-3.1 Legislation The Clean Water Act (CWA), Section 312 authorizes DOD to issue regulations governing the design, construction, installation and operation of marine sanitation devices (MSDs) on board vessels owned and operated by DOD. The DOD regulations are contained in reference (b).

22-3.2 Terms and Definitions

22-3.2.1 Graywater. Discarded water from deck drains, lavatories, showers, dishwashers, and laundries, as well as discarded water from shipboard medical facilities. Does not include industrial wastes, infectious wastes and human body wastes.

22-3.2.2 Graywater Collection and Transfer System. An independent, auxiliary graywater collection and transfer system designed to collect graywater and pump the waste to shore facilities in port or direct water overboard at sea. Graywater collection and transfer systems are typically installed on ships with Type III-A marine sanitation devices (MSDs) that may lack the capability to collect and transfer graywater.

22-3.2.3 Industrial Wastewater. Wastewater or semi-solid material generated in shipboard processes such as manufacturing, production and maintenance (for example, metal plating, acid cleaning, photo processing, solvent cleaning and painting materials).

22-3.2.4 Marine Sanitation Device (MSD). Any equipment on board a ship or craft designed to receive and treat sewage to a level acceptable for overboard discharge, or which receives or retains sewage on board for later discharge ashore or in waters where discharge is permissible. Within the generic term MSD, the Navy uses the following terms to identify general types:

22-3.2.4.1 Type I: "Flow-through" and "discharge" device designed to receive and treat sewage aboard ship and produce an overboard effluent with a fecal coliform count of not more than 1,000 per 100 milliliters and no visible floating solids.

22-3.2.4.2 Type II: "Flow-through" and "discharge" device that produces an overboard effluent with a fecal coliform count of not more than 200 per 100 milliliters and total suspended solids of not more than 150 milligrams per liter.

22-3.2.4.3 Type III-A: "Non-flow-through" device designed to collect shipboard sewage by means of vacuum or other reduced-flush systems and to hold the sewage while transiting within 0-3 nm from shore. This type may include equipment for shipboard evaporation or incineration of collected sewage.

22-3.2.4.4 Type III-B: Collection, holding and transfer (CHT) system designed to collect both sewage and graywater while in port; to offload sewage and graywater to suitable shore receiving facilities; to hold sewage while transiting within 0-3 nm from shore; and to discharge both sewage and graywater overboard while operating beyond 3 nm from shore.

22-3.2.5 Sewage. Human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes.

22-3.3 Navy Policy

22-3.3.1 Shipboard Equipment. To ensure compliance with regulations regarding sewage and graywater:

22-3.3.1.1 The Navy shall equip ships with MSDs designed to prevent the discharge of untreated or inadequately treated sewage, or of any waste derived from sewage (e.g., sludge), within 0-3 nm of the U.S. Ships shall have the capability to collect and transfer graywater to shore while pierside.

22-3.3.1.2 The Navy shall equip all new ships with Type II or Type III MSDs certified by the Technical Authority (COMNAVSEASYSCOM). New public vessels operated under the direction of COMSC may be equipped with USCG-approved Type II MSDs.

22-3.3.1.3 Existing ships equipped with Type I or Type II MSDs installed on or before 1 April 1979 are in compliance so long as the device remains satisfactorily operable. Type I or Type II MSDs that become inoperable and require removal shall be replaced with Technical Authority (COMNAVSEASYSCOM) certified Type II or Type III MSDs. Public vessels operated under the direction of COMSC may replace inoperable MSDs with USCG-approved Type II MSDs.

22-3.3.1.4 Existing ships with installed toilet facilities, but not equipped with Type I or Type II MSDs installed before 1 April 1979 shall be equipped with Type II or Type III MSDs certified by the Technical Authority (COMNAVSEASYSCOM). Public vessels operated under the direction of COMSC may be equipped with USCG-approved Type II MSDs.

Figure 22-2

Standard Dimensions of Flanges for Discharge Connections

Description	Dimension
Outside diameter	210 mm
Inner diameter (1)	According to pipe outside diameter
Bolt circle diameter	170 mm
Slots in flange	4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 18 mm.
Flange thickness	16 mm
Bolts and nuts: quantity and diameter	4, each of 16 mm diameter and of suitable length

The flange is designed to accept pipes up to a maximum internal diameter of 100 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a suitable gasket, shall be suitable for a service pressure of 6 kg/cm^2.

a. For ships having a molded depth of 5 m or less, the inner diameter of the discharge connection may be 38 mm.

22-3.3.1.5 MSD installations shall include the capability for pumping collected sewage and graywater to appropriate shoreside reception facilities. Surface ships, submarines and service craft/boats shall be fitted with cam-lock sewage discharge connections in 4-inch (MS 27025-18), 2-1/2-inch (MS 27025-14) and 1-1/2-inch (MS 27025-10) sizes, respectively. Such fittings shall allow quick connect/disconnect with shoreside offloading hoses.

22-3.3.1.6 Navy ships visiting foreign ports shall be equipped with adapters to accommodate hoses having international-standard flanges specified by the International Maritime Organization in Annex IV, Regulation 11 of the International Convention on the Prevention of Pollution from Ships (MARPOL). Figure22-2 provides specifications for such flanges.

22-3.3.1.7 Ships shall not dispose of industrial wastewater through ships' sewage or graywater collection and transfer systems. Following use, ships shall deliver shipboard industrial wastewater to a shore activity for processing to determine if it has further use and, if not, disposal as waste.

22-3.3.2 Shipboard Procedures. Ships shall operate MSDs following these procedures:

22-3.3.2.1 Ships shall properly operate and maintain MSDs installed aboard Navy ships to prevent the overboard discharge of untreated or inadequately treated sewage, or any waste derived from sewage (e.g., sludge), within 0-3 nm of the U.S. shore.

22-3.3.2.2 Unless specifically designed and constructed to hold or treat both sewage and graywater, MSDs aboard Navy ships shall collect and hold or treat only sewage while operating or transiting within 3 nm of shore. For MSDs not specifically designed to handle both sewage and graywater, holding or treatment of graywater would significantly reduce MSD holding capacity or MSD treatment effectiveness and might result in the unnecessary overboard discharge of untreated or inadequately treated sewage before reaching pier facilities or unrestricted waters.

22-3.3.2.3 Ships shall collect graywater in installed MSDs or graywater collection systems while in port.

22-3.3.2.4 Navy ships shall not discharge any treated or untreated sewage into freshwater lakes (excluding the Great Lakes), freshwater reservoirs or other freshwater impoundments, or into rivers not capable of interstate navigation. Navy ships that operate in such waters shall be modified to preclude accidental discharge.

22-3.3.2.5 While operating beyond 3 nm from shore, Navy ships may discharge all sewage and graywater directly overboard.

22-3.3.2.6 Unless prohibited by law, regulation, or condition of port entry, MSC vessels may discharge treated effluent from properly functioning USCG-approved Type II MSDs.

22-3.3.2.7 Unless prohibited by law, regulation, or condition of port entry, MSC vessels which are unable to hold graywater, process it through a properly functioning Type II MSD or other approved treatment device, or discharge it ashore, may discharge graywater directly overboard.

22-3.3.2.8 Ships shall not dispose of used solvents or other industrial wastes to MSDs or graywater collection systems or dump them down sinks or deck drains. They shall containerize used solvents and industrial wastes for disposal ashore.

22-3.3.3 Ship-to-Shore Transfer. Navy ships shall follow these procedures in port:

22-3.3.3.1 While visiting Navy ports, Navy ships equipped with Type III-A and Type III-B MSDs shall periodically pump their collected sewage and graywater to shoreside reception facilities. Navy ships equipped with Type I or Type II MSDs shall pump treated sewage and graywater to shoreside reception facilities or directly overboard in accordance with local regulations. The shore activity shall provide the transfer hoses and associated fittings to connect the ship discharge line with the shore equipment.

22-3.3.3.2 While visiting non-Navy ports, Navy ships shall request sewage reception facilities in LOGREQs or other pertinent documentation. Ships shall use pier sewers when available. If sewers are not available, ships may use other sewage collection facilities such as barges or tank trucks unless it is impractical to do so, or if the Commanding Officer determines the safety of the crew and/or ship is at risk. If pier sewers are not available, and unless prohibited by law, regulation, or condition or port entry, Navy and MSC vessels may discharge treated effluent from properly functioning USCG-approved Type II MSDs.

22-3.3.3.3 When in port, food service garbage grinders shall be diverted to the MSD system for discharge ashore.

22-3.3.4 Exceptions. Navy ships may discharge minimal quantities of untreated sewage within 0-3 nm of shore, but only under certain circumstances and with due consideration for environmental effects. Because certain State or local water quality authorities may require notification of sewage or graywater discharges, ships shall coordinate reporting requirements through fleet and port environmental coordinators. Ships may discharge sewage overboard within 3 nm of shore only under the following conditions:

22-3.3.4.1 The ship's holding capacity is insufficient because transit time through the zone 0-3 nm from shore is of long time duration. The ship shall minimize any necessary sewage discharge and shall pump out as far as possible from land.

22-3.3.4.2 The ship is conducting or participating in military operations or exercises (including training or readiness evolutions) within the zone 0-3 nm from shore, and terminating operations to offload sewage pierside or beyond 3 nm from shore would impair operational effectiveness or the mission.

22-3.3.4.3 The ship is at anchor or moored where sewage reception facilities or services are not reasonably available, or where use of such services or facilities is not feasible because of foul weather, poor visibility, or unsafe environmental conditions, and where on board retention of sewage is not practicable.

22-3.3.4.4 The ship is anchored, moored, or pierside and the use of sewage reception facilities would not allow the ship to maintain its Anti-Terrorism/Force Protection posture.

22-3.3.4.5 The ship's MSD is inoperable because of equipment malfunction or maintenance, its use would interfere with an overhaul or repair effort, or its use would pose a hazard to the health or welfare of the crew. Ships shall minimize those periods prompting use of this exemption.

Ships shall discharge any sewage underway under this section as far as possible from shore. If in port, the ship shall obtain the concurrence of the shore activity environmental manager before the overboard discharge of sewage.

22-3.4 Training. Ships shall train personnel who operate or maintain sewage and graywater disposal or transfer equipment on the proper procedures for sewage or graywater disposal, including hookup and transfer of sewage or graywater to shore facilities and at sea discharge restrictions. Personnel assigned to supervise sewage or graywater disposal operations shall complete the Shipboard Sewage Collection, Holding, and Transfer (CHT) course found on the Naval Education and Training Command (NETC) Shipboard Training Enhancement Program (STEP) compact discs prior to assuming these duties. All personnel who operate or maintain sewage or graywater disposal equipment shall complete the Shipboard Sewage Collection, Holding, Transfer (CHT), and Treatment PQS, NAVEDTRA 43199-C, prior to assignment to those duties.

22-4 Air

22-4.1 Legislation (This section contains background material from which Navy policy is derived).

22-4.1.1 The Clean Air Act (CAA) authorizes State and local governments to set standards for emissions of air pollutants. Federal law requires Federal agencies to comply with Federal, State, interstate and local air pollution requirements. Although most air pollution regulations address shoreside sources, Navy ships operating within U.S. and State waters may also be subject to certain regulation.

22-4.1.2 Reference (c) (NESHAP for Shipbuilding and Ship Repair) considers ship's force coating operations as an EPA-regulated activity when a ship is pier side at an affected source. “Affected source” is an EPA determination and, therefore, affects both Navy shore activities (shipyards and naval stations) and private ship repair facilities. The shore activity is required to include information about marine coating use by ship's force in their semi-annual reports.

For ships at affected source sites, reference (c) imposes recordkeeping requirements, proscribes use of certain types of paint, and restricts use of paint thinners.

Despite the applicability of the requirement, EPA headquarters has recommended that regional EPA offices grant waivers to relieve Navy activities classified as affected source sites of the requirement to record and report ships’ force marine coating use on “operational ships” (all ships other than those in an overhaul availability). Overhaul is a depot level maintenance availability that occurs at Navy or commercial shipyards. EPA will not automatically grant waivers. The Navy must apply to EPA regional offices to obtain them. Therefore, recordkeeping and reporting requirements will be administered and enforced on a variable basis by EPA regions and state environmental agencies.

22-4.2 Terms and Definitions

22-4.2.1 Affected Source. A major source of Hazardous Air Pollutants (HAPs) that emits more than 25 tons/year of HAPs aggregate or more than 10 tons/year of any single HAP and uses at least 264 gallons of marine coating per year.

22-4.2.2 Coating. Any material that can be applied as a thin layer to a substrate and which cures to form a continuous solid film. Coatings include paints, primers, varnishes, lacquers, etc. Marine coatings meeting this definition are regulated under reference (c).

22-4.2.3 Domestic. Within the United States, its possessions, and territories.

22-4.2.4 General Use Coating. Any coating that is not a specialty coating. Marine coatings meeting this definition are regulated under reference (c).

22-4.2.5 Volatile Organic Compounds (VOCs). Photochemically reactive organic compounds that evaporate readily under normal temperature and pressure conditions. As a result of the tendency to evaporate readily, VOCs are primary contributors to the formation of ground level ozone.

22-4.3 Navy Policy

22-4.3.1 Compliance with Regulations. Navy ships shall comply with applicable Federal, State and local regulations governing air pollution emissions.

22-4.3.2 Shipboard Procedures. Ships shall follow these procedures:

22-4.3.2.1 Navy ships at pierside shall implement operation and maintenance procedures to prevent stack emissions in violation of State and local regulations. Specifically, Navy ships shall comply with regulations on the opacity of smoke during normal operation of boilers and special periods, such as lighting off, securing, baking out, or testing of boilers.

22-4.3.2.2 In port, Navy ships shall minimize operation of boilers and diesel engines by using shore-provided "hotel" services whenever operational requirements permit. Ships shall limit blowing of boiler tubes in port to the minimum necessary to conform to provisions of reference (d), chapter 221.

22-4.3.2.3 Ships shall use only approved solvents, paints, fuels, lubricants and chemicals on board. The Ships Hazardous Material List (SHML) or the Submarine Material Control List (SMCL) contains a list of Hazardous Materials (HM) approved for use aboard ship. For submarines, additional restrictions may apply to solvents, paints, fuels, lubricants and other chemicals per the Nuclear Powered Submarine Atmosphere Control Manual (S-9510-AB-ATM-010/(U)).

22-4.3.2.4 Only properly trained personnel equipped with appropriate personal protective equipment shall perform shipboard emergency or operational readiness repairs on thermal insulation containing asbestos. See reference (e), chapter B1 for guidance. This reference also discusses other asbestos work, including the removal of asbestos-containing deck tiles, replacement of asbestos-containing gasket/packing material and preventive maintenance on asbestos-containing brake assemblies. Ships shall

properly containerize any asbestos material removed during shipboard repair actions performed by ship's force and dispose of it without release of asbestos fibers into the environment (see reference (e), chapter B1). In preparation for disposal ashore, repair personnel must adequately wet asbestos residue before double bagging it in heavy-duty (6 mil thickness) plastic bags or other suitable impermeable containers. Repair personnel shall provide standard asbestos danger labels on all bags or containers containing asbestos material. Other applicable laws, regulations and contract requirements govern asbestos removal by Navy shore facilities or contractors.

22-4.3.2.5 Navy and COMSC ships with AC&R systems with an installed refrigerant charge of more than 50 pounds that contain ODSs such as CFC-11, CFC-12, or CFC-114 or ODS substitute material such as HFC-134a or HFC-236fa shall meet the following annual performance goals:

a. Maintain maximum annual leakage rate of no more than 15 percent of total installed refrigerant charge of air conditioning equipment.

b. Maintain maximum annual leakage rate of no more than 35 percent of total installed refrigerant charge of ship stores and cargo refrigeration.

22-4.3.2.6 Ships shall recover ODSs and ODS substitute materials including refrigerants and firefighting agents prior to maintenance on air conditioning and refrigeration systems and fire protection systems. Navy personnel shall not intentionally release chlorofluorocarbons (CFCs) or halons during the servicing, maintenance, repair and disposal of any AC&R or firefighting equipment. Only maintenance personnel trained per paragraph 22-4.3.3 shall perform maintenance on equipment containing such substances. Under these procedures, maintenance personnel shall use only approved procedures for minimizing loss of ODSs, regardless of the ship’s location.

22-4.3.2.7 Navy personnel who perform maintenance on shipboard AC&R systems shall keep records of maintenance actions, names of technicians performing work, pounds of refrigerant removed and pounds of refrigerant added. Ships shall keep records to calculate annual equipment leakage rates addressed in paragraph 22-4.3.2.5 and retain them for 3 years.

22-4.3.2.8 Ships shall restrict the use of ODS-containing solvents for shipboard equipment to those procedures specifically required.

22-4.3.2.9 ODS Reserve. The Navy established the ODS reserve to support mission-critical ODS requirements. Shipboard CFC for use in air conditioning and refrigeration systems and halon for use in firefighting systems are mission-critical designated. The ODS reserve material is set aside for these shipboard systems. Navy ODS Advisory 96-01 (series), produced by COMNAVSEASYSCOM (SEA 05M) provides procedures for deposits to and requisitions from the reserve. CNO (N45), COMNAVSEASYSCOM, COMNAVAIRSYSCOM, COMSC and Fleet Commanders monitor requisitions from the ODS reserve.

22-4.3.2.10 Shipboard Galley and Other Ancillary Refrigeration Equipment. Class I ODS refrigerants used in shipboard galley and other ancillary refrigeration equipment such as air dehydraters, drinking water fountains, and medical refrigerators were phased out of production on 31 December 1995. Existing supplies are limited, however, ships are authorized to use material from the ODS reserve to support galley and other ancillary refrigeration equipment until the year 2010. Ships shall replace existing equipment with new equipment at the end of its normal life cycle or when it is no longer usable or

repairable. Replacement equipment must be EPA-approved (complying with their significant new alternatives policy (SNAP) program) and must use a refrigerant with an ozone depletion potential (ODP) of 0.05 or less. Replacement equipment must also meet safety and health criteria. NAVSEA Catalog S6161-Q5-CAT-010 lists replacement equipment.

22-4.3.2.11 Shipboard Marine Coating Use

a. Ships in an Operational Status. Routine, incidental preservation and maintenance painting conducted by Ships Force aboard vessels in an operational status is considered by EPA, per reference (f), to be exempt from recordkeeping and reporting requirements of the Ship NESHAP. However, a waiver from this requirement for ships pierside at Navy shore activities designated EPA "affected sources" is required. Since the EPA does not consider all shore activities to be "affected sources", Navy activities and Supervisor of Shipbuilding (SUPSHIPs) shall notify ships of their reporting responsibilities prior to entering the activity. Fleet Commanders shall direct Navy activities, at affected sources, to work with the RECs to request recordkeeping waivers from EPA regional offices for ships in "operational status". Affected activities unable to secure waivers for ships force painting recordkeeping and reporting during operational availabilities are required to comply with reference (c). Affected activities required to comply with reference (c) shall compile records of certification of the as-supplied VOC content of each batch of coating on a monthly basis and maintain those records for a minimum of five (5) years.

b. Ships in a Non-Operational Status. Ships in an overhaul availability at Navy NESHAP affected source sites shall maintain records of ships' force marine coating use *for coatings distributed from ships' stores*. Surface ships may use the installed NAVSEA-approved management software (HICSWIN) to maintain these records. Submarines may use the Submarine Hazardous Material Inventory System (SHIMS) to maintain these records. If regional EPA offices grant appropriate waivers, operational ships located at Navy affected sources sites will *not* be required to maintain records of ship's force marine coating use. Ships' force, however, shall record and report coating use when located at commercial affected source sites (e.g., private shipyards and maintenance facilities) regardless of availability type or operational status.

c. Ship Recordkeeping and Reporting Requirements. When requested by the Navy activity or SUPSHIP, ships must record and report marine coating used each day. HICSWIN or SHIMS, as appropriate, may be used to track this information. Records shall include the following information:

(1) Coating Type (e.g. general use, non-skid, special marking, etc.)

(2) Color

(3) National Stock Number (NSN)

(4) Manufacturer Name and/or Commercial and Government entity (CAGE) code

(5) Manufacturer product name

(6) Manufacturer part number

(7) Volume of coating used

(8) VOC content of coating

(9) Coating certification (when available)

(10) Date used.

Records shall be provided by the seventh day of the month for the previous month, and/or prior to departure.

Figure 22-3

Application	EPA VOC Limit (Metric)	Conversion (U.S.)
Air Flask	(340 g/l)	(2.53 lbs/gal)
Antenna	(530 g/l)	(4.42 lbs/gal)
Antifoulant	(400 g/l)	(3.33 lbs/gal)
Heat Resistant	(420 g/l)	(3.33 lbs/gal)
High Gloss	(420 g/l)	(3.50 lbs/gal)
High-Temperature	(500 g/l)	(4.17 lbs/gal)
Inorganic Zinc High-Build Primer	(340 g/l)	(2.53 lbs/gal)
Military Exterior	(340 g/l)	(2.83 lbs/gal)
Mist	(610 g/l)	(5.08 lbs/gal)
Navigational Aids	(550 g/l)	(4.50 lbs/gal)
Nonskid	(340 g/l)	(2.83 lbs/gal)
Nuclear	(420 g/l)	(3.50 lbs/gal)
Organic Zinc	(360 g/l)	(3.00 lbs/gal)
Pre-Treatment Wash Primer	(780 g/l)	(6.50 lbs/gal)
Repair and Maintenance of Thermoplastic Coating	(550 g/l)	(4.58 lbs/gal)
Rubber Camouflage	(340 g/l)	(2.83 lbs/gal)
Sealant Coat For Thermal Spray Aluminum	(610 g/l)	(5.08 lbs/gal)
Special Marking	(490 g/l)	(4.08 lbs/gal)
Specialty Interior	(340 g/l)	(2.83 lbs/gal)
Tack Coat	(610 g/l)	(5.08 lbs/gal)
Undersea Weapons Systems	(340 g/l)	(2.83 lbs/gal)
Weld-Through Shop Primer	(650 g/l)	(5.42 lbs/gal)
*General Use	(340 g/l)	(2.83 lbs/gal)

*General use coating is defined as “any coating not defined as a specialty coating”.

d. Restrictions on Marine Coating Use. Ships are responsible for not using materials exceeding permissible volatile organic compound (VOC) limits for applications as listed in figure 22-3. (This information is obtained from the VOC certificate issued by the manufacturer and can also be found on the coating can.) The SHML, or the SMCL for submarines, contains a listing of those marine coatings authorized for shipboard use by ship’s force. If ship's force cannot obtain materials meeting these standards through the Navy supply system, they should contact COMNAVSEASYSCOM (SEA05M1) for a compliant substitute.

e. Restrictions on Use of Thinners. Ship's forces are prohibited from thinning marine coatings with anything except water. Ships shall label paint lockers with a placard stating, "Thinning of marine coatings/paints is prohibited."

f. Marine Coating Certification. Navy supply activities including Fleet Industrial Supply Centers (FISC) have implemented procedures ensuring that all marine coatings have batch VOC certificates complying with the requirements of reference (c) prior to issue of marine coatings to affected sources. VOC certificates may be obtained by any of the following means:

(1) Directly from the vendor/manufacturer;

(2) From the NAVSUP Ship-NESHAP batch certification database; or,

(3) Locally prepared by an activity qualified to perform VOC content analysis in accordance with EPA Method 24.

g. Ships shall implement the following marine coating work practices:

(1) minimize spills of marine coatings,

(2) ensure marine coating containers are intact and leak-free and,

(3) ensure marine coating containers are closed when not in use.

22-4.3.3 Training

22-4.3.3.1 Ships shall train personnel whose watch duties may result in air pollution (for example, diesel engine operators, boilermen, or gas turbine operators) in the minimization of air pollution as a part of their watch qualification.

22-4.3.3.2 Ships shall train personnel whose task assignments may result in air pollution (for example, topside painters or users of volatile solvents) on the proper use of the material prior to performing the task, to minimize the release of pollutants.

22-4.3.3.3 All Navy AC&R technicians who perform maintenance on air conditioning and refrigeration equipment shall be certified under an EPA-approved technician certification program appropriate for the type of equipment that they maintain. Ships shall provide these personnel with training on ODS regulations as well as spent/recyclable ODS labeling prior to assigning them to perform these duties.

22-4.3.3.4 Ships shall train personnel who work with other ODSs (e.g., halons and solvents) or perform maintenance on equipment containing such substances on methods to prevent release prior to assigning them to such work.

22-4.3.3.5 Personnel assigned to operate incinerators or other thermal destruction equipment shall complete all Personnel Qualifications Standards (PQS) appropriate for the type of equipment, prior to assignment.

22-5 Oil and Oily Waste

22-5.1 International Convention and Legislation

22-5.1.1 Annex I of MARPOL addresses oil pollution from ships at sea. Annex I requirements do not apply strictly to warships, but party states (including the U.S.) are required to establish standards for their warships that require such vessels to conform as closely as practicable with the international standard, without compromising operational effectiveness. Annex I establishes "special areas" in which all discharge of oil or oily mixture from oil tankers and other ships in excess of 400 gross tons is prohibited. This prohibition does not apply to the discharge of processed bilge water from machinery spaces provided all of the following conditions are met:

22-5.1.1.1 The ship is proceeding en route.

22-5.1.1.2 The oil content of the overboard discharge without dilution does not exceed 15 parts per million (ppm).

22-5.1.1.3 The ship has in operation oil filtering equipment that will alarm if an output of greater than 15 ppm is exceeded (ships greater than 10,000 tons).

22-5.1.1.4 The filtering system is equipped with a stopping device that will ensure that the discharge is automatically stopped if the effluent oil content exceeds 15 ppm.

Annex I special areas in effect include the Mediterranean Sea, the Baltic Sea, the Black Sea, and the Antarctic area. Annex I limits the oil content of discharges from ships into all other ocean areas of the world at 15 ppm.

22-5.1.2 The Act to Prevent Pollution from Ships (APPS) implements the stringent oil and oily waste discharge requirements of Annex I of MARPOL. Although public vessels are not strictly subject to MARPOL Annex I, the Act requires heads of Federal departments to prescribe standards for ships under their authority that are consistent with those of the MARPOL Protocol "so far as it is reasonable and practicable without impairing the operations or operational capabilities of such ships." APPS applies to U.S. vessels worldwide.

22-5.1.3 The Clean Water Act (CWA) prohibits the discharge of oil in a harmful quantity into all waters within 12 nm of the U.S. coast or in any waters which may affect natural resources of the Exclusive Economic Zone (EEZ). U.S. EPA regulation states that a discharge of oil in a harmful quantity is one that violates applicable water quality standards or causes a sheen on the water. The oil content within a discharge that is sufficient to cause a sheen varies with type of oil, sea state, lighting, and viewing angle. In general, in excess of 15 to 20 ppm of oil may be sufficient to cause a sheen.

22-5.2 Terms and Definitions

22-5.2.1 Bilge Water. A mix consisting primarily of water, with some oil (normally less than 5 percent) and other unspecified substances, resulting from the normal operation of a vessel. Bilge water is considered an oily waste. Under normal circumstances, bilge water does not contain HM or other constituents that would classify it as a hazardous waste.

22-5.2.2 Oil. For the purposes of compliance with MARPOL Annex I and the Act to Prevent Pollution from Ships (APPS), the term "oil" refers to any petroleum-based fluid or semisolid, including crude oil, liquid fuels (like gasoline, kerosene, diesel), lubricating oil, waste oil, oil sludge and oil refuse. Oil also includes synthetic-based lubricating and transmission products. MARPOL, Annex II classifies non-petroleum-based oils, such as vegetable oils, as noxious liquid substances.

For the purposes of Clean Water Act (CWA) compliance, the term "oil" refers to oil of any kind or in any form, including petroleum, fuel oil, sludge, oil refuse, vegetable oil, and oil mixed with waste other than dredge spoils.

22-5.2.3 Oily Rags. Cleaning rags or other sorbents contaminated with oil as defined in paragraph 22-5.2.2. Does not include sorbents contaminated with vegetable oils, liquid or solid shortening, or animal fat/lard used in food preparation.

22-5.2.4 Oily Waste. Oil mixed with water or other fluids such that the mixture is no longer useful.

22-5.2.5 Reclamation. The processing of used oil to recover useful oil products.

22-5.2.6 Sheen. An iridescent appearance on the surface of the water.

22-5.2.7 Used Oil. Oil whose characteristics have changed since being originally refined but which may be suitable for future use and is economically reclaimable. Used oil excludes synthetic-based lubricating and transmission products.

22-5.2.8 Waste Oil. Oil whose characteristics have changed markedly since being originally refined and has become unsuitable for further use, and is not considered economically recyclable.

22-5.3 Requirements

Ship commanding officers will comply with applicable oil discharge regulations and the operational requirements contained in this chapter. Compliance will ensure that Navy ships operate with due regard to all recognized standards for environmental protection, while not detracting unreasonably from the Navy's mission to protect the national security interests of the United States. Compliance will also demonstrate appreciation for the harmful effects of marine oil pollution and reduce the risk that external controls, with their attendant administrative and cost burdens, may be imposed if Navy is unable to improve its oil spill performance.

Commanding officers will make every effort to minimize oil spill risks across all navy operations through application of aggressive spill prevention measures. All ships should strive to continuously reduce oil spills through proper preparation, rigid adherence to published procedures, and application of

the full measure of command attention to any operation involving movement of oil and oily waste.

Preventing oil spills is one of the Navy's top priorities. However, in the event an accidental discharge occurs, timely reporting is essential. Timely reporting ensures a more effective response, compliance with applicable regulatory requirements, and maintenance of an accurate database to support continued spill prevention efforts.

22-5.4 Navy Policy

22-5.4.1 Clean Water Act (CWA) Compliance. In compliance with the Clean Water Act, no discharge that produces a sheen is permitted within 12 nm of the U.S.

22-5.4.2 APPS Compliance. Ships operating in MARPOL Annex I special areas (Mediterranean Sea, Black Sea, Baltic Sea, and the Antarctic area) shall refrain from discharging any oil or oily waste to the extent practicable without endangering the ship or impairing its operations or operational effectiveness. Oil and oily waste discharges that are necessary in Annex I special areas or elsewhere on the high seas shall comply with the requirements listed below. Refer to paragraph 22-5.4.5 for operational and management requirements.

22-5.4.2.1 Surface Ships With Oil/Water Separators (OWSs) and Oil Content Monitors (OCMs). Navy ships equipped with OWS and OCM shall attempt to limit oil and oily discharges to 15 ppm oil worldwide. OWSs will generally operate more effectively if the processed oily waste does not contain mechanical emulsions generated by shipboard equipment, chemical emulsions produced by detergents or other emulsifying agents and/or particulates that could clog the OWS.

22-5.4.2.2 Ships With OWSs or Bilge Water Processing Tanks (BWPTs) But Without OCMs shall process all machinery space bilge water through an OWS or BWPT before discharge.

22-5.4.2.3 Surface Ships Without an Operating OWS But With an Oily Waste Holding Tank (OWHT) shall, when possible, hold tank contents for shore disposal. If operating conditions require the disposal of oily bilge water at sea, it shall be made at least 50 nm from the nearest land and only while the ship is making way. If compliance with this limitation would adversely influence the ship's ability to carry out its mission, the discharge should occur as far from land as mission limits allow. Commanding officers and/or ship masters shall ensure minimal discharges occur and duly note the details (nature, quantity, and geographic location) in the ship's Engineering Log. If such a discharge is required within 12 nm of the United States and its territories, and a sheen is created, it shall be treated as an oil and hazardous substance spill and immediately reported to the USCG National Response Center and the cognizant military authorities (see section 22-9).

22-5.4.2.4 Surface Ships With Neither an Operating OWS nor OWHT shall retain all oily bilge water for shore disposal to the maximum extent possible, without endangering the ship or impairing its operations or operational effectiveness. Discharges are permitted beyond 50 nm from the nearest land if operating conditions are such that oily bilge water must be disposed of at sea. Such discharges of oily bilge water shall take place only while the ship is underway.

22-5.4.2.5 Submarines Without BWPTs. When bilge water is to be discharged, after allowing for adequate separation time, submarines shall pump the bottom, non-oily water phase of bilge water

overboard. The non-oily, water phase of bilge water shall not be pumped overboard within 50 nm except when the operations or operational capabilities of the submarine would be impaired by this requirement. In this case, the non-oily, water phase should be pumped as far from shore as practicable. In any case, the oily phase shall be held onboard and pumped to a shore collection facility. Submarines shall ensure this policy is met by written procedure.

22-5.4.3 Foreign Countries. Within foreign territorial seas (12 nm), see the Visit Clearance or Status of Forces Agreement (SOFA) as delineated in the Port Guide or Logistics Request (LOGREQ) reply. If sufficient guidance is not available follow the procedures in 22-5.4.2 above. If the above procedures are not feasible, follow standards observed by the host nation's warships.

22-5.4.4 Shipboard Equipment. The Navy shall install the following equipment/systems on ships to allow proper segregation, collection, and processing of shipboard oily waste and collection of waste oil:

22-5.4.4.1 OWSs, OCMs, OWHTs, and waste oil tanks (WOTs) to allow adequate processing of shipboard oily waste prior to its discharge overboard and to allow proper segregation and collection of shipboard waste oil; including oily waste ultrafiltration polishing systems installed on some new construction ships

22-5.4.4.2 Bilge pumps (oily waste transfer pumps), piping risers, and weather-deck connections to allow safe and convenient ship-to-shore transfer of oily waste/waste oil (OW/WO)

22-5.4.4.3 Cam-lock discharge connections, 2-1/2-inch (MS 27023-14), for OW/WO discharge to allow quick connect/disconnect with shoreside offloading hoses

22-5.4.4.4 OW/WO adapters to accommodate hoses with standard International Maritime Organization (IMO) flanges for use by Navy ships visiting foreign or non-Navy ports

22-5.4.4.5 Mechanical seals on appropriate shipboard pumps to minimize the quantity of oily wastewater collected in ship bilges

22-5.4.4.6 Improved tank level indicators to reduce the potential for overboard spills during fueling and oil and oily waste handling and transfer operations

22-5.4.4.7 Contaminated fuel settling tanks (CFSTs) to receive and assist reclamation of fuel tank strippings that might otherwise be discharged overboard

22-5.4.4.8 Oil-water interface detectors, cargo tank cleaning systems, and where appropriate, segregated ballast tanks on oilers and oil tankers.

All oil pollution abatement equipment/systems shall be inspected prior to the issuance of a user's certificate to verify proper installation and operation per NAVSEASYSCOM's inspection and certification process. The installation and operation of oil pollution abatement equipment/systems on MSC vessels shall be inspected and certified to commercial standards by the USCG and/or the American Bureau of Shipping (ABS).

22-5.4.5 Operational and Management Requirements. Shipboard operational and management requirements for bilge water, oil, oily waste, and shipboard oil pollution abatement are described in the following paragraphs. Reference (d), chapter 593, section 3 provides detailed procedural instructions implementing these requirements.

22-5.4.5.1 Bilge Water and Oily Waste.

a. Bilge water and oily waste minimization. Ships shall minimize oil contamination of bilge water. Mechanical seals in oil and water pumps and proper segregation of oily and non-oily wastewater will greatly reduce the generation of oily waste.

b. Contaminated bilge water and oily waste. Ships shall use bilge cleaners or chemical agents that are OWS compatible and do not promote stable chemical emulsions (i.e., detergents and surfactants) for machinery space cleaning. Use of unapproved bilge cleaners will prevent oil-water separation, cause oil content monitor malfunction, and force recirculation of the OWS effluent until the OWHT is full. COMNAVSEASYSCOM approved short-lived or non-emulsifying detergents for bilge cleaning, are listed in Chapter 593 of reference (d). A short-lived detergent is a cleaner or degreaser that produces a brief emulsion period to effectively remove oil during the cleaning process and over a short period of settling time breaks to release the oil for subsequent separation from water. In port, ships shall offload oily waste containing chemical emulsion agents or contaminants from sources of bilge water, which cannot be processed by the OWS, to shore receiving facilities. If oily waste has become contaminated from other than routine sources, such as aqueous film-forming foam (AFFF), solvents, anti-freeze, or other HM, ships shall advise the receiving shore facility prior to offload. Since some States may consider bilge water to be contaminated or have varying oil discharge requirements, ships in those States shall consult with the shore receiving facility for collection and discharge requirements.

c. Bilge water and oily waste disposal in port. Navy policy is to maximize separation, recycling, and reuse of oil. While in a Navy port, ships shall comply with shore activity established bilge water and oily waste sampling requirements and shall dispose of bilge water and oily wastes per supporting activity guidance using one or more of the following approaches:

(1) Permanent shore reception facilities. In Navy ports that provide shore oily waste collection, shoreside collection of bilge water and oily wastes followed by recovery of recyclable products is the preferred method of dealing with these shipboard wastes.

(2) OWS and OCM systems. Ships equipped with OWS and OCM systems may use them, provided the effluent does not exceed 15 ppm, cause a sheen, or violate any other applicable water quality standard. Prior to discharging in a Navy port via an OWS, ships shall consult with the supporting shore facility host command for discharge requirements. In non-Navy ports, use of the OWS in conjunction with the OCM is the preferred method of dealing with bilge water.

(3) Ship waste offload barges (SWOBs). Supporting shore activities shall operate SWOBs per reference (g). Ships not equipped with an operable OWS shall use OW/WO collection lines ashore, if available, or shall discharge to a SWOB.

d. Emergency dewatering. Ships shall not use eductors to dewater bilges containing oily waste, except in emergency situations when OWS systems (including OWHTs) are not available or are not of sufficient capacity to handle the immediate flow requirements. If a ship must use an eductor, it shall

make every effort to discharge beyond 12 nm from land and while underway. The ship shall make an engineering log entry (nature, quantity, and geographic location) concerning eductor use to discharge bilge waste overboard.

22-5.4.5.2 Waste/Used Oil

a. Shipboard personnel shall make maximum use of available port facilities for disposal of all waste/used oil products prior to departing from and upon returning to port. Those facilities include SWOBs, pierside collection tanks, tank trucks, bowsers, and contaminated fuel barges.

b. Shipboard personnel shall collect, store separately and label used lubricating oils for eventual shore reclamation. They shall not discharge lubricating oils into the bilge, OWHTs or WOTs.

c. Shipboard personnel shall collect synthetic lube oils and hydraulic oils separately from other used/ waste oils. Ships that do not have a system dedicated to collect used synthetic oils shall use 5- or 55-gallon steel containers, properly labeled per reference (g) for eventual shore recycling. All personnel handling synthetic oil shall wear protective clothing, as specified in material safety data sheets (MSDSs) and the Hazardous Material Users Guide (OPNAVINST 5100.28).

d. Ships shall retain containers (such as drums, cans, etc.) in which oil products were originally packaged and properly label them per reference (g) for storing and transferring oil ashore.

22-5.4.5.3 Fuel Transfer. Ships shall fuel, defuel, transfer fuel internally, and offload oil in restricted waters during normal daylight working hours, when operating schedules permit. They shall conduct these evolutions with well-trained personnel (see paragraph 22-5.5). They shall observe the following precautions to minimize oil spills:

a. Maintain topside watches at all locations of possible spills and rig direct communication to fuel transfer pump stations.

b. Establish check-off lists and procedures for valve alignment and transfer operations. Double-check alignment of all transfer system valves.

c. Use only qualified personnel to perform the detailed transfer procedures.

d. Continuously monitor each tank level while filling with fuel. Use remote tank-level indicators as the primary method of obtaining tank levels.

e. Prior to actual fuel transfer, transfer personnel shall inform the responsible ship's officer (commanding officer, command duty officer, or officer of the deck) and the fuel supplier that the ship is ready to commence fueling operations.

22-5.4.5.4 Fuel Tank Stripping

a. Ships shall not use eductors to strip fuel or cargo tanks.

b. On ships equipped with fuel tank stripping systems, ships shall discharge the strippings to CFSTs for reuse. Ships shall not discharge fuel tank strippings overboard.

c. CFSTs are for strippings from fuel storage and service tanks only. Ships shall not discharge bilge water and waste or other wastewater into CFSTs.

22-5.4.5.5 Compensated Fuel/Ballast Water Systems and OW/WO. Under normal circumstances, compensated fuel/ballast water is neither OW/WO nor HW. Ships with compensated fuel/ballast systems shall comply strictly with fuel transfer and ballasting procedures to ensure ballast water does not become contaminated with oil or any other waste. Ships utilizing self-compensating fuel tanks shall ensure adequate margin is preserved in tanks to prevent inadvertent discharges of oil with the compensating water. Some State regulations require supporting shore activities to collect and process compensated fuel/ballast water prior to discharge to the environment.

22-5.4.5.6 Oil-contaminated Solid Waste

a. Surface ships shall containerize oil and fuel filters and other items coated or soaked with oil for shore disposal. They may weight these items for negative buoyancy and jettison them beyond 50 nm of shore if necessary for safety of ship or health of crew.

b. Surface ships equipped with COMNAVSEASYSCOM approved thermal destruction equipment shall not burn heavily soaked oily rags or rags contaminated with hazardous materials (HM). Ships may only dispose of rags that are lightly soaked (i.e., less that 50 percent of the rag surface area wetted and not dripping without wringing) with petroleum products or other non-hazardous liquids via thermal destruction equipment beyond 12 nm from shore.

c. Ships, other than MSC vessels, shall utilize the COMNAVSUPSYSCOM Afloat Shop Towel Program (ASTP) to the maximum extent practicable.

d. Ships should store all rags that are not incinerated aboard in suitable closed containers designed to contain flammable or combustible materials in a space fitted with adequate ventilation and fire suppression systems per reference (e).

e. Submarines may weight oil-contaminated solid waste (including oily rags/sorbents) for negative buoyancy and jettison beyond 50 nm from shore, or as necessary for the safety of the submarine and crew.

22-5.4.5.7 Vegetable Oils. Ships may dispose of vegetable oils and cleaning solutions (wash or rinse water) containing these oils outside of 12 nm from land without restriction. Inside of 12 nm, ships may not dispose of such material in such quantities that create a sheen on the water. Ships should containerize larger quantities (e.g. the content of a deep fat fryer) for disposal ashore. Ships and submarines should not dispose of quantities of vegetable oil via the sanitary or graywater systems as this has the potential to clog piping and associated system components. Rags, paper towels, and other materials used to absorb vegetable oil should be disposed of per solid waste processing requirements for the material.

22-5.4.6 Exemption From Oily Waste Requirements. Exemption from oily waste requirements may be necessary at certain times and under certain circumstances. Instances of specifically authorized exemptions include the following:

22-5.4.6.1 While operating in waters beyond 50 nm from land, with shipboard oily waste processing equipment inoperable due to equipment malfunction, a Navy ship may discharge oily bilge water directly to the sea if the on board retention of such water poses a safety hazard. They may conduct the discharge only after a concerted effort has been expended to repair the equipment malfunction. Commanding Officers shall minimize discharges under such circumstances. The ship shall duly note the details of a discharge (nature, quantity and geographic location) in the engineering log. Ships shall report equipment casualties that either threaten or result in a discharge of oily water through the Casualty Report (CASREP) system. The initial report shall note the potential for discharge. All subsequent status reports shall report the frequency and approximate amount of actual discharges.

22-5.4.6.2 A Navy ship may discharge oily waste to the sea in any other situation in which a Commanding Officer decides that a discharge of such wastes is required to ensure crew or ship safety, or to prevent machinery damage. For example, the ship shall not allow oily bilge water to reach levels that threaten chloride contamination of shipboard condensate systems. Commanding Officers shall minimize such discharges and ensure the recording of details of the discharge (nature, quantity and geographic location) in the engineering log. If such a discharge is necessary within 12 nm from shore and it creates a sheen, ships shall treat the discharge as an oil and hazardous substance (OHS) spill.

22-5.4.6.3 While operating in waters beyond 50 nm from land, a Navy ship may discharge directly overboard oily waste from isolated spaces, such as JP-5 pump rooms, if the ship does not have the capability to collect and transfer such waste for processing through the OWS system. Such discharges shall contain only distillate (non-persistent) oils and shall result in discharges of minimal quantities of oily waste.

22-5.5 Training. Ships shall train personnel who operate or maintain waste oil and oily waste holding, processing, disposal, or transfer equipment on the proper procedures for oily waste processing and disposal, including hookup and transfer of waste oil and oily waste to shore facilities. These personnel shall also be trained on in-port and at-sea discharge restrictions. Personnel assigned to supervise oily waste processing and disposal operations shall complete the Oil Pollution Abatement (OPA) Equipment Operation and Maintenance course, K-652-2196, prior to assuming these duties. All personnel who operate or maintain oil processing, transfer or disposal equipment shall complete the Oil Spill Control and Removal Equipment PQS, NAVEDTRA 43195-B, prior to assignment to those duties.

22-6 Hazardous Material Control and Management (HMC&M)

22-6.1 Legislation

22-6.1.1 The Clean Water Act (CWA) prohibits the discharge of harmful quantities of hazardous substances (HS), as defined in Chapter 12-3.10, into or upon U.S. waters out to 200 nm.

22-6.1.2 The Resource Conservation and Recovery Act (RCRA) regulates generation, treatment, storage and disposal of hazardous waste. RCRA, as modified by the Federal Facilities Compliance Act of 1992, provides that Hazardous Waste (HW) generated on public vessels is not subject to storage, manifest, inspection or record keeping requirements until the ship transfers such waste ashore or transfers it to another public vessel within 12 nm of the U.S. and then only after that vessel stores it aboard for more than 90 days after the date of transfer.

22-6.1.3 Through the Toxic Substances Control Act (TSCA), Federal restrictions govern the manufacture, use, labeling and disposal of polychlorinated biphenyls (PCBs), asbestos and asbestos-containing waste.

22-6.1.4 Federal law pertaining to national defense requires that contracts for work on board naval vessels (other than new construction) identify the type and amount of HW expected to be generated and responsibility for the disposal. Also, a Navy generator number shall be used for Navy-generated HW, a contractor generator number for contractor-generated HW, and both a Navy and contractor generator number for HW co-generated by the Navy and the contractor, regardless of who owns the site where the waste is generated. Under no circumstances will a Navy vessel be listed as a 'generating site' by a shore facility or contractor when applying for EPA HW Generator ID Numbers. The law further requires naval vessels to offload used or excess HM to the maximum extent feasible prior to arrival at a private repair facility.

22-6.2 Terms and Definitions

22-6.2.1 Consolidated Hazardous Material Reutilization Inventory Management Program (CHRIMP). A hazardous material control and management program that requires all hazardous material (including used and excess HM and all empty HM containers) to be centrally controlled onboard ships and submarines. CHRIMP requires the establishment/installation of HAZMINCENs. CHRIMP includes centralized inventory management, procurement, storage, issue/receipt/reissue, and collection/consolidation/offload of HM.

22-6.2.2 Empty Hazardous Material Container. A hazardous material container shall be considered to be empty if there is no liquid in the container and there is less than one (1) inch of solid residue (hardened product) in the container.

22-6.2.3 Hazardous Material (HM). Any material that, because of its quantity, concentration or physical, chemical or infectious characteristics, may pose a substantial hazard to human health or the environment when incorrectly used, purposefully released, or accidentally spilled. This definition includes the following:

(a) Flammable/combustible materials

(b) Toxic materials

(c) Corrosive materials (including acids and bases)

(d) Oxidizing materials

(e) Aerosol containers

(f) Compressed gases

For this instruction the definition does not include ammunition, weapons, explosives, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk furls, and radioactive materials.

Asbestos and lead require special guidance for handling and control, which are addressed in reference (e).

22-6.2.4 Hazardous Material Minimization Center (HAZMINCEN). The facilities, equipment, and procedures to execute CHRIMP. HAZMINCEN designs can vary greatly, depending on the size of the ship, mission, and requirements for HM.

22-6.2.5 HM Contaminated Rags. Cleaning rags or other sorbents contaminated with solvents, adhesives, paint, or other HM defined in paragraph 22-6.2.3.

22-6.2.6 Used or Excess Hazardous Material. HM for which there is no further, immediate use on board the ship possessing the material. Such material may ultimately be used on another ship or within the shore establishment for the same purpose or a purpose other than initially manufactured or by commercial industry. Used HM is material that has been used in a shipboard process. Excess HM is unused material in full, properly sealed containers. Ships are required to transfer used or excess HM to a Navy shore activity for determination of suitability for further use. Navy shore activities possess trained personnel who can determine, working with ships' personnel, whether shipboard HM is usable, reusable, or should be disposed of as HW. The shore activity will act as the HW generator if it determines that the material has no further use, and dispose of it as required by Federal, State, and local regulations.

22-6.2.7 Hazardous Substance. HM or HW.

22-6.2.8 Hazardous Waste (HW). A solid waste or combination of solid wastes, which because of its quantity, concentration or physical, chemical or infectious characteristics may:

a. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

The term solid waste includes liquid, semi-solid or contained gaseous material.

22-6.3 Requirements. Reference (h) establishes policy and assigns responsibilities for HM pollution prevention. It requires that HM be selected, used and managed over its life cycle so that the DOD achieves the lowest costs required to protect human health and the environment. Additionally, State and local regulations prescribe requirements for the proper storage, packaging, labeling, transportation and disposal of HM.

22-6.4 Navy Policy

22-6.4.1 Shipboard Procedures. Ships shall follow these procedures in the management of used/excess HM:

22-6.4.1.1. Surface ships and submarines shall implement CHRIMP by following policies and requirements in the subsequent sections of this Chapter and references (d) (Chapters 593 and 670), and (e). The following elements are essential for effective CHRIMP implementation. The requirements associated with these elements are described in reference (e).

a. Centralized inventory management/tracking
b. Requisitioning and receiving authorized HM
c. HM container labeling
d. Storage of HM
e. Controlling HM issue/re-issue/return
f. HM container compatibility
g. Consolidation of used HM and empty HM containers
h. Offload/disposal of used or excess HM and empty HM containers
i. HM use and handling requirements
j. Training

22-6.4.1.2. Used HM Consolidation. Navy ships and submarines shall not commingle different hazardous materials for the purpose of disposal. Consolidation of hazardous materials with identical stock numbers is permitted. Consolidation of hazardous materials with identical composition but different stock numbers is permitted only if the different stock numbers represent different units of issue. When this requirement cannot be met, a list of HM commingled in each container shall be maintained an provided to the shore receiving activity.

22-6.4.1.3 Except for MSC vessels, all hazardous material containers shall be managed by the ship's HAZMINCEN. HAZMINCEN personnel shall determine if hazardous material containers meet the requirements of 22-6.2.2 and can be declared "empty". Empty hazardous material containers meeting these requirements are no longer considered to be hazardous and may be disposed of as shipboard solid waste in accordance with the procedures in section 22-7 of this chapter. Hazardous material containers onboard MSC vessels shall be managed by the Supply Officer.

22-6.4.1.4 Ships shall retain used/excess HM on board for shore disposal. Navy ships shall not discharge overboard, used or excess HM generated aboard or HW unless specifically allowed by appendix L or necessary for crew or ship safety. Appendix L provides detailed guidance for authorized HM/HW discharges. If HM/HW discharge is necessary for crew or ship safety every effort will be made to discharge greater than 200 nm from land.

22-6.4.1.5 Under no circumstances may a ship collect used/excess HM from other ships or HW from shore facilities and transport it to sea for the purpose of disposal.

22-6.4.1.6 Reference (e), chapters B3, C23 (surface ships), and D15 (submarines), govern shipboard labeling, handling and storing of HM.

22-6.4.1.7 Reference (e), chapters C23 and D15; reference (d),; and applicable PCB advisories govern shipboard labeling, handling and storing of PCBs and items containing PCBs.

NOTE:

The Navy discovered many uses of PCBs not recognized or authorized by 40 CFR 761. At the direction of CNO, COMNAVSEASYSCOM provided guidance on shipboard PCB issues through reference (i). Ships shall implement the PCB requirements of reference (e) and (j).

22-6.4.1.8 Ships shall turn over used HM received from another ship within 12 nm of the U.S. to a supporting shore activity for processing within 90 days of receipt.

22-6.4.1.9 To the maximum extent practicable, ships shall remove all HM from a ship before decommissioning, but in no case later than 90 days after decommissioning or removal from service. Any HW created by shipboard operations, preservation or maintenance after decommissioning shall be removed within 30 days of the time it is created.

22-6.4.2 Ship-to-Shore Transfer. Ships shall transfer used or excess HM to a shore activity for determination of disposition. If the shore activity determines that used/excess HM has no further use, it will declare the material to be waste and process it per RCRA requirements governing generation of HW. Under no circumstances will a Navy vessel be listed as a 'generating site' by a shore facility or contractor when applying for EPA HW Generator ID Numbers.

22-6.4.2.1 Prior to transfer ashore, ships shall segregate, containerize and label used HM per reference (e), chapters B3, C23 (surface ships), and D15 (submarines). Ships shall fill containers with only one type of HM (i.e., all the used HM in a container shall normally be of only one stock number (except where different stock numbers are issued to specify different sized containers)). Failure to do so may result in a charge to the fleet for laboratory analyses if it is determined that the material will be disposed of as HW. If the contents of the container are unknown, the label shall so state, and the cost of chemical analysis to determine specific content shall be paid out of fleet accounts.

22-6.4.2.2 When visiting Navy ports, Navy ships shall request used/excess HM pickup by the cognizant shore activity representative. Ship's force shall provide used HM in a suitable container (either the original container or one specified in reference (e), appendix C23-A), properly labeled, with a completed DD 1348-1. If the Hazardous material originated outside the supply system or a Material Safety Data Sheet (MSDS) is unavailable in the Hazardous Material Information System (HMIS) or the Submarine Hazardous Material Inventory System (SHIMS) the used HM shall also be accompanied by an MSDS. Normally, person-to-person contact is required during the actual transfer of HM to the shore activity. However, facilities that have designated used HM collection sites pierside, for which the HM is properly labeled and the DD-1348-1 is properly filled out, do not require person-to-person contact.

22-6.4.2.3 When visiting non-Navy ports and foreign ports, Navy ships shall offload used HM only when necessary and feasible. The ship shall identify in the LOGREQ the types and amount of used HM to be offloaded. If unable to find adequate facilities at non-Navy ports, the ship shall hold HM for offloading at a Navy port. All HM shall be properly labeled and containerized. If offload is necessary in foreign ports, commanding officers must ensure compliance with applicable customs laws and the SOFA.

22-6.4.2.4 Prior to entering a private shipyard for an availability, naval vessels (except contractor-operated vessels) shall:

a. To the maximum extent feasible offload used or excess HM at a Navy or other public facility.

b. Identify to the SUPSHIP or Port Engineer responsible for the private shipyard, a ship HM coordinator for the availability. Give this individual authority and resources to ensure shipboard compliance with HM and HW management procedures and site specific management practices established by the SUPSHIP or port engineer.

c. Identify to the SUPSHIP or port engineer during preavailability planning conferences the types and amounts of HW anticipated by ship's force during the availability.

d. Comply with all established HW and HM management practices and those site-specific procedures delineated by the SUPSHIP or port engineer.

Type commanders responsible for ships in private shipyards for availabilities shall monitor ship compliance with established procedures.

22-6.4.3 Ship-to-Ship Transfers.

22-6.4.3.1 Except where used/excess HM is transferred from a tended unit to a tender, ships shall only transfer used HM to another ship during operations that preclude the ship entering a port in which normal offload may occur. Transfers of HM shall be for the sole purpose of returning the material to a supporting shore activity. Ships shall offload all used HM within 5 working days of arrival at a U.S. Navy port.

22-6.4.3.2 Prior to transfer to the receiving ship, ships shall properly segregate, containerize and label used HM per reference (d), chapters B3, C23 and D15. Responsibility for packaging, documentation and labeling shall rest with the originating ship.

22-6.4.3.3 After receiving used HM from another ship for eventual shore processing, the receiving ship shall offload that material to a shore facility within 90 days of receipt. This includes transfer from another ship while in port. For information on shore activity requirements, see paragraph 18-5.2.1.

22-6.4.4 Transporting Shore-Generated Hazardous Waste Aboard Ship. Navy ships shall not accept HW from shore facilities in the U.S. for transportation to another location. Navy ships may accept HW from a shore activity outside the U.S. for transportation to the U.S. or to a foreign country only when specifically tasked by competent authority. The authority shall include specific instructions on procedures to be used to ensure proper notice to the receiving authorities and compliance with applicable laws and regulations at the destination.

22-6.5 Training. Reference (e), chapter B3, provides training requirements for personnel handling, storing and disposing of HM.

22-7 Solid Waste

22-7.1 International Conventions and Legislation

22-7-1.1 MARPOL. Annex V of MARPOL addresses shipboard solid waste discharge at sea. Annex V establishes three major requirements:

22-7-1.1.1 No plastic discharges at sea worldwide.

22-7-1.1.2 Outside of special areas, ships shall not discharge solid waste within 3 nm from shore. Ships may discharge comminuted, pulped, or ground wastes including food wastes, paper, rags, or glass whose discharge is able to pass through a screen with a mesh size no larger than 25 mm between 3 and 12 nm from shore. They may discharge non-floating solid waste beyond 12 nm from shore. Ships may discharge floating waste beyond 25 nm from shore.

22-7-1.1.3 Within special areas, food waste is the only solid waste discharge authorized. Ships may discharge food waste beyond 12 nm from shore. To date, three Annex V special areas are in effect internationally: the Baltic Sea, the North Sea and the Antarctic Region (south of 60 degrees south latitude).

NOTE:

MARPOL Annex V special areas and special areas that are in effect are not necessarily the same as those specified in MARPOL Annex I.

The MARPOL Convention provides that the above Annex V requirements do not strictly apply to warships. Party states (including the U.S.) must, however, establish standards for their warships that require such vessels to conform as closely as practicable with the international standard, without compromising operational effectiveness.

22-7.1.2 Act to Prevent Pollution from Ships (APPS). APPS implements MARPOL Annex V for the U.S. APPS requires U.S. public vessels, including warships, to comply with MARPOL Annex V discharge requirements, including the plastic discharge prohibition and special area limitations. Submarines must comply with MARPOL Annex V discharge requirements, including the plastic discharge prohibition and the special area discharge requirements after 31 December 2008. However, APPS permits U.S. Navy ships to discharge in MARPOL Annex V special areas in the following manner:

22-7-1.2.1 Ships and submarines may discharge a slurry of seawater, paper, cardboard or food waste capable of passing through a screen with openings no larger than 12 millimeters in diameter outside 3 nm from land.

22-7-1.2.2 Surface ships may discharge metal and glass that have been shredded and bagged to ensure negative buoyancy outside 12 nm from land.

22-7-1.2.3 As of 31 December 2008, submarines may discharge non-plastic garbage that has been compacted and weighted to ensure negative buoyancy outside 12 nm from land.

22-7.1.3 Ocean Dumping Act (ODA). ODA prohibits U.S. entities from transporting material from the U.S. or from any other place for the purpose of dumping it into ocean waters, unless a permit has been obtained from the U.S. EPA. ODA does not apply to waste that is generated aboard ships while underway.

22-7.1.4 Clean Water Act. Prohibits the discharge of pollutants (including solid waste) from vessels into waters of the U.S. within 3 nm from shore. (Discharge of solid waste pollutants beyond 3 nm from shore is regulated under APPS.)

22-7.1.5 Other Statutes. Various statutes authorize the U.S. Department of Agriculture (USDA) to regulate the handling of foreign food and foreign source garbage entering the U.S. via ship and aircraft. U.S. Navy ships must comply with those regulations.

22-7.2 Terms and Definitions

22-7.2.1 Foreign Source Garbage. Goods, food wastes, wrappers, containers and disposable materials originating in any foreign country (excluding Canada) or Hawaii, Puerto Rico, U.S. Virgin Islands, American Samoa, Guam and the Trust Territories of the Pacific Islands.

22-7.2.2 Food Waste. Spoiled or unspoiled victual substances, such as fruits, vegetables, dairy products, meat products, food scraps and food particles.

22-7.2.3 Garbage. For consistency with international law, this chapter adopts the MARPOL Annex V definition of garbage: All kinds of victuals and domestic and operational waste generated during the normal operation of the ship. The MARPOL term "garbage" therefore encompasses shipboard solid waste, including plastics, food waste and dry waste such as paper, cardboard and wood, traditionally referred to as "trash."

22-7.2.4 Pulped Garbage. Pulped, ground or comminuted garbage capable of passing through a screen with openings no greater than 12 millimeters (0.47 inch).

22-7.2.5 Plastic Waste Processor (PWP). A device that melts and compresses plastic waste so that it can be efficiently and safely stored aboard ship for shore disposal.

22-7.2.6 Special Area. A sea area where, for recognized technical reasons in relation to its oceanographic and ecological condition and to the particular character of its traffic, enhanced efforts are required to minimize pollution from ships. The IMO designates Annex V special areas. Their designation becomes effective internationally after IMO determines that littoral nations have sufficient capacity to manage the potential waste from ships after special area status becomes effective. Three Annex V special areas are in effect: the Baltic Sea, the North Sea and the Antarctic Area (south of 60 degrees south latitude). Other Annex V special areas are designated but not yet in effect are: Mediterranean Sea, Black Sea, Persian Gulf, Red Sea and Wider Caribbean Area.

22-7.2.7 Submarine Plastic Waste Management Process. A process that consists of using high-strength odor barrier bags (OBB), cable ties and heat sealers in conjunction with the submarine trash compaction process to compact, package and store plastic waste on submarines for shore disposal.

22-7.3 Navy Policy. Requirements applicable to garbage discharge at sea include both legal requirements and requirements that the Navy has adopted as a matter of policy to enhance protection of the marine environment. For ease of comprehension, the legal requirements and the requirements of Navy policy regarding shipboard solid waste discharges have been combined below.

22-7.3.1 Plastic Discharges

22-7.3.1.1 All Navy vessels will minimize the volume of plastic material taken to sea that may become waste while at sea. They shall replace plastic disposable items with non-plastic items where possible. If appropriate, they will remove plastic wrapping and shipping materials from supply items before bringing them on board. They will minimize the amount of plastic supplies used.

22-7.3.1.2 Surface Ships

a. Discharge of plastic waste to the marine environment from Navy surface ships is prohibited unless necessary to ensure ship safety, protect the health of the crew, or save a life at sea.

b. Plastic waste processors will normally be used to manage plastic waste.

c. Ships with inoperable plastic waste processor(s) shall utilize remaining processors to their maximum extent. If the generation rate exceeds processing capacity, plastic shall be sorted until processor(s) are repaired or waste can be offloaded. Ships shall report equipment casualties that either threaten or result in a discharge of plastic through the CASREP system. The initial CASREP shall note the potential for discharge.

d. If plastic waste interferes with normal operation of the ship, or poses a potential health problem to the crew, surface ships should use combat logistics force (CLF) ships (including COMSC ships) to transfer plastic waste ashore rather than disposing of it overboard. If transferring processed or non-food contaminated plastic waste to another ship, ships shall observe the following practices:

(1) The sending ship shall contact the receiving ship to determine if space is available to accommodate the plastic waste. The sending ship shall not transfer waste without the receiving ship's concurrence.

(2) The sending ship shall transfer only processed or non-food contaminated plastic. Ships shall develop procedures to ensure that packages for transfer do not contain articles such as food contaminated plastic, other trash, garbage and hazardous material.

(3) The sending ship shall package the plastic waste to permit safe handling by both the sending and receiving ships. Securely banded triwalls are the preferred method of transferring processed or non-food contaminated plastic waste. If compactors are installed aboard, ships should compact plastic waste prior to packaging.

(4) Ships shall clearly mark the content of processed or non-food contaminated plastic waste packages on the outside.

e. If the plastic waste storage capacity of the ship is exhausted and operational considerations require, then as a last resort, plastic overboard discharge is authorized. Such discharges may only be

made beyond 50 nm from the nearest land. Commanding officers shall minimize the amount of plastics discharged under these circumstances. The ship shall make such discharges in weighted bags to ensure negative buoyancy. The commanding officer shall note the details of such a discharge (date, time, and location of discharge, approximate weight and cubic volume of the discharge, and nature of the material discharged) in the Ship's Deck Log and report the commencement of plastics discharges to the appropriate operational commander.

22-7.3.1.3 Submarines

a. After 31 December 2008, the discharge of plastic waste to the marine environment from Navy submarines is prohibited unless necessary to ensure boat safety, protect the health of the crew, or save a life at sea.

b. The Submarine Plastic Waste Management Process and related equipment will normally be used to manage plastic waste.

c. Submarines equipped with plastic waste stowage facilities and equipment shall retain all plastics for shore disposal.

d. Submarines not equipped with plastic waste stowage facilities shall limit plastics discharges to the minimum amount practicable.

e. Submarines with inoperable Plastic Waste Management Process equipment shall continue utilizing the process to the maximum extent possible. Submarines shall report equipment casualties that either threaten or result in a discharge of plastic through the CASREP system. The initial CASREP shall note the potential for discharge.

f. After 31 December 2008, if the plastic waste storage capacity of the submarine is exhausted and operational considerations require, then as a last resort, plastic overboard discharge is authorized. Such discharges may only be made beyond 50 nm from the nearest land. Commanding officers shall minimize the amount of plastics discharged under these circumstances. The submarine shall ensure such discharges are negatively buoyant. The commanding officer shall note the details of such a discharge (date, time, and location of discharge, approximate weight and cubic volume of the discharge, and nature of the material discharged) in the Boat's Deck Log and report the commencement of plastics discharges to the appropriate operational commander.

22-7.3.1.4 Release of Military Equipment Containing Plastic. The plastic retention requirements apply only to disposal of plastic waste. These requirements do not apply to normal use of expendable military equipment that contains plastic, such as targets, weather balloons, sonobuoys, etc., because the plastic in these items is not considered "waste" when normal use of the items results in their release into the ocean. However, in keeping with Navy policy to protect the marine environment, expendable items that can be retrieved after use, particularly targets, should be retrieved, if safe and practicable to do so. Once collected after use, plastic components of such items should be regarded and managed as plastic waste.

22-7.3.2 Non-Plastic Garbage Discharges. All references to "garbage" within this subsection refer to non-plastic garbage discharges.

22-7.3.2.1 No garbage discharges shall occur within 3 nm of land.

22-7.3.2.2 Ships equipped with an operable pulper shall use it worldwide. Ships shall limit the discharge of pulped food products, paper and cardboard to beyond 3 nm from land.

22-7.3.2.3 Ships may discharge processed garbage from garbage grinders into shipboard MSDs only when a ship is docked and the MSDs are discharging to pier facilities. Ships shall not use garbage grinders within 3 nm of land in order to maximize necessary sewage holding capacity and thus reduce the risk of inadvertent overboard discharges of sewage.

22-7.3.2.4 Ships equipped with an operable shredder shall use it worldwide. They shall limit the discharge of shredded glass and metal products that are contained in a sinkable, burlap bag to beyond 12 nm from land.

NOTE:

Fluorescent light bulbs contain a small amount of mercury and shall not be processed, but shall be retained for shore disposal (see appendix L). Ships equipped with a COMNAVSEASYSCOM approved fluorescent bulb crusher shall retain debris for shore disposal.

22-7.3.2.5 When operating outside special areas in effect, if a ship does not have pulper/shredder equipment or this equipment is inoperable, it may discharge unprocessed garbage beyond 25 nm from land. Surface ships shall use available means to cause unprocessed garbage to sink as rapidly as possible.

22-7.3.2.6 When operating within special areas in effect, surface ships that do not have Navy solid waste equipment installed or surface ships with inoperable equipment will, to the maximum extent practicable, without impairing the operational capabilities of the ship, operate in the following manner:

a. Prior to entering into a special area in effect, these ships will identify essential logistics requirements needed to facilitate that offload and disposal of shipboard garbage. This may be accomplished via either port reception facilities or supply ships that have the capacity to receive and store other ship’s garbage for transfer and disposal ashore.

b. These ships may not discharge unprocessed garbage into special areas in effect unless such discharge is in compliance with the following exceptions:

(1) The disposal of garbage is necessary for purpose of securing the safety of the ship and those on board or saving life at sea.

(2) The escape of garbage results from damage to the ship or its equipment provided all reasonable precautions have been taken before and after the occurrence of the damage for the purpose of preventing or minimizing the escape.

c. On the unusual occasions in which a discharge may be necessary in a special area in effect, per the exceptions noted above, surface ships shall use all available means to cause unprocessed garbage to sink as rapidly as possible. The commanding officer shall note the details of such a discharge (date of

discharge, special area involved, and nature and amount of discharge) in the ship's Deck Log. Ships with inoperable installed equipment shall report equipment casualties that either threaten or result in a discharge of unprocessed garbage to a special area in effect through the CASREP system. The initial CASREP shall note the potential for discharge. Reports of such discharges will by made to CNO (N45) per paragraph 22-7.3.3.

22-7.3.2.7. Submarines equipped with an operable Navy-approved submarine garbage grinder shall use it worldwide. Submarines shall limit discharges of ground food waste processed by Navy-approved garbage grinders to beyond 3 nm from land.

22-7.3.2.8 Submarines may discharge compacted, sinkable garbage between 12 nm and 25 nm from land, provided that the depth of water is greater than 1,000 fathoms. When greater than 25 nm from land, direct discharge is permitted.

22-7.3.2.9 Transporting any material to sea for the purpose of dumping requires a permit from the U.S. EPA. In most cases, obtaining a permit is a complex undertaking and beyond the capability of afloat units. To ensure compliance with ODA, Navy ships are prohibited from taking on any material in port for the purpose of dumping it at sea unless permission has been obtained from CNO (N45).

22-7.3.2.10 Although the at-sea disposal of garbage by ships is permissible (as indicated above), international guidelines encourage the use of port reception facilities as the primary means of shipboard garbage disposal, whenever practical. This means that surplus materials that can reasonably and safely be stored on board, such as damaged equipment or office furniture, shall be retained aboard for shore disposal.

22-7.3.2.11 Aerosol cans may be punctured/drained/crushed only with a COMNAVSEASYSCOM approved aerosol can puncturing/draining/ or puncturing/draining/crushing device. If not equipped with the COMNAVSEASYSCOM approved device(s), ships shall not attempt to puncture/drain/crush aerosol cans and will retain them for disposal ashore.

22-7.3.3 Special Area Discharge Reports. Upon completion of operations in a special area in effect, in which a garbage discharge was necessary, Navy surface ships shall report the following information to CNO (N45), information copies to the chain of command, regarding all discharges other than food waste, pulped garbage and shredded and bagged metal and glass:

a. Date of discharge

b. Special area involved

c. Nature and amount of discharge (estimated pounds of plastic; unshredded metal and glass; unpulped wood, paper and cardboard; ceramic; or other non-food material).

22-7.3.4 Foreign Food and Garbage

22-7.3.4.1 Navy ships shall comply with USDA regulations pertaining to ship introduction of foreign source garbage into the U.S., its territories and possessions.

22-7.3.4.2 If practicable, ships shall totally consume all regulated foreign food stores, transfer it to an outbound vessel prior to docking, or otherwise dispose of it as waste beyond 25 nm from U.S. shores. All garbage aboard (including plastic disks from plastic waste processors, or plastic waste from submarines) not disposed of before entering within 25 nm from shore will be treated as foreign and will be required to be disposed of ashore by the USDA-approved methods provided in NAVSUP Publication 486 Volume I and USDA's Manual for Agricultural Clearance.

22-7.3.4.3 The instructions given above do not preclude discharge of any solid waste in an emergency when failure to do so would clearly endanger the health or safety of shipboard personnel.

22-7.3.5 Miscellaneous Wastes

22-7.3.5.1 Pilot Urine Bags. Pilot urine bags are not considered medical waste. These products should be placed into Odor Barrier Bags (OBBs) and the OBB heat-sealed closed for shore disposal.

22-7.3.5.2 Feminine Hygiene Products. Feminine hygiene products are not considered medical waste. These products should be placed into OBBs and the OBB heat-sealed closed for shore disposal.

22-7.3.6 Thermal Destruction

22-7.3.6.1 Ships equipped with COMNAVSEASYSCOM approved thermal destruction equipment may incinerate non-plastic, non-hazardous garbage outside of 12 nm from nearest land.

22-7.3.6.2 Ships equipped with thermal destruction equipment approved by COMNAVSEASYSCOM for high thermal content wastes including plastics, pilot urine bags, feminine hygiene products, and oily rags may incinerate non-hazardous garbage outside of 12 nm from nearest land.

22-7.3.6.3 Ash from incinerators not containing incompletely burned plastics or heavy metals may be disposed of at sea by direct discharge outside of 12 nm from nearest land. Ash containing unburned plastics or heavy metals must be retained and transferred to appropriate shore reception facilities for disposal.

22-7.4 Training

22-7.4.1 Ships shall train personnel responsible for handling ship's garbage on the discharge restrictions applicable to the waste before assignment to those duties. Such training shall include the proper collection, treatment and disposal of plastics waste.

22-7.4.2 Ships shall train personnel responsible for the supervision and approval of overboard disposal of solid waste on the legal requirements applicable to this waste category.

22-7.4.3 All personnel assigned to operate and maintain solid waste processing equipment (plastics waste processors, shredders, and pulpers), shall complete the applicable computer-based training (CBT) interactive courseware, prior to assignment.

22-8 Medical Waste

22-8.1 Legislation (This section contains background material from which Navy policy is derived)

22-8.1.1 U.S. Public Vessel Medical Waste Anti-Dumping Act. Prohibits public vessel dumping of infectious medical waste into ocean waters during peacetime, except under emergency conditions.

22-8.2 Terms and Definitions

22-8.2.1 Medical Waste. Medical waste is any waste generated during patient diagnosis, treatment or immunization. Medical waste is of two categories, infectious waste and noninfectious waste.

22-8.2.1.1 Infectious Medical Waste. Infectious medical waste is liquid or solid waste that contains pathogens in sufficient numbers and with sufficient virulence to cause infectious disease in susceptible hosts exposed to the waste. Specific examples of infectious wastes are provided in reference (j).

22-8.2.1.2 Non-infectious Medical Waste. Non-infectious medical waste includes disposable medical supplies and materials that do not fall into the category of infectious medical waste. Specific examples of non-infectious medical wastes are provided in reference (j).

22-8.3 Navy Policy

22-8.3.1 Reference (j) governs shipboard labeling, handling and storage of potentially infectious medical waste.

22-8.3.2 Surface ships shall steam or chemically sterilize non-liquid infectious medical waste. The resultant sterilized non-liquid medical waste shall be suitably packaged and stored for ultimate disposal ashore or incinerated in COMNAVSEASYSCOM approved thermal destruction equipment (see section 22-7.6.3).

22-8.3.3 Ships shall collect sharps in plastic autoclavable sharps containers. They shall never recap, clip, cut, bend or otherwise mutilate needles or syringes to avoid causing accidental puncture wounds and infectious aerosols. Ships shall retain all sharps on board for proper disposal ashore. They shall dispose of unused sharps ashore in the same manner as medical waste.

22-8.3.4 Ships may dispose of infectious and noninfectious liquid wastes by discharging them into the sanitary system, at all times.

22-8.3.5 Ships may dispose of non-infectious waste not requiring steam sterilizing or special handling, as garbage. Ships shall process and dispose of this material in the same method as prescribed for similar material in section 22-7 (e.g., plastic will be sent to the plastic waste processor; paper and cardboard will be pulped; and glass and metal (excluding sharps) will be shredded).

22-8.3.6 Ships shall establish a system of tracking storage and disposal of infectious medical waste as required by reference (j).

22-8.3.7 If retention of potentially infectious solid wastes would threaten the health or safety of personnel on board, create an unacceptable nuisance condition or compromise combat readiness, overboard discharge (excluding sharps) is authorized (using the methods prescribed for similar material in section 22-7) beyond 50 nm provided such waste has been steam sterilized and packaged for negative buoyancy. Ships shall record in the deck log the overboard discharge of infectious medical wastes.

22-8.3.8 The requirement to steam sterilize before disposal at sea does not apply to submarines.

22-8.4 Training. Ships shall train personnel responsible for processing and disposing of shipboard medical waste to ensure that such actions comply with the requirements governing this waste. Submarine Independent Duty Corpsmen (IDC) receive their training as part of the Submarine IDC School.

22-9 Oil and Hazardous Substance (OHS) Spills

22-9.1 Terms and Definitions

22-9.1.1 Facility Response Team (FRT). Emergency response personnel (formerly known as On-Scene Operations Teams) who are designated, trained and equipped to provide rapid response to OHS releases that occur on or from their facility.

22-9.1.2 Navy On-Scene Coordinator (NOSC). The Navy official pre-designated to coordinate Navy OHS spill contingency planning and direct Navy OHS spill response efforts in a pre-assigned area. Shoreside NOSCs are normally Regional Environmental Coordinators (RECs) pre-designated by the cognizant Area Environmental Coordinator(AEC) (See chapter 1 for definitions of REC and AEC). The NOSC is the Federal On Scene Coordinator for all Navy HS releases. The NOSC also acts as the incident commander for spills which exceed the response capability of a facility located within the NOSC AOR. The NOSC may designate a qualified individual (QI) who meets the qualifications of Section 12-3.27 to implement a NOSC plan and manage an oil spill incident.

22-9.1.3 Spill. An accidental or not permitted discharge of OHS into or upon the water. In this chapter, the definition does not apply to spills on board ship that do not go over the side.

22-9.1.4 Supervisor of Salvage (SUPSALV) Spill Response Team (SSRT). Specially trained and equipped mobile spill response team maintained by COMNAVSEASYSCOM SUPSALV (NAVSEA 00C). COMNAVSEASYSCOM maintains the team and an extensive inventory of offshore and large-scale spill response equipment to support NOSCs and commanding officers for offshore, salvage-related, or major inland oil spills and HS releases.

22-9.2 Policy

22-9.2.1 Designation of Fleet Navy On-Scene Coordinators. The Area Environmental Coordinators shall designate the fleet NOSCs.

22-9.2.2 Shore-Based Facility Response Teams (FRTs). FRTs maintain trained personnel and specialized equipment to contain and recover OHS spilled into harbor waters. The primary functions of the FRTs are to respond to port spills and spills that can be readily contained and recovered using local facility equipment.

22-9.2.3 SUPSALV Spill Response Capability. SUPSALV maintains an extensive inventory of salvage and large-scale oil spill response equipment to support pre-designated NOSCs in offshore- and salvage-related spill control operations. SUPSALV's salvage inventory includes all equipment needed to remove oil and repair and salvage a stranded or damaged vessel. The spill response inventory includes booms; skimmers; tow vessels; pumps for offloading petroleum, oil, and lubricants (POL); portable storage; and related equipment. These inventories are located in response centers in Williamsburg, VA; Port Hueneme, CA; Pearl Harbor, HI; Anchorage, AK; and Bahrain, and are designed for rapid mobilization to spill sites worldwide. Salvage equipment is also maintained in Livorno, Italy; Sasebo, Japan; and Singapore.

Trained operators, mechanics, and supervisory personnel deploy from U.S. response centers with the equipment. SUPSALV, headquartered in Washington, DC also maintains access to a full range of technical experts and advisors as well as specialty equipment from other government agencies, industry and academic institutions.

22-9.2.4 Ship Spill Response Capability. For spills over the side, ship's personnel under the commanding officer or master shall initiate immediate actions to mitigate the effects of the spill.

22-9.2.4.1 Each surface ship shall maintain a minimum of one Oil Spill Response Kit, AEL 2-550024006, for overboard oil and hazardous substance (OHS) spill response. Each ship shall also maintain a minimum of one Hazardous Material Spill Response Kit; AEL 2-550024007 (for surface ships), 2-50024008 (for small craft), or 2-50024009 (for mine countermeasures vessels) discussed in reference (e), for HS spills that occur on board the ship. If the response to Navy ship spills is considered beyond the ship's limited capability, the cognizant shore activity commanding officer, shore NOSC, or fleet NOSC will provide appropriate assistance and direct response efforts.

22-9.2.4.2 While mitigating the spill, in all cases of spills, the ship's commanding officer or master shall immediately report the incident to the cognizant shore activity commanding officer, the NOSC, and other officials as required by the ship's SCP. The Hazardous Material Control and Management (HMC&M) CD-ROM program lists spill response points of contact.

22-9.2.5 OHS Spill Response Within 12 nm of the U.S. Ships shall comply with the following OHS spill response procedures when within 12 nm of the U.S.:

22-9.2.5.1 In Navy ports, the ship's commanding officer shall:

a. Take, insofar as practical, immediate actions to mitigate the effects of the spill.

b. Notify the shoreside NOSC/cognizant facility commanding officer by the most expeditious means possible. For environmentally significant spills, see paragraph 22-9.2.8.

c. Ensure the National Response Center (NRC) is notified by telephone at (800) 424-8802.

d. Follow up by submitting a naval message. Appendices H and I provide formats for OHS spill reports.

22-9.2.5.2 In non-Navy ports (and elsewhere within 12 nm of the U.S.), the ship's commanding officer shall:

a. Take, insofar as practical, immediate actions to mitigate the effects of the spill. Rapid action by the ship's crew can result in containment and collection of the spill. Shipboard personnel shall use available means to clean up minor spills before requesting assistance from shore-based personnel.

b. Notify the appropriate shoreside NOSC and cognizant shore facility commanding officer specified in the shoreside NOSC OHS regional response plan (NOSC Plan). For environmentally significant spills, see paragraph 22-9.2.8.

c. Notify the NRC by telephone at (800) 424-8802.

d. Follow up by submitting a naval message. Appendices H and I provide formats for OHS spill reports.

22-9.2.5.3 See Chapter 12, Section 12-5 of this manual for information on NOSC responsibilities and reporting requirements.

22-9.2.6 OHS Spill Response Outside 12 nm from the U.S. as Defined in Governing Contingency Plans. For OHS spills in these areas, ships shall:

22-9.2.6.1 Initiate immediate action to mitigate the effects of the spill.

22-9.2.6.2 Notify the predesignated fleet NOSC for spills greater than 12 nm from nearest land, or the pre-designated shoreside NOSC for spills within 12 nm of nearest land, by naval message using the format in appendix H for oil and appendix I for HS. For information on environmentally significant spills, see paragraph 22-9.2.8.

22-9.2.6.3 The Fleet or shore NOSC shall implement the applicable NOSC Plan.

22-9.2.7 OHS Spill Response in Foreign Ports. Ships shall take the following action for an OHS spill in these waters:

22-9.2.7.1 The ship's commanding officer shall initiate immediate action to mitigate the effects of the spill.

22-9.2.7.2 The ship's commanding officer shall immediately notify the predesignated shoreside NOSC (as defined in governing contingency plans) by naval message. Appendices H and I contain formats for OHS spill/release messages.

22-9.2.7.3 The shoreside NOSC shall implement the applicable NOSC Plan.

22-9.2.8 Environmentally Significant Spills. For spills anywhere resulting from catastrophic events, causing significant adverse public reaction, having geopolitical implications or for other causes warranting OPREP-3 special incident reports per reference (d), ships shall make the initial report by the OPREP-3 system. Following the OPREP-3 report, the cognizant fleet or shoreside NOSC shall forward an amplifying report in the format prescribed in appendix H (for oil) or appendix I (for HS).

22-9.2.9 Fleet NOSC OHS Regional Response Plan (NOSC Plan). Fleet Commanders, when designated as the NOSC, shall prepare a NOSC Plan for spills that occur beyond 12 nm from nearest land (U.S. or foreign nations). COMNAVSEASYSCOM (SUPSALV) shall provide assistance to Fleet Commanders in preparing the plans.

22-9.2.10 Shipboard Spill Contingency Plans (SCPs). Reference (e) requires each Navy and MSC surface ship to implement a spill contingency plan (SCP) to respond to spills of HM. Reference (e) contains specific guidelines for writing a HM SCP. Each Navy and MSC ship shall also develop a contingency plan to respond to oil spills. COMNAVSEASYSCOM will provide a sample of a Shipboard Oil Spill Contingency Plan (SOSCP) format upon request. Ships may consolidate the SOSCP with the HM SCP, but this combined plan shall address the unique procedures for spills over the side and use of the Oil Spill Response Kit. The plan(s) shall contain procedures for reporting, containment, control, recovery, and disposal of spilled material, protective clothing, and spill clean-up materials; information sources for oil and HM; and names and telephone numbers of fleet as well as shoreside NOSCs. Although neither Coast Guard nor State officials have authority to require preparation of public vessel OHS SCPs, the Navy will provide Navy ship SCPs to Coast Guard and State officials upon request.

22-9.3 Training

22-9.3.1 Ships shall conduct and document at least one OHS spill response drill for each duty section annually. These drills shall include deployment of the Oil Spill Response Kit or Hazardous Material Spill Response Kit (not applicable for submarines) and exercising notification practices, including simulated telephone calls and the drafting of "do not release" messages to higher authority. Ships may take credit for responding to actual spills, when such spills meet drill objectives. Where possible, the ship shall include OHS spill response requirements into other routine shipboard emergency drills. Responsible officers shall incorporate lessons learned during these drills into the ship's SCP. Ships are encouraged to participate in local area OHS spill command post exercises and in NOSC/ U.S. Coast Guard-sponsored triennial "area exercises" designed to test worst case spill response capabilities.

22-9.3.2 The ship shall train in-port watchstanders and command duty officers on in port OHS spill response procedures, the ship's SCP, and local notification requirements prior to assignment.

22-9.3.3 One petty officer in each in port fireparty and each repair party shall qualify on Watchstation 304, Oil/Hazardous Material (Substance) Spill Response Scene Leader, in the Hazardous Material/Environmental Protection Programs Afloat PQS, NAVEDTRA 43528-A, within 6 months of assignment. For submarines, type commanders shall specify requirements for completion of Watchstation 304 of the PQS, so that appropriately qualified individuals are present at the scene of any HM or oil spill.

22-10 Ship Ballast Water and Anchor System Sediment Control

22-10.1 Ballast Water Guidelines. The Marine Environmental Protection Committee of the International Maritime Organization (IMO) has developed guidelines for the control of ship ballast water to prevent the introduction of unwanted aquatic organisms and pathogens. The U.S. Coast Guard published these guidelines for adoption as voluntary standards to decrease the possibility of further introduction of cholera and other pathogens into U.S. waters. Since Navy ships operate worldwide, the Navy has chosen to adopt the intent of the Coast Guard standards.

22-10.2 Pollution potentially infects water in harbors, rivers, inlets, bays, landlocked waters and the open sea within 12 nm of the entrance to these waterways. Fleet surgeons or their representatives may declare other areas polluted. Some species if taken up with ballast water and transferred to a different location or ecosystem could cause damage or be harmful to the ecosystem. These species are more prevalent within 3nm from the shore or within the polluted areas described above.

22-10.3 Policy

22-10.3.1 If it is necessary for a surface ship to load ballast water in an area that is either potentially polluted (as defined in paragraph 22-10.2) or within 3 nm from the shore (e.g., amphibious ships operating in such waters and ballasting to operate landing craft or tankers ballasting to replace offloaded cargo), the ship shall pump the ballast water out when outside 12 nm from shore and twice fill the tank(s) with clean sea water and pump prior to the next entry within 12 nm from shore. Surface ships will effect a ballast exchange twice in clean water, even if ballast water was pumped out before exiting the polluted waters or 3 nm limit, since residual water remaining in a tank after emptying it may still contain unwanted organisms, which could be transferred during the next ballasting evolution.

NOTE:

Ballast water exchange is not required during local operations or when reentering within 12 nm in the same locale as the ballast water was initially loaded. “Same locale” is defined as water taken form within 12nm, of the mouth of the same harbor, port, river, estuary, or bay, or from the same landlocked waterbody.

22-10.3.2 Surface ships’ engineers shall record in the ship's engineering log the loading of ballast water in potentially polluted areas or within 3 nm from land and the flushing of ballast tanks to rid them of possible pollutants or unwanted species. The entry shall include the geographical position and the amount of ballast water taken on.

22-10.3.3 Surface ships with seawater compensated fuel stowage systems shall also record sea-water intake occurring in potentially polluted areas or within 3 nm of shore during routine internal fuel transfer for propulsion plant operation (but need not effect a ballast water exchange).

22-10.3.4 Surface ships shall routinely wash down anchors, chains and appendages with seawater when retrieving them to prevent on board collection of sediment, mud and silt. Where possible following anchor retrieval, surface ships shall also wash down chain lockers outside 12 nm from land to flush out sediment, mud or silt.

22-10.3.5 Amphibious vessels launching and recovering amphibious vehicles shall ensure those vehicles, including their treads, are washed down after completion of operations. Ships shall dispose of wash water before entering within 12 nm of the next operating area.

22-11 Environmental Planning

22-11.1 Terms and Definitions

22-11.1.1 Contingency Operations. The spectrum of military operations up to but not including wartime operations such as; counterinsurgency, counterterrorism, peacekeeping, counterdrug operations, civil operations, evacuation or U.S. or third world country nationals, and disaster relief.

22-11.1.2. Major Exercise. A maneuver or simulated wartime operation involving planning, preparation and execution that:

a. Is carried out pursuant to an operation order or similar tasking directive primarily designed for the purpose of training

b. Has substantial potential to cause a significant impact on the quality of the environment because of the number of participating units, the nature of the training activities, and the location of the exercises. Major exercises include JTFEX, FLEETEX, RIMPAC, Kernel Blitz and exercises of similar scope and intensity as designated by the Echelon 2 commander or his delegate. They may be a combined, joint, or single-service exercise, depending upon participating organizations.

Major exercise does not include unit-level training or multi-unit training that is not conducted under a dedicated training operation order.

22-11.1.3 Peacetime Operations. Operations conducted under conditions in which the possibility of armed conflict is low, which include but aren't limited to the following: training for combat, normal steaming under peacetime conditions, exercises with other U.S. Naval Forces, Joint Forces, or Allied Forces, or other peacekeeping operations.

22-11.1.4 Programmatic Approach. A comprehensive analysis of the environmental impacts of a class of undertakings that are repetitive in nature or of similar effect and recurring within the same geographical area, so as to avoid or mitigate adverse effects to the extent practicable consistent with the accomplishment of the military training and exercise activities under review. This can include the preparation of a baseline document, such a as a conservation plan or biological assessment; or by contrast, it can include the preparation of tiered NEPA documents, such as a programmatic environmental impact statement with supplemental environmental analyses. The Fleet Commanders charged with developing a programmatic approach have the discretion to determine the specific methodologies to be pursued under the circumstances, subject to the coordination and approval procedures established in this chapter.

22-11.1.5 Routine Training and Exercises at Sea. For the purposes of this instruction, routine training and exercises at sea generally are associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and shipboard or airborne gunnery, missile, or torpedo firings; are conducted as unit operating schedules permit; are not repeated in the same vicinity; utilize available

sensors and assets within normal operating parameters; and, ordinarily have minor, localized, and transient effects on the environment.

22-11.2 Environmental Planning. While carrying out assigned missions, operational commanders and commanding officers have an obligation to avoid unnecessary damage to the environment. Toward that end, commanders must closely observe laws, regulations, and policy for protecting and preserving the environment in all naval operations. Failure to consider environmental requirements or effects early in the planning process could result in operational delays. Early environmental protection actions or mitigating measures should result in minimal or no limitations or impacts on exercise objectives. Environmental planning must be meticulous to achieve compliance, avoid unnecessary environmental degradation, and maintain public support for the continued use of operating areas. Environmental planning may lead to modifying operational objectives to achieve most if not all goals, selecting more favorable operating areas, and establishing environmental "rules of engagement" that will result in operational success while achieving environmental protection.

The Navy developed Naval Warfare Publication (NWP) 4-11, *Environmental Protection* (reference (k)), to provide commanders and their planning staffs with doctrine to accomplish assigned missions while achieving the highest possible degree of environmental protection and compliance. To support environmental planning, commanders shall develop an Environmental Annex for each operational plan or order.

To facilitate efficient and consistent compliance the Navy has developed the Environmental Information Management System (EIMS) to provide Fleet environmental planners with enhanced GIS software tools and access to relevant information. EIMS supports the environmental analysis and document preparation associated with Fleet training and exercise environmental planning. Data collected in support of environmental analysis shall be obtained in electronic format compatible with and made accessible to EIMS, in order to facilitate Navy-wide sharing and re-use of environmental data.

Reference (k) discusses the environmental planning process for peacetime and contingency operations in detail. It also contains guidance for developing the Environmental Annex. Chapter 5 and appendix E (of this instruction) provide detailed information on compliance with the requirements of the National Environmental Policy Act (NEPA) and Executive Order 12114 for overseas environmental planning.

22-11.3 Exercise Environmental Planning.

22-11.3.1 In conducting exercises and training at sea, Navy commands shall comply with applicable statutes, regulations, and executive orders and will strive to protect the environment, prevent pollution, and protect natural, historic, and cultural resources. Navy policy is to comply with environmental requirements in a manner that is consistent and efficient and minimizes administrative burdens on commanders of operating units. For purposes of this policy, exercises and training do not include combat operations, operations in direct support of combat, or other activities conducted primarily for purposes other than training.

22-11.3.2 Chapter 5, of this instruction, provides Navy policy to develop a programmatic approach to ensure continued compliance with environmental requirements for ranges and OPAREAs, as well as describes additional environmental planning requirements applicable to the conduct of exercises, including U.S. joint and combined exercises and training at sea.

22-11.3.3 The following specific policies apply for compliance with environmental requirements for exercises (including U.S. joint and combined exercises) and training at sea:

22-11.3.3.1 Major Training Exercises. Commanders or officers in charge of major exercises (OCE) shall ensure and document compliance with environmental requirements applicable to the full range of activities proposed for the exercise.

22-11.3.3.2 Routine Training and Exercises. Commanders shall ensure compliance with environmental requirements for routine exercises at sea per references (k), (l), (m), and (n); and this section. Unit/Squadron Commanding Officers conducting unit level training of this type shall ensure the use of the Protective Measures Assessment Protocol (PMAP). PMAP is a Geographic Information System-based software program specifically designed to provide Commanding Officers with situational awareness and protective measures for routine unit level training and exercises to implement the Secretary of the Navy's At-Sea policy. PMAP provides graphical representations of protected and environmentally sensitive areas such as coral reefs and marine sanctuaries. PMAP currently provides protective measures for the following seventeen (17) exercises and training events. Guidance is also provided for mid-frequency active sonar maintenance.

a. GUNEX (surface-to-surface)
b. GUNEX (surface-to-air)
c. GUNEX (air-to-surface)
d. TORPEX (excluding service weapon/warshot tests) (involving use of MF sonar)
e. Small Arms Training
f. MISSILEX (surface-to-air)
g. MISSILEX (air-to-air)
h. MISSILEX (air-to-surface)
i. Practice Bombing (explosive)
j. Practice Bombing (non-explosive)
k. Mine Countermeasures (mechanical mine avoidance/minesweeping)
l. Mine Countermeasures (acoustic mine avoidance/mine sweeping using MF sonar)
m. Mine Countermeasures (explosive)
n. Anchor Operations
o. Ship and Submarine Mid-Frequency Active Sonar Usage
p. Explosive Echo Ranging (EER) Training Operations
q. Helicopter Dipping Sonar Training Operations

22-11.3.3.3 Training and Exercises within Foreign Nation Exclusive Economic Zones (EEZ). For training and exercises within a foreign nation EEZ, the protective measures contained in PMAP shall form the minimum requirements absent definitive guidance from the Host Nation, SOFA (or other bilateral agreements), Fleet Commander, or operational Commander. In the event of conflict between the protective measures contained in PMAP and those provided by the Host Nation, SOFA (or other bilateral agreements), Fleet Commander, or operational Commander, the more stringent protective measures shall apply. For areas where no foreign EEZ has been delineated, like parts of the Mediterranean Sea, the waters beyond the Territorial Sea (normally 12 nm) are considered "at sea" as defined in section 22-2.1.1 of this instruction.

22-11.3.3.4 Training and Exercises within Foreign nation Territorial Sea. Training and exercises within a foreign nation territorial sea (normally 12 nm from nearest land) are conducted with the concurrence of the Host Nation. For training and exercises within the foreign nation territorial sea, the protective measures contained in PMAP shall form the minimum requirements absent definitive guidance from the Host Nation, SOFA (or other bilateral agreements), Fleet Commander, or operational Commander. In the event of conflict between the protective measures contained in PMAP and those provided by the Host Nation, SOFA (or other bilateral agreements), Fleet Commander, or operational Commander, the more stringent protective measures shall apply.

22-11.3.4 Units equipped with mid-frequency active sonar shall report use of active sonar for exercises and training daily via the Sonar Positional Reporting System (SPORTS) as required by section 22-12.3.3.3 of this instruction and reference (o).

22-12 Protection of Marine Mammals and Endangered Marine Species

22-12.1 Legislation (This section contains background material from which Navy policy is derived.)

2-12.1.1 Marine Mammal Protection Act. Protects marine mammals by prohibiting unauthorized "taking" of marine mammals in the U.S. or on the high seas.

22-12.1.2 Endangered Species Act. Protects listed endangered species by prohibiting unauthorized taking of listed endangered species in the U.S. or on the high seas.

22-12.2 Terms and Definitions

22-12.2.1 Endangered Marine Species. Any listed endangered marine species, including all six species of sea turtles in the U.S. It is illegal to harm, or in any way interfere with a sea turtle or its eggs.

22-12.2.2 Marine Mammal. Any ocean dwelling mammal, including sea otters, manatees, dugongs, sea cows, seals, walruses, whales, dolphins and porpoises or ones that primarily inhabit the marine environment (such as polar bears).

22-12.2.3 Stranding. For the purposes of this section, a marine mammal stranding includes animals found alive and/or dead on beaches or floating dead in open water.

22-12.2.4 Taking. To harass, hunt, capture or kill or attempt to harass, hunt, capture or kill any marine mammal or endangered marine species.

22-12.3 Navy Policy

22-12.3.1 Marine Mammal Protection. Marine mammals enjoy protection under the Marine Mammal Protection Act. Therefore, no Navy vessel shall deliberately harass a marine mammal. Commanders and commanding officers shall plan and act to protect marine mammals during operations and planning.

22-12.3.2 Endangered Marine Species Protection. Endangered marine species enjoy protection under the Endangered Species Act. Therefore, no Navy vessel shall deliberately harass any endangered marine

species. Commanders and commanding officers shall plan and act to protect endangered marine species, including sea turtles and their eggs, during operations and planning.

22-12.3.3 Reports

22-12.3.3.1 Whale strikes and strandings shall be reported as OPREP 3 NAVY BLUE in accordance with reference (p). Reports are intended to assist the Navy in assessing compliance status only. Ships are not expected to report to outside agencies unless special circumstances apply and guidance has been provided through the chain of command.

22-12.3.3.2 Other direct interactions with whales, such as instances where naval units assist responsible agency personnel (NMFS/USFWS) in freeing whales entangled in nets shall be reported as Unit Sitreps in the format prescribed in reference (p).

22-12.3.3.3 Prudent environmental stewardship requires enhancing the Navy's ability to quickly and accurately determine if mid-frequency (1-10 KHz) active sonar (MFAS) operations were conducted in the proximity to a specific marine mammal event. The Sonar Positional Reporting System (SPORTS) has been developed to support the assessment of the potential effects of MFAS on the marine environments. Use of mid-frequency active sonar for training, exercise, and/or maintenance shall be reported by record message traffic in the format found at the SPORTS website, sports.navy.smil.mil. This requirement applies to all units (surface, submarine, and aviation) that employ mid-frequency sonar or sonar devices (1-10 KHz).

22-12.3.3.3.1 All units employing MFAS shall report as of 2000Z on days when MFAS was used for training, exercise, and/or maintenance via record message traffic. Submarines unable to meet the 2000Z reporting requirement for operational or training purposes shall report by record message traffic at the next scheduled communications window.

22-12.3.3.3.2 The message format and software to generate the message body are available at the SPORTS website, sports.navy.smil.mil. The data message will be sent action to NAVWARCENDIV NEWPORT RI, information to CNO WASHINGTON DC//N45/N3IPS//, COMFLTFORCOM NORFOLK VA//CDO/N77//, COMPACFLT PEARL HARBOR HI//CDO/N01CE1// with the subject line "DAILY MID-FREQUENCY SONAR REPORT". The data collected will include:

- Unit Name
- Purpose of sonar use
- Positional information (updated every 4 hours and/or 40 NM during the time that active sonar is used)
- Sensor used

22-13 Floating Drydocks

22-13.1 Terms and Definitions

22-13.1.1 Floating Drydock. A mobile dock, floating in water, capable of lifting a host ship for repairs to its underwater hull.

22-13.2 Navy Policy

22-13.2.1 Industrial Wastes

22-13.2.1.1 Using vacuum methods, drydocks shall periodically remove and send to shore facilities for disposal: spent sand, metals, wood, liquid wastes, solid wastes and all other industrial waste from the floor of the drydock. Drydocks shall prevent those wastes from entering the air or surrounding waters. Prior to flooding the dock, they shall remove all loose materials and floors and vacuum clean the chainways.

22-13.2.1.2 Floating drydocks equipped with industrial waste collection systems shall use the systems to the maximum possible extent for processing waste from hull-blasting, anti-fouling paints, or other industrial processes. Drydock discharges from the industrial waste collection system to treatment systems ashore, the sewer system, or directly into surface waters, shall comply with applicable Federal, State and local regulations.

22-13.2.2 Sewage and Graywater. Where possible, drydocks and hosted vessels shall transfer all sewage and graywater ashore for proper disposal.

22-14 Noise

22-14.1 Legislation. The Noise Control Act provides for Federal performance standards, which the Navy must incorporate into the design of new ship systems and equipment to reduce noise emission. Retrofit modifications are not prescribed for existing noise sources. Military aircraft, combat equipment and weapon systems are exempt from new product design standards. Workplace noise is not environmental noise. Reference (e) prescribes workplace noise abatement.

22-14.2 Navy Policy. The use of powered tools, machinery, outboard loudspeakers or any other devices that emit excessive noise, either directly or indirectly through re-radiation, shall be restricted to normal daylight working hours to the maximum possible extent.

22-15 Responsibilities

22-15.1 COMNAVSEASYSCOM shall:

22-15.1.1 Designate an Acquisition Official in a technical oversight office as the Technical Authority responsible for approving environmental systems and equipment for installation on vessels, and administering certification requirements.

22-15.1.2 Develop, test, evaluate, procure and install the necessary shipboard sewage systems, solid waste processing equipment, oil pollution abatement equipment and associated support designed to minimize health and safety hazards and to comply with applicable standards.

22-15.1.3 Develop, test, evaluate, procure and install the necessary pollution abatement equipment and associated logistic support to allow Navy floating drydocks to operate in full compliance with guidelines and standards.

22-15.1.4 Continue the inspection and certification program to ensure that shipboard oil pollution abatement systems and sewage systems are properly designed, installed and fully operational and to ensure adequate technical documentation, spare parts support and crew indoctrination are provided.

22-15.1.5 Provide engineering and technical assistance to the fleet, as required, to ensure the safe and effective operation of shipboard pollution abatement systems and equipment, the proper management of HM and the meeting of air pollution control requirements.

22-15.1.6 Provide support and hardware for shipboard environmental training programs established by NETC.

22-15.1.7 Acquire, distribute and install appropriate disposal systems, containers, labels, handling equipment, clean-up materials and protective clothing to allow safe and effective control of HM aboard Navy ships. Ships shall use reference (e) as guidance for proper management of HM aboard.

22-15.1.8 Initiate procurement procedures to ensure the major noise products and equipment, not designed for combat use, meet Federal noise emission standards.

22-15.1.9 Ensure that all ships have proper material support, including adequate spare parts for installed sewage systems.

22-15.1.10 Ensure that associated funding requirements are properly identified, budgeted and programmed.

22-15.1.11 Promote research to define and study noise pollution problems unique to the Navy and coordinate such research with other DOD components and with EPA.

22-15.1.12 Identify, evaluate and correct Navy ships' systems and equipment that are major sources of environmental noise.

22-15.1.13 Develop improvements to shipboard processes to reduce the use of HM and the generation of shipboard used HM.

22-15.1.14 Periodically assess, by means of regularly scheduled pierside surveys, the compliance status of Navy ships regarding applicable air pollution control requirements and report all findings to commanding officers, fleet commanders and other appropriate command levels.

22-15.1.15 Provide assistance and guidance to fleet and shoreside NOSCs in the preparation of oil spill and HS release response plans.

22-15.1.16 Provide general shipboard OHS SCPs to Navy ships for use in preparation of ship-specific OHS SCPs.

22-15.1.17 Develop Shipboard OHS Spill Kits containing appropriate equipment and protective clothing for personnel use in responding to OHS spills.

22-15.1.18 Provide specialized equipment and trained personnel to assist NOSCs/commanding officers in responding to offshore, salvage-related and major inland oil spill and HS release response operations.

22-15.1.19 Provide proper reception capabilities at COMNAVSEASYSCOM facilities for receipt of ship-generated oily waste and waste oil, sewage and graywater, solid waste and used HM. This includes transfer hoses, associated fittings and adequate tank holding capacity at each COMNAVSEASYSCOM facility for all visiting ships, Navy and non-Navy.

22-15.1.20 Ensure that operating forces obtain adequate system documentation with particular emphasis on ensuring that the documentation contains health, sanitation, and safety guidance. Documentation shall include:

a. Equipment technical manuals for all installed equipment/systems

b. Maintenance Requirements Cards (MRCs) covering a comprehensive sewage system preventive maintenance program and certification criteria

c. Sewage Disposal Operation Sequencing System (SDOSS) which consists of systematic and detailed written procedures using charts, instructions and diagrams developed for the operations of a specific ship's sewage system

d. Reference (f), chapter 593

e. PCB Advisories.

22-15.1.22 Develop contract requirements for ship availabilities in private shipyards to process ship generated waste in compliance with the law.

22-15.1.23 Apply for required HW generator numbers required to manage Navy-generated and co-generated HW at private shipyards. Manage the HW manifest program and provide annual management reports to CNO and the fleets on program cost and effectiveness.

22-15.1.24 Develop and issue to the fleet site-specific HW management procedures for private shipyards. Provide on-site coordination from the SUPSHIP office with the identified ship HM coordinator.

22-15.1.25 Identify to the type commander or type commander representative any unresolved issues of ship noncompliance with SUPSHIP-generated procedures.

22-15.1.26 Provide program management for the Protective Measurers Assessment Protocol (PMAP).

22-15.1.27 Coordinate with fleet commanders for development of a programmatic approach to environmental compliance for NAVSEA-related research, development, training, and evaluation ranges to the extent they are used for fleet training.

22-15.1.28 Monitor requisitions from the ODS reserve.

22-15.1.29 Provide program management for the Sonar Positional Reporting System (SPORTS).

22-15.1.30 Ensure that all data generated or obtained in support of SPORTS is provided in electronic format meeting the standards set by Navy, DOD and Federal policies.

22-15.2 Naval Education and Training Command (NETC) shall:

22-15.2.1 Establish formal training programs on the operation, maintenance, sanitation and safety of all shipboard sewage systems. Monitor and update training programs as required.

22-15.2.2 Develop shipboard indoctrination programs on sanitation, safety and basic operation of all sewage systems. Review and revise indoctrination programs as necessary.

22-15.2.3 Establish formal training programs at appropriate facilities on the operation and maintenance of shipboard oil pollution abatement systems and equipment. Monitor and update training programs as required.

22-15.2.4 Provide shipboard indoctrination programs on oil spill control, oil reclamation and the basic operation of all oil pollution abatement systems and equipment. Review and revise indoctrination programs as necessary.

22-15.2.5 Establish formal training programs on the handling, storage, treatment, disposal and cleanup of shipboard oil and HS. Monitor and update training programs as required.

22-15.2.6 Incorporate environmental protection training including protection of marine mammals and endangered species and the use of the Protective Measurers Assessment Protocol (PMAP) into relevant curricula.

22-15.3 Commander, Naval Legal Service Command shall establish training courses on environmental compliance afloat for military lawyers assigned to afloat billets, fleet staffs and shore stations providing support to afloat units.

22-15.4 Chief, Bureau of Medicine and Surgery (BUMED) shall:

22-15.4.1 Issue guidance for shipboard medical department personnel concerning health and sanitation aspects of shipboard sewage systems.

22-15.4.2 Ensure that training programs for shipboard medical personnel include all aspects of health and sanitation associated with shipboard sewage systems.

22-15.4.3 Determine, validate and establish health criteria and standards relating to chemical and physical environmental health standards.

22-15.4.4 Collect, evaluate and disseminate data related to health problems associated with lead and zinc chromate paint removal aboard ship.

22-15.4.5 Perform research and evaluation in environmental medicine to determine the health impacts of Navy sources of environmental noise.

22-15.4.6 Provide, at Navy ports, the required services for disposal of medical waste generated by ships and ensure that disposal ashore complies with applicable Federal, State and local laws or regulations and SOFAs or international agreements.

22-15.5 Fleet Commanders shall:

22-15.5.1 Ensure that ships under their command are provided with appropriate sewage systems, air emission and oil pollution abatement equipment, solid waste treatment and disposal systems and low-noise emission equipment.

22-15.5.2 Ensure that ships under their command possess appropriate disposal/treatment systems, containers, labels, handling equipment, clean-up materials, spill kits and protective clothing to allow safe and effective control of shipboard HM.

22-15.5.3 Ensure that ships operate their sewage systems; air, oil and solid waste control systems; and other pollution abatement systems per the requirements of this instruction.

22-15.5.4 Provide for repair and maintenance of air, oil, sewage and solid waste pollution abatement systems that are beyond the capability of ship's force to accomplish.

22-15.5.5 Issue operational guidelines and reporting procedures for compliance with the policies set forth in this instruction for ship-generated plastic waste.

22-15.5.6 Provide the names and addresses of fleet NOSCs to fleet units.

22-15.5.7 Fund the cleanup of OHS spills from Navy vessels under their command.

22-15.5.8 Ensure that assigned Navy floating drydocks possess appropriate pollution abatement systems and equipment.

22-15.5.9 Ensure that assigned drydocks operate their pollution abatement systems per paragraph 22-12.2.

22-15.5.10 Provide for repair and maintenance of pollution abatement systems beyond the capability of assigned drydock's force to accomplish.

22-15.5.11 Establish procedures to ensure, to the maximum extent feasible, that used and excess HM is offloaded at a Navy or other public facility prior to a ship's entering a private shipyard for an availability. Such procedures shall include the offloading of HM not anticipated for use by ship's force during the availability.

22-15.5.12 Ensure that ships identify a shipboard HM coordinator to the Regional Maintenance Centers (RMC) for each ship availability at a private shipyard. Ensure that this individual has the authority and resources commensurate with the assigned responsibility to ensure shipboard compliance with HM and HW management procedures and site specific management practices established by the RMC.

22-15.5.13 Ensure that ships identify, in preavailability planning conferences, the types and amounts of used HM anticipated by ships' force during the availabilities.

22-15.5.14 Direct ships to comply with all established HM and HW management practices and those site-specific procedures delineated by the RMC.

22-15.5.15 Ensure type commanders monitor ship compliance with established HM/HW procedures while in private shipyards.

22-15.5.16 Incorporate the protection of marine mammals and endangered marine species into operational planning for major fleet exercises. Direct subordinate commands to use the Protective Measurers Assessment Protocol (PMAP) for routine training and exercises at sea. Ensure compliance with the PMAP requirement through a comprehensive assessment mechanism.

22-15.5.17 With support from Navy region and numbered fleet commanders, develop a programmatic approach to environmental compliance for ranges and OPAREAS within their respective areas of responsibility.

22-15.5.18 With the systems commanders, coordinate development of a programmatic approach to environmental compliance for research, development, training, and evaluation ranges to the extent they are used for fleet training.

22-15.5.19 With COMNAVSEASYSCOM, monitor requisitions from the ODS reserve.

22-15.5.20 Establish, resource, and maintain a SONAR Positional Reporting System (SPORTS) to collect data on when and where mid-frequency active sonar (1-10 KHz) is used for training, exercises, and/or maintenance.

22-15.5.21 Ensure that all units under their command implement and execute mid-frequency active sonar reporting via SPORTS in accordance with this instruction.

22-15.6 Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) shall implement programs for source reduction of plastic aboard ship by identifying non-plastic packaging products and non-plastic consumables for shipboard use.

22-15.7 Commander Military Sealift Command (COMSC) shall:

22-15.7.1 Properly equip assigned ships with appropriate sewage systems, air emission and oil pollution abatement equipment, solid waste treatment/disposal systems and low-noise emission equipment.

22-15.7.2 Equip assigned ships with appropriate disposal/treatment systems, containers, labels, handling equipment, clean-up materials, spill kits and protective clothing to allow safe and effective control of shipboard HM.

22-15.7.3 Ensure that assigned ships operate installed sewage systems, air, oil and solid waste control systems and other pollution abatement systems per the requirements of this instruction.

22-15.7.4 Provide for repair and maintenance of air, oil, sewage and solid waste pollution abatement systems that are beyond the capability of ship’s force to accomplish.

22-15.7.5 Issue operational guidelines and reporting procedures for compliance with the policies set forth in this instruction for ship-generated plastic waste.

22-15.7.6 Fund the cleanup of OHS spills from assigned Navy and contract ships.

22-15.7.7 Establish procedures to ensure, to the maximum extent feasible, that used HM is offloaded from assigned ships at a Navy or other public facility before entering a private shipyard for an availability. Such procedures shall include the offloading of HM not anticipated for use by ship's force during the availability.

22-15.7.8 Identify a shipboard HM coordinator for each assigned ship's availability at a private shipyard. Provide this individual the authority and resources commensurate with the assigned responsibility to ensure shipboard compliance with HW management procedures and site-specific management practices established at the private shipyard.

22-15.7.9 Ensure that ships identify, in preavailability planning conferences, the types and amounts of HW anticipated by ships' force during the availabilities.

22-15.7.10 Direct ships to comply with all established HM and HW management practices and those site-specific procedures delineated for the private shipyard.

22-15.7.11 Monitor ship compliance with established HM/HW procedures while in private shipyards.

22-15.7.12 With COMNAVSEASYSCOM, monitor requisitions from the ODS reserve.

22-15.7.13 Incorporate the protection of marine mammals and endangered marine species into operational planning for major fleet exercises. Direct subordinate commands to use the Protective Measurers Assessment Protocol (PMAP) for routine training and exercises at sea. Ensure compliance with the PMAP requirement through a comprehensive assessment mechanism.

22-15.8 PRESINSURV shall:

22-15.8.1 Conduct environmental compliance oversight inspection as a part of the regular ship inspection process. These inspections shall include equipment operation, program compliance and training.

22-15.8.2 Train assigned inspectors on the requirements of this chapter.

22-15.8.3 Report to the CNO the status of afloat environmental compliance and issues requiring CNO attention as a part of the periodic brief.

22-15.9 Commander Navy Installation Command (CNIC) shall:

22-15.9.1 Provide, at Navy ports under their command, proper facilities for receipt of ship-generated solid waste, industrial waste, sewage and wastewater, HM and oily waste and waste oil. Such facilities will include appropriate discharge hoses, fittings and holding capacity for wastes.

22-15.10 RECs shall:

22-15.10.1 Coordinate with the cognizant port clearance authority to ensure LOGREQ replies fully apprise arriving ships of local environmental requirements and port practices.

22-15.10.2 Notify the cognizant area environmental coordinator and CNO (N45) in advance when anticipating regulatory concern over arriving ship environmental compliance. Recommend a course of action to resolve the issue.

22-15.10.3 Maintain close liaison with SUPSHIP/RMC offices and naval shipyards to ensure proper resolution of environmental issues regarding ships in overhaul.

22-15.10.4 Report to CNO (N00N) and COMNAVSEASYSCOM (SEA-08) any regulatory attempt to assert authority over radioactive or non-radioactive discharges from naval nuclear propulsion plants.

22-15.10.5 Upon request, assist both U.S. and foreign Navy ships in resolving environmental issues, including but not limited to inspection of ships, air emissions, water discharges, oil spill planning and response and natural resource damage assessments following oil spills.

22-15.10.6 Provide information on the Federal, State and local environmental regulations that apply to ships in port. Such information shall describe necessary actions by ship commanding officers to comply with the requirements of this instruction and all other Federal, State and local regulations applicable to the port.

22-15.10.7 Inform ship commanding officers of reference (c) compliance requirements for marine coatings at Navy and commercial affected source sites activities.

22-15.10.8 Direct Navy activities, at affected sources, to work with RECs to request recordkeeping waivers from regional offices for ships in "operational status".

22-15.11 COs of Navy ships and masters of MSC vessels shall:

22-15.11.1 Obtain certification and recertification for, properly operate, periodically inspect and properly maintain the ship's sewage and oil pollution abatement systems. Carry out ship-to-shore transfers of sewage and graywater in a safe and effective manner.

22-15.11.2 Operate and maintain his or her ship to conform with applicable State and local air pollution emission regulations and HM regulations.

22-15.11.3 Ensure that ships comply with the guidelines, standards and procedures of this instruction.

22-15.11.4 Dispose of no medical materials in a manner that poses a risk or perception of a risk to the public health and welfare or to the marine environment.

22-15.11.5 Complete and document training of shipboard personnel as prescribed in paragraphs 22-2.2.7, 22-3.4, 22-4.3.3, 22-5.5, 22-6.5, 22-7.4, 22-8.4 and 22-9.3.

22-15.11.6 Schedule periodic inspections (at least quarterly) per reference (q) by senior medical department personnel to maintain sanitary and hygienic conditions of MSD systems and operational practices. Sanitation and hygiene inspections should also be made of solid waste processing equipment (when installed and operating).

22-15.11.7 Post appropriate health and sanitation precautions as required by reference (e); General Specifications for Ships of the United States Navy (GENSPECS); reference (d), chapter 593; and reference (q).

22-15.11.8 Report, as required and established by the chain of command, sewage discharge within 0-3 nm from U.S. shores.

22-15.11.9 Report to the fleet commander any conditions or system/equipment malfunctions that could result in unlawful air pollutant emissions.

22-15.11.10 Report to the fleet commander any conditions or system/equipment malfunctions that would necessitate oily waste, HM or solid waste discharge into waters in which discharge is restricted.

22-15.11.11 Ensure that the engineering log or equivalent oil record book records any oily waste discharge that causes a sheen. When a sheen-producing discharge occurs, determine the cause. Record keeping shall consist of the date, time of occurrence, ship location at the beginning and end of the incident, substance discharged, quantity discharged and the cause of the discharge.

22-15.11.12 Designate an officer as HM coordinator to ensure that all shipboard personnel comply with reference (e) requirements for HM handling, packaging, storing, labeling, treating and disposal. Prior to the ship leaving port, the HM coordinator or HAZMINCEN Supervisor shall request used/excess HM pickup by the cognizant shore activity representative.

22-15.11.13 Predesignate one or more shipboard action officers to be responsible for shipboard spill/ release contingencies planning and response.

22-15.11.14 Prepare shipboard OHS SCPs and coordinate with the cognizant NOSC plan. Provide these plans, via the chain of command, to Coast Guard and State officials for information, upon request.

22-15.11.15 Properly train shipboard personnel and make them fully aware of applicable OHS SCPs. Conduct required OHS spill drills.

22-15.11.16 Report OHS spills as prescribed in paragraph 22-9.2.5 through 22-9.2.8.

22-15.11.17 Take immediate actions to contain, control and mitigate all spills caused by the ship.

22-15.11.18 Appoint an officer or petty officer to oversee drydock operations to ensure that industrial waste and sewage collection and treatment systems are properly operated and maintained and that ship-to-shore transfers of the waste are handled in a safe and effective manner.

22-15.11.19 Offload used and excess HM, to the maximum extent feasible, to a Navy or other public facility prior to entering a private shipyard for an availability. Also offload HM not anticipated for use by ship's force during the availability before entering the private shipyard.

22-15.11.20 Identify to the RMC responsible for a private shipyard the ship’s HM coordinator for the availability. Provide that individual the authority and resources to ensure shipboard compliance with HW management procedures and site-specific management practices established by the SUPSHIP.

22-15.11.21 Identify to the RMC, in preavailability planning conferences, the types and amounts of used HW anticipated by ship's force during the availability.

22-15.11.22 Comply with all established HM and HW management practices and those site-specific procedures delineated by the RMC.

22-15.11.23 During paint removal operations, to the maximum extent feasible, collect the debris, dust and residual materials from the paint removal operation and properly package them for disposal ashore.

22-15.11.24 Report to the chain of command, cognizant REC, area environmental coordinator and CNO (N45) any regulatory request that the Navy apply for permits involving ship discharges or implement measures regarding ship discharges beyond the requirements contained in this chapter. Enter into no agreements with environmental agencies regarding ship discharges without CNO (N45) approval.

22-15.11.25 If it is necessary for surface ships to load ballast water in a potentially polluted area or within 3 nm from land (i.e., amphibious ships operating in such waters and ballasting to operate landing craft or tankers ballasting to replace offloaded cargo), offload the water outside 12 nm from shore and

take on clean sea water and discharge it twice prior to entry within 12 nm from shore. This action need not be taken during local operations in which the ballast water may be discharged into essentially the same waters. Record in the ship's engineering log the loading of ballast water in potentially polluted areas or within 3 nm from shore and the flushing of ballast tanks to rid them of possible pollutants or unwanted species. The entry should include the geographical position and the amount of ballast water taken on.

22-15.11.26 Properly enter reports of all plastic discharges by surface ships in the deck log. Personally approve any plastic discharges.

22-15.11.27 Employ the Protective Measures Assessment Protocol (PMAP) for all routine training and exercises at sea. Ensure the PMAP requirement is included in appropriate ships' instructions, bills, and checklists and maintain documentation in accordance with Fleet Commander and Type Commander requirements. While participating in major Fleet exercises employ PMAP for all applicable exercises or training events absent definitive environmental protection guidance. Avoid deliberately harassing marine mammals and sea turtles. Consider marine mammal and sea turtle protection during ship operations and planning.

22-15.11.28 Ensure that the requirements of references (g) and (j) are followed for all activities associated with PCBs, PCB-containing materials or systems potentially contaminated with PCBs (e.g., ventilation systems that employ PCB-containing felt gaskets).

22-15.11.29 Assign a crewmember as the AEPC. Train the AEPC per paragraph 22-2.2.7c.

22-15.11.30 Maintain records of ships' force marine coating use for coatings distributed from ships' stores for domestic Navy and commercial affected source sites, as appropriate. Deliver a monthly report of daily coating use by the seventh day of the month following use or before departure, if departing before the end of the month or after a short visit (i.e. several days). Deliver the report to the affected source site Navy shore activity or, when located at a commercial affected source site, to the appropriate SUPSHIP office.

22-15.11.31 Use only marine coatings that meet VOC content standards of reference (d), chapter 631, table 3-7. These coatings are compliant with reference (c). When approved marine coatings are not available or there is uncertainty whether a material is regulated under reference (c), contact COMNAVSEASYSCOM (SEA05M) for information on compliant substitutes. Remove non-compliant coatings from shipboard stores and return them to the supply system as excess HM as soon as possible.

22-15.11.32 Prohibit the thinning of marine coatings with materials such as coating thinners, solvents, and varnishes. Label paint lockers with a placard stating, "Thinning of marine coatings/paints is prohibited."

22-15.11.33 Implement the following marine coating work practices: (1) minimize spills of marine coatings, (2) use intact and leak-free marine coating containers and (3) close marine coating containers when not in use.

22-15.11.34 Follow the requirements of paragraph 2-6.4.3c when transferring or receiving used HM from another ship while at sea.

22-15.11.35 Units so equipped, report mid-frequency active sonar use for training, exercises, and/or maintenance daily via SONAR Positional Reporting System (SPORTS) in accordance with Fleet/TYCOM guidance.

22-15.12 COs of floating drydocks shall:

22-15.12.1 Appoint an officer or petty officer to ensure that drydock personnel properly operate and maintain oil and oily waste collection and treatment systems and that they safely and effectively handle ship-to-shore transfers of the waste.

22-15.12.2 Properly train drydock personnel working with oil pollution systems, send them to appropriate schools, and fully document this training.

22-15.12.3 Coordinate with the shore activity commanding officer to ensure compliance with State or local regulatory requirements.

22-15.12.4 Report to the fleet commander any conditions or system/equipment malfunctions that would necessitate solid waste discharge upon or into restricted waters.

22-15.12.5 Properly operate drydock systems for the collection and transfer of sewage and wastewater from the ship in drydock to shoreside receiving facilities. Periodically inspect and properly maintain the systems. Handle transfers of sewage and wastewater in a safe and effective manner. Reference (d), chapter 593; GENSPECS,; and references (g) and (q) provide guidance concerning CHT systems.

22-15.12.6 Ensure discharges from floating drydocks are permitted as required.

22-15.13 Fleet NOSCs shall:

22-15.13.1 Develop fleet NOSC OHS Regional Response Plans.

22-15.13.2 Provide coordination and direction for the cleanup of OHS spills from Navy ships beyond 12 nm from nearest land (U.S. or foreign nations), unless otherwise directed by the Area Environmental Coordinator.

22-15.13.3 Provide coordination and assistance, as requested, to predesignated shoreside NOSCs assigned in chapter 12.

22-15.14 CNO (N45) shall:

22-15.14.1 Oversee the review of Navy-wide sonar use trends.

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CHAPTER 23

OCEAN DUMPING

23-1 Scope

This chapter identifies requirements and responsibilities for ocean disposal of material, other than dredged or fill material (see Chapter 9), and those discharges covered in Chapter 22.

23-1.1 References. Relevant references are:

(a) 40 CFR 220-225, 227-229, Ocean Dumping Regulations and Criteria;

(b) NAVMEDCOMINST 5360.1 of 17 September 1987, Decedent Affairs Manual. (NOTAL).

23-2 Legislation

21-2.1 Marine Protection, Research, and Sanctuaries Act. Bars the transport of any material from the U.S. for the purpose of dumping into the ocean waters without a permit issued by EPA, and dumping material from outside the U.S. within the territorial sea or contiguous zone. The primary means of regulation is a Federal permit system; violations carry civil penalties of $50,000 per violation, and criminal penalties of 1 year imprisonment and/or $50,000 fine.

23-2.2 Ocean Dumping Act. Prohibits the transportation of material from the U.S. or any other location for the purpose of ocean dumping unless an EPA permit has been obtained. Violation of this requirement is punishable under Federal law. In practical terms, this Act requires that trash and garbage generated in port be off-loaded for shore disposal before getting underway. It also means that wastes generated during exercises ashore cannot be loaded aboard ships for subsequent ocean disposal.

23-3 Terms and Definitions

23-3.1 Dumping. The intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea. Does not include routine discharge of materials or wastes generated on board ship and/or effluent incidental to the propulsion or operation of motor driver equipment on vessels. It does, however, include the discharge of contaminated material, including bilge water, received from another ship or shore source.

23-3.2 Material. Matter of any kind or description, including, but not limited to, solid waste, incinerator residue, garbage, sewage, sewage sludge, munitions, radiological, chemical and biological warfare agents, and discarded equipment, but does not include sewage from vessels processed through an approved marine sanitation device (MSD) as described in Chapter 22.

23-3.3 Ocean Waters. Waters seaward of the baseline from which the boundary of the territorial sea is measured.

23-4 Requirements

Unless specifically permitted, dumping of material in ocean waters is prohibited without a permit.

23-5 Navy Policy

23-5.1 Ocean Dumping

a. Ocean dumping may only be authorized on a case-by-case basis by CNO (N45). Except in emergency conditions, requests for such authorization shall be accompanied by documentation per the criteria established in reference (a). Following CNO approval, full compliance with EPA permitting procedures is required.

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

23-5.2 Transport of Target Vessels

a. The transportation of naval ships and craft from the U.S. or from any other location for the purpose of conducting a sinking exercise (SINKEX) concerning tests and evaluations of conventional ammunition and weapons systems, while not considered ocean dumping, is subject to EPA permit requirements established in section 229.2 of reference (a).

b. Necessary measures shall be taken to ensure that the vessel sinks to the bottom rapidly and permanently and that marine navigation is not impaired by the sunken vessel.

c. All such vessel sinkings shall be conducted in water of at least 1,000 fathoms (6,000 feet) and at least 50 nm from land, as measured from that portion of the baseline from which any territorial sea is measured (as provided for in the Convention on the Territorial Sea and the Contiguous Zone) that is the closest proximity to the proposed SINKEX site.

d. Under permit conditions and before sinking, appropriate measures shall be taken by qualified personnel at a Navy or other appropriate facility to remove, to the maximum extent practicable, all materials that may degrade the marine environment, including, but not limited to:

- Emptying of all fuel tanks and lines to the lowest point practicable, flushing of such tanks and lines with water, and again emptying such tanks and lines to the lowest point practicable so that tanks and lines are essentially free of petroleum.

- Removing from the hulls other pollutants and all readily detachable material capable of creating debris or contributing to chemical pollution.

e. Each SINKEX operation shall be conducted only after approval by CNO (N43) and preparation of the target per the EPA permit and specific OPNAV directives.

f. Requests for conducting SINKEX exercises shall be forwarded via chain of command to CNO (N43) (copy CNO (N8F) and COMNAVSEASYSCOM) on a case-by-case basis and shall include:

- User activity
- Requirements for, or purpose of the sinking
- Designated target hulls and approximate tonnage
- Statement that the designated hull has been prepared per the specification of paragraph 23-5.2.d
- Approximate date and location of the sinking.

g. After the sinking, a report (Report Symbol OPNAV 5090-12) shall be made to CNO (N43) (copies to CNO (N45), CNO (N8F), COMNAVSEASYSCOM, and appropriate fleet and force commanders) with the name of each vessel sunk, approximate tonnage, and the location and date of sinking.

23-5.3 Burial at Sea

a. The EPA has granted a general permit to transport human remains from any location for the purpose of burial at sea and to bury such remains at sea.

b. Human remains shall be prepared for burial at sea and be buried per Chapter 8 of reference (b) (Report Symbol OPNAV 5090-9).

c. For non-cremated human remains, burial at sea shall take place no closer than 3 nm from U.S. land and 12 nm from foreign land and in water of no less than 100 fathoms (600 feet) depth. All necessary measures shall be taken to ensure that the encased remains sink to the bottom rapidly. For purposes of this paragraph, "land" means that portion of the baseline from which any territorial sea is measured (as provided for in the Convention on the Territorial Sea and the Contiguous Zone) that is in closest proximity to the proposed disposal site.

d. Cremated remains shall be buried in or on ocean waters without regard to the depth limitations specified above, provided that such burial take place no closer than 3 nm from U.S. land and 12 nm from foreign land.

23-6 Responsibilities

23-6.1 CNO (N43) shall prepare and submit an annual report to the EPA Administrator setting forth the name of each vessel sunk as a target, its approximate tonnage, and the location and date of sinking (Report Symbol OPNAV 5090-12).

23-6.2 Fleet Commanders shall:

(a) Ensure that all naval vessel commanders comply with the policies and criteria as stated herein.

(b) Ensure that ship sea detail checklists include a requirement to collect and offload all trash and garbage before getting underway.

(c) Ensure that planning for exercises includes provisions for appropriate disposal of wastes generated ashore during the exercise.

23-6.3 BSOs shall provide technical assistance to Navy commands, vessels, and activities, as requested, in matters concerning ocean dumping.

23-6.4 COs of a vessel or aircraft conducting burials at sea shall report within 20 days of conducting the burial; the date, longitude and latitude, number, and type of burial (whole body or cremated remains) to the fleet commander , with copies to the type commander and the regional environmental coordinator.

23-6.5 CNIC shall ensure that all shore activity commanders comply with the policies and criteria as stated herein.

23-6.6 RECs shall submit a report to the appropriate EPA regional office detailing the burial at sea within 30 days of conducting the burial.

23-6.7 COs of ships shall, prior to getting underway from port, see that all trash and garbage is collected and off-loaded. This requirement shall be included in the ship's sea detail checklist.

CHAPTER 24

NATURAL RESOURCES MANAGEMENT

24-1 Scope

This chapter establishes Navy program requirements for ensuring military readiness and sustainability while complying with natural resource protection laws, and conserving and managing natural resources in the United States, its territories, and possessions for both appropriated and non-appropriated fund activities. This dual dynamic of Stewardship and Readiness is essential for the long-term maintenance of military and natural resources sustainability. This chapter also summarizes the natural resources management (NRM) program for managing Navy lands, waters, forests, fish and wildlife, and outdoor recreation resources. Refer to Chapter 18 for NRM policies for overseas installations. An in-depth source of information on Natural Resources Regulations is available on the U.S. Navy RegFinder CD disk available from the U.S. Navy Civil Engineer Officer School.

24-1.1 References. Relevant references are:

(a) DOD 3210.6-R, DOD Grant and Cooperative Agreement Regulations of April 1998;

(b) NAVFAC Natural Resources Management Procedural Manual, P-73, Vol. II;

(c) 32 CFR 190, DOD Natural Resources Management Program;

(d) Conserving Biodiversity on Military Lands- A Handbook for Natural Resources Managers, 1996;

(e) ASN (I&E) memo of 12 August 1998, DON Policy Memo 98-06: Review of INRMPs Under NEPA;

(f) CNO ltr of 30 November 1998, Guidance on Preparing NEPA Documents for INRMPs;

(g) 15 CFR 930, Federal Consistency with Approved Coastal Management Programs;

(h) 15 CFR 923, Coastal Zone Management Program Regulations;

(i) NAVFAC ltr of 2 July 1996, Guidelines for establishment of Ecological Areas;

(j) 50 CFR 17, Endangered and Threatened Wildlife and Plants;

(k) 50 CFR 10, 18, 216, & 228, Regulations Concerning Marine Mammals;

(l) Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801-1883;

(m) 50 CFR 10.13, List of Migratory Birds;

(n) SECNAVINST: 6401.1A of 16 August 94, Veterinary Health Services;

(o) 33 CFR 320-330, Clean Water Act Section 404 and Rivers and Harbors Act Section 10 Regulatory Programs;

(p) SECNAVINST 11011.47 Acquisition, Use By Others and Disposal of Department of the Navy Real Property;

(q) NAVFAC Real Estate Procedural Manual, P-73, Vol. I;

(r) 7 USC 4201 et seq. Farm Land Protection Policy;

(s) DOD Financial Management Regulation 7000.14-R, Volume 11A, chapter 16, Accounting for Production and Sale of Forest Products;

(t) NAVCOMPT Manual Volume 3.

24-2 Legislation

a. Bald Eagle Protection Act, 16 U.S.C. 668

b. Coastal Barrier Resources Act of 1982, 16 U.S.C. 3505

c. Coastal Zone Management Act (CZMA), 16 U.S.C. 1451

d. Conservation Programs on Military Reservations (Sikes Act), 16 U.S.C. 670

e. Defense Appropriations Act of 1991 Legacy Program, P.L. 101-511

f. Endangered Species Act (ESA), 16 U.S.C. 1531 et seq

g. Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136

h. Federal Noxious Weed Act of 1974, 7 U.S.C. 2801

i. Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (CWA), 33 U.S.C. 1251

j. Fish and Wildlife Conservation Act, 16 U.S.C. 2901

k. Fish and Wildlife Coordination Act, 16 U.S.C. 661

l. Forest Resources Conservation and Shortage Relief Act, 16 U.S.C. 620

m. Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801-1883

n. Marine Mammal Protection Act, 16 U.S.C. 1361

o. Marine Protection, Research, and Sanctuaries Act of 1972, 16 U.S.C. 1431

p. Migratory Bird Treaty Act, 16 U.S.C. 703

q. Military Construction Authorization Act - Leases; Non-excess property, 10 U.S.C. 2667

r. Military Construction Authorization Act - Military Reservations and Facilities - Hunting, Fishing, and Trapping, 10 U.S.C. 2671

s. Military Construction Authorization Act - Sale of Certain Interests in Lands; Logs, 10 U.S.C. 2665

t. National Defense Authorization Act of 1989 - Volunteer and Partnership Cost-Share Programs, P.L. 101-189

u. National Environmental Policy Act (NEPA), 42 U.S.C. 4321

v. National Invasive Species Act of 1996, 16 U.S.C. 4701

w. Oil Pollution Act of 1990 (OPA 90), 33 U.S.C. 2701

x. Outdoor Recreation - Federal/State Programs Act, 16 U.S.C. 460 P-3

y. Soil Conservation Act, 16 U.S.C. 3B

24-3 Executive Orders (EO)

11644, as amended by EO 11989, Use of Off-Road Vehicles on Public Lands of 24 May 1977;

11988, Floodplain Management of 24 May 1977;

11990, Protection of Wetlands of 24 May 1977 as amended;

12962, Recreational Fisheries of 7June 1995;

13089, Coral Reef Protection of 11June 1998;

13112, Invasive Species, of 3 February 1999;

13148, Greening the Government through Leadership in Environmental Management of April 21 2000;

13158, Marine Protected Areas of 26 May 2000;

13186, Responsibilities of Federal Agencies to Protect Migratory Birds of 17 January 2001.

24-4 Terms and Definitions

Agricultural Outleasing. Use of non-excess DOD lands under a lease to an agency, organization, or person generally for growing crops or grazing domestic animals. The term "agriculture" includes activities related to producing, harvesting, processing, or marketing an agricultural, aquaculture, maricultural, or horticultural commodity, including the breeding, raising, shearing, feeding, caring for, training, and management of livestock, bees, poultry, fish, shellfish, and fur-bearing animals and wildlife, and the planting, cultivating for harvest, or processing short rotation (less than 15 years) forest products.

Annual Increment. An INRMP addendum prepared annually, to facilitate implementation of the INRMP.

Best Management Practices (BMP). Within the scope of this chapter, BMPs are practical, economical and effective management or control practices that will reduce or prevent water pollution. Usually BMPs are applied as a system of practices based on site-specific conditions rather than a single practice. State agencies usually prepare BMPs for land disturbing activities related to agriculture, forestry, and construction.

Biodiversity. The variety of life and its processes; it includes the variety of living organisms, the genetic differences among them, the communities and ecosystems in which they occur, and the ecological and evolutionary processes that keep them functioning, yet ever changing and adapting.

Biological Assessment (BA). A biological evaluation conducted by the action agency as part of the interagency consultation process under the Endangered Species Act (ESA). The purpose of the assessment is to determine whether or not the proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat.

Biological Opinion (BO). A document stating the opinion of the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) about whether or not a Federal action, described in a BA, is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.

Bird Aircraft Strike Hazard (BASH) Prevention Program. An integrated program, based on a BASH Plan, to support the Navy's flying mission. This program promotes land management practices to minimize bird attractants, and safety procedures to recognize, control, and avoid hazardous bird concentrations. A critical part of the BASH Program involves disciplined reporting of bird strikes.

Candidate Species. Any species being considered by the Secretary of Interior or Commerce for listing under ESA as an endangered or a threatened species, but not yet the subject of a proposed listing.

Coastal State. A State of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. The term also includes Puerto Rico, the U.S. Virgin Islands, Guam, and America Samoa.

Coastal Zone. An area specifically identified or otherwise delineated by a coastal State in its approved Coastal Zone Management Plan (CZMP). It is an area of coastal waters and adjacent shorelines strongly

influenced by each other and in proximity to the shorelines of the several coastal States, including islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.

Conservation. The prudent care, protection, and management of natural resources that best reflect sound resource stewardship for present and future generations.

Cooperative Agreement. A Cooperative Agreement is used to acquire goods or services or stimulate an activity undertaken for the public good. Cooperative agreements assume substantial involvement between the Federal agency and recipient during performance of the activity. Cooperative agreements may be used to accomplish work identified in the INRMP, and may be entered into with States, local governments, non-governmental organizations, and individuals to provide for the maintenance and improvement of natural resources on, or to benefit natural resources research on DOD installations. Agreements authorized by the Sikes Act (22-2.5) are not subject to the provisions of the Federal Grant and Cooperative Agreement Act, but must comply with the procedural requirements of the DOD Grant and Cooperative Agreement Regulations, reference (a). Funds approved for a particular fiscal year may be obligated to cover the costs of goods and services provided under a cooperative agreement during any 18-month period beginning in that fiscal year in accordance with the Sikes Act Improvement Act of 18 November 1997.

Critical Habitat. The geographic area on which are found those physical or biological features essential to the conservation of a species listed and published by the USFWS or NMFS under the authority of the ESA.

Ecological Reserve Areas. Those areas dedicated primarily or exclusively to preserving examples of ecosystems and genetic diversity and to scientific research and education on ecological and environmental problems. Guidance for selection and establishment of Ecological Reserve Areas is in reference (b).

Ecological Risk Assessment. A quantitative and/or qualitative appraisal of the actual or potential effects of a hazardous waste (HW) site on plants and animals other than people or domesticated species.

Ecosystem. A system formed by the interaction of a community of organisms with each other and the environment.

Ecosystem Management. Ecosystem management in DOD draws on a long-term vision of desired future ecological conditions, integrating ecological, economic and social factors. The goal of ecosystem management is to maintain and improve the sustainability and native biological diversity of ecosystems while supporting human needs, including the military mission.

Endangered or Threatened Species. A species of fauna or flora that has been listed by the USFWS or the NMFS for special protection and management under the ESA.

Environmentally and Economically Beneficial Landscaping. Landscaping, construction and design practices which support EO 13148, Greening the Government through Leadership in Environmental Management.

Essential Fish Habitat. (EFH) means the water and substrates necessary to fish for spawning, feeding, or growth to maturity.

Fish and Wildlife Management. Actions designed to preserve, enhance and regulate indigenous wildlife and its habitats, including conservation of protected species and non-game species, management and harvest of game species, BASH reduction, and animal damage control.

Forest Management. Actions designed for the production and sale of forest products and for maintaining the health and vigor of forest ecosystems. Actions include timber management, forest administration, timber sales, reforestation, afforestation, timber stand improvement, timber access road construction and maintenance, forest protection, and other directly related functions; and for maintaining the health and vigor of forest ecosystems.

Forest Products. All plant materials in wooded areas that have commercial value.

Game Species. Fish and wildlife harvested per applicable Federal and State hunting and fishing laws.

Geographic Information Systems (GIS). An organized collection of computer hardware, software, and geographic data designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced data.

Grounds. All land areas not occupied by buildings, structures, pavements, and other facilities. Depending on the intensity of management, grounds may be classified as improved, as those near buildings, semi-improved, or unimproved.

Habitat. An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies its life requirements.

Integrated Natural Resources Management Plan (INRMP). The INRMP is a long term planning document to guide the installation commander in the management of natural resources to support the installation mission, while protecting and enhancing installation resources for multiple use, sustainable yield, and biological integrity. The primary purpose of the INRMP is to ensure that natural resources conservation measures and military operations on the installation are integrated and consistent with stewardship and legal requirements.

Land Management. Programs and techniques to manage lands, wetlands, and water quality, including soil conservation, erosion control and nonpoint source pollution, surface and subsurface waters, habitat restoration, control of noxious weed and poisonous plants, agricultural outleasing, range management, identification and protection of wetlands, watersheds, floodplains management, landscaping, and grounds maintenance.

Multiple Use. The sustainable use of natural resources for the best combination of purposes to meet the long-term needs of the DOD and the public.

Natural Resources. Landforms, soils, waters, and their associated flora and fauna.

Natural Resources Coordinator. An individual who has been delegated the responsibility for implementing the INRMP

Natural Resources Damage Assessment. The process of collecting and analyzing information to determine injury to, or destruction of, or loss of, natural resources, and the assessment of damages for that injury, including the costs of assessing the injury, loss or destruction resulting from a past or present hazardous substance (HS) release or oil spill.

Natural Resources Management Procedural Manual (NRMPM). Reference (b), which provides comprehensive guidance for implementing requirements of pertinent laws, EOs, and Federal regulations, DOD directives, SECNAV and OPNAV instructions.

Natural Resources Management Professional. Individual with an undergraduate or graduate degree from an accredited university in a natural resources-related science and who has the responsibility for managing natural resources on a regular basis.

Non-game Species. Fish and wildlife species not classified as game species and that are not harvested for recreation or subsistence purposes.

Nonpoint Source (NPS) Pollution/Polluted Runoff. Pollution caused by diffuse sources that are not regulated as point sources; normally associated with runoff from construction activities, urban, agricultural and silvicultural runoff, and other land disturbing such as military training and operations that disturb lands, soils, and waters. NPS pollution can result from stormwater runoff, precipitation, atmospheric deposition, or percolation.

Noxious Weeds. Plant species identified by Federal or State agencies as requiring control or eradication.

Off-road Vehicle. A vehicle designed or used for recreational travel on natural terrain. The term excludes a registered motorboat confined to use on open water and a military, emergency, or law enforcement vehicle during use by an employee or agent of the government or one of its contractors in the course of carrying out their tasks.

Outdoor Recreation. Program, activity, or opportunity dependent on the natural environment. Examples are picnicking, bird-watching, hiking, wild and scenic river use, hunting, fishing, and primitive camping that will not impair or degrade natural resources.

Outdoor Recreation Management. Management of natural resources to provide recreation opportunities that are sustainable, within the military mission, within established carrying capacities, and consistent with the natural resources upon which they are based.

Projects, INRMP-related. Includes studies, plans, surveys, inventories, and land/water treatments as well as physical improvements, minor construction, and public relations described in the INRMP.

Proposed Species. Any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the ESA.

State Listed Species. Any species of fish, wildlife, or plant protected by an appropriate State agency as issued in a State's endangered species law and other pertinent regulations.

Stewardship. The responsibility to inventory, manage, conserve, protect, and enhance the natural resources entrusted to one's care in a way that respects the intrinsic value of those resources, and the needs of present and future generations.

Sustainable Yield. Production of renewable natural resources at a level such that harvest or consumptive use does not exceed net growth.

Watchable Wildlife Program. A national program designed to promote viewing areas for the American public to observe, experience and enjoy native North American wildlife and habitat.

Watershed. The ridge or crestline dividing two drainage areas; the area drained by a river or stream.

Wetlands. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, marshes, and bogs.

24-5 Requirements and Policies

a. **Stewardship Supporting Naval Readiness and Sustainability.** Responsibility for good stewardship of natural resources shall be an important and identifiable function of all commands. Each command shall establish procedures to continuously inform Navy decision makers of the conditions of natural resources, the objectives of INRMPs, and potential or actual conflicts between Navy actions/management plans and the requirements of this instruction. Commands shall recognize and balance environmental stewardship with mission readiness in retaining control and use of Navy land, sea, and air space for sustainment of mission needs and military readiness.

The policy of the Navy is to act responsibly in the public interest to restore, improve, conserve, and properly use natural resources on Navy-administered lands. There shall be a conscious and active concern for the inherent value of natural resources in all Navy plans, actions, and programs. Proposals for new and continuing actions that affect natural resources shall be coordinated with installation Natural Resources Managers (see reference (b)).

The Navy will also strive to protect and conserve natural resources throughout the land, sea, and air space areas in which the Navy operates.

b. **Ecosystem Management.** It is Navy policy to incorporate ecosystem management as the basis for planning and management of Navy installations. This approach shall take a long-term view of human activities, including military uses, and biological resources as part of the same environment. The goal is to preserve and enhance ecosystem integrity, and to sustain both biological diversity and continued availability of those resources for military readiness and sustainability and other human uses. Ecosystem-based management shall include:

(1) A shift from single species to multiple species conservation.

(2) Formation of partnerships necessary to consider and manage ecosystems that cross boundaries.

(3) Use of the best available scientific information and adaptive management techniques.

c. **Natural Resources Management.** Natural resources under the stewardship and control of the Navy shall be managed to support and be consistent with the military mission, while protecting and enhancing those resources for multiple use, sustainable yield, and biological integrity (see reference (c)). Land use practices and decisions shall be based on scientifically sound conservation procedures and techniques, and use scientific methods and an ecosystem approach.

d. **Navy NRM Program Goals.** The basic natural resources program goal is to support military readiness and sustainability. Commands shall accomplish the following when managing natural resources on Navy lands:

(1) Assign specific responsibility, provide centralized supervision and assign professionally trained personnel to this program; and provide natural resource personnel the opportunity to participate in NRM job-training activities and professional meetings.

(2) Protect, conserve, and manage the watersheds, wetlands, natural landscapes, soils, forests, fish and wildlife, prime and unique farmland, and other natural resources, as vital elements of a natural resources program.

(3) Manage natural resources to provide outdoor recreation opportunities.

(4) Use and care for natural resources in the combination best serving the present and future needs of the U.S. and its people.

(5) Provide for the optimum use of land and water areas and access thereto while maintaining ecological integrity.

(6) Interact with the surrounding community to develop positive and productive community involvement, participation and educational opportunities

e. **Integrated Natural Resources Management Plans (INRMP).** The INRMP is a long term planning document to guide the installation Commander in the management of natural resources to support the installation mission, while protecting and enhancing natural resources for multiple uses, sustainable yield, and biological integrity. Each installation having custody of Class I property (land and water) suitable for the conservation and management of natural resources will prepare (or ensure preparation of) and implement a comprehensive INRMP that fulfills the requirements of the Sikes Act. The primary purpose of the INRMP is to ensure that natural resources conservation measures and military operations on the installation are integrated and consistent with stewardship and legal requirements. Professionally trained personnel will prepare INRMPs to support the installation operational mission, meet stewardship and legal requirements, enhance the quality of life on the installation; and ensure installation resources are managed through an ecosystem approach. Cooperative agreements are authorized to implement these plans. Installation commanders will continuously monitor INRMPs, review them annually, and revise them as necessary. They will renew INRMPs at least every 5 years. Natural resources managers are encouraged to use geographic information systems as the basis of their INRMP and to use reference (d), “Conserving Biodiversity on Military Lands-A Handbook for Natural Resources Managers” as a basic reference document.

Sikes Act required INRMP elements, development and implementation processes are summarized below:

(1) **Required Plan Elements.** Consistent with military operations on the installation, each INRMP will, where appropriate and applicable, provide for:

(a) Fish and wildlife management, land management, forest management, and fish and wildlife-oriented recreation. Fish and wildlife habitat enhancement or modifications.

(b) Wetland protection, enhancement, and restoration.

(c) Integration of, and consistency among, the various activities conducted under the Plan.

(d) Establishment of specific natural resources management objectives and time frames for proposed actions.

(e) Sustained use by the public of natural resources for recreation to the extent that such use is consistent with the needs of fish and wildlife management and subject to installation safety and security requirements.

(f) Enforcement of natural resources laws and regulations.

(g) No net loss in the capability of military lands to support the military mission of the installation.

(2) **Authorship.** Priority should be given to preparing the INRMP in-house by installation natural resources personnel and coordinating it with the appropriate EFD/EFA wherever possible. If commands must contract for plan preparation, it is critical that the installation natural resources coordinator maintain a sufficient level of quality control to ensure proper coordination and ease of implementation of the plan, and that it addresses the appropriate issues.

(3) **Coordination and Review.** Installations are encouraged to work with other organizations, agencies, and individuals both on and off the installation throughout the planning process. Building partnerships with the right organization(s) is essential for ecosystem management. Coordination of preparation of the INRMP with installation personnel responsible for military operations is especially critical.

(4) **Cooperative Preparation.** The Sikes Act requires preparation of INRMPs in cooperation with the USFWS and the appropriate State Fish and Wildlife Agency. The act requires that the INRMPs reflect mutual agreement of the parties concerning the conservation, protection, and management of covered fish and wildlife resources. A MOU between installation, USFWS, and State may serve to address the responsibilities, expectations, and commitments of the various partners. Mutual agreement on the INRMP by USFWS and state officials can be documented by an MOU, signatures of the appropriate official on the title page of the INRMPs, or letters of endorsement attached to the INRMP.

(5) **NEPA Documentation.** In accordance with reference (e) NEPA documentation is required before approval of all new or newly revised INRMPs. Under normal circumstances, an EA will suffice. However, if the goals, objectives, or essential projects identified in the INRMP will have a significant

environmental impact, an EIS may be required. Reference (f) contains guidelines for preparing NEPA documents for INRMPs.

(6) **Public Involvement.** Installations shall provide an opportunity for the submission of public comments on INRMPs. These comments will be incorporated when possible and applicable.

(7) **Endorsement.** The INRMP Title page shall include a signature block for the installation commanding officer, installation natural resources manager/coordinator, regional commander, and the EFD/EFA natural resources manager to reflect concurrence and acceptance of the Plan. Copies of completed INRMPs should go to the BSO environmental office.

(8) **Implementation.** INRMPs shall reflect an annual strategy that addresses legal requirements, other priorities, funding, and manpower. The installation, BSO, or COMNAVFACENGCOM natural resources fund sources should provide funding. A Sikes Act Cooperative Agreement, developed with State agencies, universities, non-governmental organizations, and individuals, typically provides a vehicle to accomplish work addressed in the INRMP. Other options include contracts, in-house self-help processes, and use of volunteers from conservation programs such as the Student Conservation Association.

(9) **Record Keeping and Reporting.** Commands should endeavor to keep a narrative and photographic record of projects implemented through the INRMP to document accomplishments and facilitate monitoring programs and data calls.

(10) **Updating INRMPs.** INRMPs shall be reviewed annually, and updated at least every 5 years. Commands should acquire the services of the cognizant EFD/EFA for technical assistance.

f. **Evaluation of Need for an INRMP.** BSO and Regional Natural Resources Managers (NRM) shall determine if their installations require preparation and implementation of an INRMP. They should accomplish this evaluation with technical assistance from the cognizant EFD/EFA natural resources manager and should base it upon a minimum of one site visit to assess installation natural resources. The evaluation should take into account military uses of the area and capacity to support the mission; acreage, habitat types, and special natural features; aesthetics and outdoor recreational opportunities; the ecological context of the installation and the local community relationship. If the BSO and Regional NRM determine that an INRMP is not required or is to be consolidated with another installation in the region, it shall document this determination and provide it to CNO (N45) with a copy to COMNAVFACENGCOM. Even if the BSO does not require an INRMP for a particular installation, it may consider it prudent to address natural resources stewardship issues in a less formal document. A BSO must re-evaluate an installation without an INRMP every 5 years to reconsider its status. Relief from INRMP requirements does not negate the need for natural resources compliance nor does it preclude the need for natural resources project funding.

g. **Funding for Natural Resource Programs.** Funding to implement an INRMP is an important responsibility of Navy commands and shall be included in installation Program Objective Memorandum (POM) submittals. Funds may be available from other sources such as agricultural out-leasing, forestry programs, Sikes Act user fees, Moral Welfare & Recreation (MWR), and the Legacy Resource Management Program to supplement portions of these programs, but the funding for natural resource compliance projects should be reflected in POM requirements.

h. **Pesticide Use in NRM Programs.** If any multiple-use program of land management involves pesticides, users will ensure that use complies with applicable requirements. Consistent with chapter 13, pesticide use will be minimized. Coordinate pesticide use with the installation and supporting NAVFAC pest management personnel.

i. **Public Access Associated with the NRM Program.** The INRMP will address the appropriate level of public access for recreational opportunities consistent with installation security, military mission and sustainable natural resources management objectives.

j. **Access by Federal and State Conservation Officials.** Commanders shall permit Federal and State Conservation Officers access to enforce natural resources laws after taking proper safety and security measures. Assistance from Federal and State Conservation Officers should be solicited with any existing or proposed Wildlife Law Enforcement Program on the installation.

k. **Coastal Zone Management.** See chapter 25 for policy and guidance on ensuring that Navy activities with the potential to affect coastal uses or resources are in full compliance with the Federal consistency provisions of the Coastal Zone Management Act (CZMA) (additional guidance is provided in reference (g)).

(1) **Support of State Programs.** Navy shall support, as applicable, the conservation requirements detailed in approved State Coastal Zone Management Plan. The Navy shall encourage research and development efforts to address nonpoint sources of pollution to identify and understand Navy impacts on the coastal and marine environment.

(2) **Consistency with Coastal Zone Plans.** The CZMA, reference (h), requires that Navy installations ensure their operations, activities, projects, and programs in or on coastal lands or waters that affect coastal zones, comply with the coastal State's approved management program to the maximum extent practicable and shall cooperate in resolving concerns identified during the consistency review process.

(3) **Protection of Coastal Barriers.** Before construction, maintenance, military activities, or other Federal expenditures may take place in designated Coastal Barrier Resources, the Navy is required to consult with the Secretary of the Interior. Navy installations may expend funds in areas designated as coastal barriers only for uses which include military activities essential to national security, projects for the study, management, protection and enhancement of natural resources, scientific research, essential emergency actions, maintenance (but not expansion) of publicly owned structures, and non-structural projects for shoreline stabilization (see Coastal Barrier Resources Act of 1982, 16 U.S.C. 3505).

(4) **Protection of Coral Reefs.** The Navy recognizes that coral reefs and related endemic mangrove and sea grass ecosystems are biologically rich and diverse habitats. High priority should be given to the protection of these resources in accordance with Executive Order 13089 and DOD and Navy policy statements and DoD Implementation Plan on coral reef protection. The identification and conservation of coral reefs should be addressed in INRMPs, where appropriate, to ensure their protection. The Navy will avoid impacting coral reefs (see EO 13089). Any action that is likely to adversely affect a U.S. coral reef system or that may qualify as an exemption under the E.O. shall be promptly reported to CNO (N45).

(5) **Ecological Reserve Areas.** Recognizing the national and international need to maintain areas in natural and near-natural conditions, and the need to have available such areas for baseline research and scientific manipulation, natural areas on Navy lands that warrant special conservation efforts may be identified as Ecological Reserve Areas. These special natural areas should include characteristic or outstanding botanical, ecological, geological, and scenic features or processes. Any proposals to designate ecological reserve areas on Navy installations shall be approved by the BSO and CNO (see reference (i)).

l. **Nonindigenous Organisms.** The Navy shall prevent the introduction of non-native organisms into natural ecosystems. Section 19-10, Ship Ballast Water and Anchor System Sediment Control provides measures to prevent such aquatic introductions, as mandated by the National Invasive Species Act of 1996 (P.L. 104-332). This law mandates the establishment of an Armed Forces Ballast Water Management Program to prevent such introductions.

24-6 Fish and Wildlife

a. **Fish and Wildlife Management.** It is Navy policy to comply with applicable laws for the pro tection and management of wildlife resources, and to develop, where compatible with the mission, programs for the development, enhancement, and use of wildlife resources. Where appropriate, the Navy shall perform those programs under cooperative agreements with State and Federal wildlife agencies.

b. Policy and guidance on complying with the Marine Mammal Protection Act and the En dangered Species Act for naval exercises and training activities at sea is contained in the Undersecretary of the Navy's memorandum on "compliance with environmental requirements in the conduct of naval exercise or training at sea," of 20 December 2000.

c. **Endangered Species.** The Navy shall, in consultation with the USFWS and NMFS, ensure that any action authorized, funded or carried out by Navy that "may effect" protected species or critical habitat is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat. Such consultations can be either formal or informal (see reference (j)).

(1) **Biological Assessment.** When necessary, the Navy will prepare a Biological Assessment (BA). The BA evaluates the effects of a proposed action on listed and proposed species and designated and proposed critical habitat. This document assists in the determination whether the action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. All BAs that may affect Fleet training and/or operations shall be approved by the BSO and the Regional Environmental Coordinator prior to sending to regulatory offices such as NMFS (Note for Marine Mammals see special provisions below) and USFWS. It is recommended that EFD/A expertise is utilized in development of the BA. In addition, the Navy will use its authority to further pro grams for the conservation of endangered and threatened species.

(2) **Approval from Chain of Command on Endangered Species Issues.** To ensure that proper budgeting and planning is conducted to support ongoing and new natural resources efforts (consistent with Section 7(a)(1) of the Endangered Species Act) for the conservation of endangered and threatened species on Navy Lands, and to ensure that Navy lands will remain available to support the

military mission, review and approval by the chain of command, including the BSO and CNO (N45) is required prior to introducing or committing to introduce species that are by federal or state law or regulation endangered, threatened, proposed, or candidate for listing on a Navy installation. Approval is also required by the chain of command, including the BSO and CNO (N45) prior to commencing or committing to commence habitat enhancement designed to actively promote introduction of federally or state listed endangered, threatened, proposed, or candidate species to a Navy installation or any Navy lands. Availability of funds, ongoing and planned stewardship efforts, and consistency with Navy mission will be key considerations in evaluating requests from field commands. Requests must also identify the need for and extent to which documentation is required pursuant to the National Environmental Policy Act. The approval process described above in no way alters the Navy commitment to use its authority to enhance the recovery of listed endangered and threatened species and their habitats.

(3) **Surveys.** The Navy shall conduct surveys of federally listed threatened or endangered, proposed and candidate species, review its mission activities, identify those that may affect federally listed species or habitats, and consult formally or informally with the appropriate agency as required.

d. **Marine Mammals.** The Marine Mammal Protection Act (MMPA), subject to limited exceptions, prohibits any person, (including Federal agencies) or vessels subject to the jurisdiction of the United States from "taking" marine mammals on the high seas, in U.S. waters or on land under the jurisdiction of the U.S. "Taking" includes the "harassment" of a marine mammal. Section 101(a)(5) of the MMPA directs the Secretaries of Commerce and Interior to allow upon request, the incidental (but not intentional) taking of marine mammals by U.S. citizens who engage in a specified activity (exclusive of commercial fishing) within a specified geographical region if certain findings are made and regulations are issued (see reference (k)). Permission may be granted to "take" marine mammal(s) incident to Navy activities if the regulatory agencies Secretary determines that the Navy action will: 1) have a negligible impact on the species or stock(s); and 2) not have an umitigatable adverse impact on the availability of the species or stock(s) for subsistence uses (permitting procedures are contained in reference (l)). Marine mammals may also be subject to the Endangered Species Act requirements discussed above.

(1) The Navy will continue to avoid or minimize adverse impacts to marine mammals. Navy vessels shall report marine mammal strikes in accordance with guidelines found in chapter 19. Navy commands will evaluate their proposed actions that may affect marine mammals and determine whether it is likely that marine mammals will be taken.

(2) If the action proponent determines that a permit is required because "takes" are likely, before contacting regulatory agencies or officials regarding Navy generated noise and its effects on marine mammals, either on land or in the water, the action proponent must notify and receive concurrence from CNO (N45) via the chain of command. The proponent must also notify the appropriate Regional Environmental Coordinator Staff. In addition, prior to release to any outside agency or the public of any documents containing analysis of sound effects on marine mammals, hard and electronic copies of pre-final documents shall be submitted to CNO (N45) via the chain of command for review and concurrence. This pre-final document review shall occur only after appropriate legal and technical review by the BSO. Types of documents containing such an analysis subject to CNO (N45) review include, but are not limited to, Biological Assessments, Incidental Harassment Authorization applications, and Overseas Environmental Assessments involving sound in the water. Review of documents by CNO (N45) will be completed within 10 working days of receipt. To ensure timely review and comment, the BSO POC must verify with CNO (N45) the receipt of the documents to be reviewed. Comments must be resolved by the BSO before submission to appropriate agencies for their review.

e. **Recreational Fisheries.** As applicable, Navy installations shall incorporate into natural resource management planning provisions for habitat restoration projects, public access where feasible, and participation in outreach programs for recreational fisheries. In keeping with E.O. 12962, Federal agencies shall improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities by restoring degraded habitat, fostering conservation, providing access and awareness of opportunities for recreational fishing.

f. **Essential Fish Habitat (EFH).** Under the provisions of the Magnuson-Stevens Fishery Conservation and Management Act, as reauthorized by the Sustainable Fisheries Act Amendments, Federal agencies must consult with the National Marine Fisheries Service (NMFS) prior to undertaking any actions that may adversely affect EFH. Federal agencies retain the discretion to determine what actions fall within the definition of "adverse affect." It is OPNAV policy that temporary or minimal impacts, as defined below, are not considered to "adversely affect" EFH. "Temporary impacts" are those that are limited in duration and that allow the particular environment to recover without measurable impact. "Minimal impacts" are those that may result in relatively small changes in the affected environment and insignificant changes in ecological functions. Note that even minor, localized effects can be adverse when the reduction in the quality and/or quantity of EFH is not insignificant. Types or categories of Navy actions may be removed from further consultation requirements if NMFS determines that they will likely result in no more than "minimal adverse effects" individually or cumulatively using the general concurrence process contained in reference (l). Action proponents shall coordinate general concurrence requests of national or regional scope with CNO (N45) and the appropriate Regional Environmental Coordinator staff via the chain of command.

g. **Bald and Golden Eagles.** It is illegal for anyone to take a bald or golden eagle. The Navy, as a Federal agency, must cancel any lease, license, or other agreement that authorizes grazing of domestic livestock by anyone convicted of a bald or golden eagle violation.

h. **Migratory Birds.** Navy installations shall coordinate with the USFWS to minimize the effects of actions that may harm or kill migratory birds listed in reference (m), their young, or eggs. Contractors must have the appropriate permits when performing work for the Navy.

i. **Fish and Wildlife Coordination.** When the Navy proposes to take an action that modifies any stream or body of water, the Fish and Wildlife Coordination Act requires that Navy installations first consult with the USFWS and the cognizant State wildlife agency with a view to the conservation of wildlife resources possibly affected by the proposed action. Recommendations of the USFWS and State must be included in reports to Congress or to persons authorizing the construction. The Navy must fully consider the wildlife aspects of the proposed action. This is not applicable to activities in connection with programs primarily for land management and use carried out by Federal agencies with respect to Federal lands under their jurisdiction which may require separate regulatory actions.

j. **Fish and Wildlife Conservation.** Congress directs all Federal agencies to use their statutory and administrative authority, to the maximum extent practicable and consistent with each agency's responsibilities, to conserve and to promote conservation of non-game fish and wildlife and their habitats

k. **Fish and Wildlife Management.** Navy installations will obtain the services of a professional biologist for management of fish and wildlife resources. When contracting fish and wildlife work on

military-controlled lands, installations will give priority to Federal and State agencies having responsibilities for conservation and management of fish and wildlife. Where installations collect fees or proceeds from hunting, fishing, aquaculture, mariculture, and trapping, they will use the fees only for funding or supplementing wildlife management programs. Uses may include funding of partnerships, cooperative and research agreements with appropriate agencies.

l. **BASH Program.** Naval air installations Safety and Air Operations Offices shall ensure BASH plans are prepared and implemented. BASH plans should be prepared in close cooperation with the installation Safety and Air Operations Officers. Reference (b) details basic guidance for the preparation of BASH plans. Personnel responsible for BASH programs should ensure that bird strike reporting and information exchange is closely coordinated with the Naval Safety Center. The NAVFAC BASH Biologist is available to assist with the development of BASH Plans, Implementation of BIRDRAD, and other BASH related requirements. The Naval Safety Center has a web site with additional BASH information.

m. **Feral Cat and Dog Control.** Feral or free/free-ranging domestic cats and dogs are considered by the professional wildlife management community to be exotic species to North America. Professional wildlife managers recognize exotic and invasive species as one of the most widespread and serious threats to the integrity of native wildlife populations and natural ecosystems. Existing policy put forth in paragraph 4-2c(4) of reference (n) states “Dogs, cats and other privately-owned or stray animals will not be permitted to run at large on military reservations.” Consistent with this policy, Navy commands must ensure the humane capture and removal of feral cats and dogs on their lands.”

Due to the potential of feral or free ranging cat populations to act as disease reservoirs, threatening human health, native wildlife populations and natural ecosystems, Navy commands shall not allow Trap Neuter Release (TNR) or similar programs on their lands.

Prevention of feral cat and dog populations requires close coordination and cooperation between natural resources, pest management, security, veterinary, and housing personnel to develop and implement an effective and humane removal programs. Navy Commands should work closely with local animal control agencies to determine the best approach for the ultimate disposition of the captured animals.

24-7 Land Management

a. **Land Management Issues.** When appropriate, INRMPs shall address land management issues such as ecosystem management, wetlands and watersheds, estuaries, soil and water conservation, biodiversity, grounds maintenance, nonpoint source pollution control, landscaping, agricultural uses and potential, fire management, insect and disease management, rangeland conditions and trends, management for multiple use, and critical or unique coastal barrier systems, coral reef systems, critical habitats and other areas of special interest.

b. **Funding.** Funding for land management activities may be provided from appropriated and reimbursable funding sources. Compliance activities are funded from appropriated O&M,N account while limited reimbursable funds may be available for stewardship activities. Revenues from the agriculture and grazing outlease program are available for:

(1) Administrative expenses of agricultural leases. The Navy shall give priority to funding natural resources professionals directly responsible for the administration of agricultural programs.

(2) Initiation, improvement, and perpetuation of agricultural outleases.

(3) Implementation of related INRMP stewardship projects. Navy installations with land management programs will obtain the services of a natural resources professional for guidance of land management programs such as grounds maintenance, landscaping, wetland protection and enhancement, erosion control, nonpoint source pollution prevention and agricultural outleasing.

c. **Wetlands Protection.** Section 404 of the CWA prohibits discharges of dredged or filled material into waters of the U.S., including wetlands, without first obtaining a permit from the U.S. Army Corps of Engineers (COE), reference (o). The Navy will comply with the national goal of no net loss of wetlands, and will avoid loss of size, function and value of wetlands. In addition, the Navy will preserve and enhance the natural and beneficial values of wetlands in carrying out its activities. In order to comply with the "No Net Loss of Wetlands Policy" of the Navy, commands with land management responsibilities shall ensure the following:

(1) That the Navy plan all construction and operational actions to avoid adverse impacts to or destruction of wetlands. Any construction requirement that cannot be sited to avoid wetlands shall be designed to minimize wetlands degradation and shall include compensatory mitigation as required by wetlands regulatory agencies in all phases of the project's planning, programming, and budgeting process. Within this policy, use of Navy lands and lands of other entities are permissible for mitigation purposes for Navy projects when consistent with EPA and COE guidelines or permit provisions. Requests by non-Navy entities to mitigate the effects of non-Navy projects on Navy property should be reviewed on a case-by-case basis for their effect on Navy mission, the environment, and appropriateness of economic compensation to the Navy for the long-term use of the site, all such projects need to be approved by the chain of command.

(2) That any action significantly affecting wetlands is addressed by the environmental review and public notification process per Chapter 5.

(3) That boundaries of legally defined wetlands, on all Navy lands, are identified and mapped with sufficient accuracy to protect them from potential unplanned impacts, and that the maps are distributed to all potential users, including facilities planners, operational units, and tenant commands. Wetland maps suitable for planning actions are available through the EFD/As in GIS format. Jurisdictional maps may be required prior to actual construction if there is any potential of wetlands present in the vicinity of the project. Field verification and jurisdictional determinations should be required for all projects. This determination should be coordinated with Natural Resources personnel.

(4) That adequate NRM expertise is available to installation commanding officers (COs) for the protection, management, identification, and mapping of wetlands.

(5) That implementation of wetlands creation or enhancement projects and wetlands banking, where compatible with the installation mission, is encouraged. Identification of potential wetland mitigation sites should be included as part of INRMPs.

d. **Nonpoint Source Pollution.** Section 319 of the CWA describes guidelines for the control of nonpoint source pollution. These guidelines assign the States responsibility to implement nonpoint source pollution best management practices. Federal consistency provisions also authorize States to review Federal activities for consistency with State nonpoint source programs. Section 6217 of the CZMA establishes authority for States to administer coastal nonpoint pollution programs when approved by National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA). The Navy shall support and accelerate the development and implementation of NPS pollution management programs that ensure water quality protection. The Navy shall place special emphasis on preventing NPS pollution from ground disturbing actions (e.g., construction, farming, and timber harvesting activities) in shoreline/streamside areas. Installations that control land areas shall evaluate the scope of nonpoint source pollution with assistance from EFDs/EFAs. INRMPs should be used as a primary tool for identifying NPS problem areas, specifying corrective measures, and coordinating nonpoint source compliance planning with State coastal and nonpoint source programs when addressing land management issues.

e. **Agriculture.** The Navy shall identify lands that are suitable for agricultural outlease purposes when compatible with military needs. Each agricultural outlease must include a conservation plan which details the best management practices to protect the natural resources and government interests under the lease. NAVFAC provides the technical and administrative functions of this program in accordance with reference (p). Chapter 19 of reference (q) outlines procedures for the administration of rent receipts received from lessees. Navy installations shall identify and minimize the adverse effects of their actions on prime and unique farmlands in accordance with reference (r).

f. **Soil Conservation.** Federal agencies must manage lands to control and prevent soil erosion and preserve natural resources by conducting surveys and implementing soil conservation measures.

g. **Control of Noxious Weeds.** Navy installations will cooperate with States in which there is a program for controlling noxious plants, and will provide access for that control, provided that: access is consistent with installation security procedures, control measures are acceptable and control measures have been implemented on privately owned adjacent lands.

h. **Floodplain Management.** The Navy will provide leadership in avoiding direct or indirect development of flood plains, and in restoring and preserving the natural and beneficial values served by floodplains. The Navy must evaluate potential effects of actions in floodplains and provide early opportunity for public review of proposals in floodplains.

i. **Environmentally and Economically Beneficial Landscaping.** Navy installations shall support the goals of EO 13148, Beneficial Landscaping, on all new or extended landscaped areas and shall consider native plants when replacement or rejuvenation of existing landscaping is required. Because the Federal Government owns and landscapes large areas of land, our stewardship presents opportunities to develop practical and cost-effective methods to complement and enhance our local surroundings by employing landscaping practices and technologies that conserve water and prevent pollution. To promote the President's April 26, 1994 Memorandum on Environmentally Beneficial Landscaping, it is Navy policy to:

(1) Use regionally native plants for landscaping,

(2) Design, use and promote construction practices that minimize adverse effects on natural habitat,

(3) Prevent pollution by reducing fertilizer and pesticide use, integrated pest management practices, recycling green waste (composting) and minimizing runoff,

(4) Implement water-efficient practices, use efficient irrigation systems and recycled water, and use landscaping to conserve energy,

(5) Create demonstration projects to promote awareness of environmental and economic benefits of these practices.

These landscaping practices should benefit the environment and generate long-term cost savings. The use of native plants not only protects our natural heritage and provides wildlife habitat, but can also reduce fertilizer, pesticide, and irrigation demands and their associated costs.

j. **Invasive Species.** Navy installations will prevent the introduction of invasive species and provide for their control per E.O. 13112. The Navy will identify actions that affect the introduction of invasive species, prevent their introduction, respond rapidly to their control, monitor populations, restore affected native species and their habitat, conduct research and develop technologies to prevent further introductions, and promote public education of the issue. The Navy will not authorize, fund, or implement actions that are likely to cause or promote the introduction or spread of invasive species in the U.S. or abroad. Proper ecosystem management requires the control of noxious weeds, aquatic nuisance species, and other invasive species. Use of native plants in landscaping, grounds maintenance, and land restoration projects is required. Installation natural resources managers shall ensure that invasive species prevention recommendations are incorporated into new construction programs and operations. Land or ecosystem restoration projects shall require the use of native species only. Natural resources managers shall monitor invasive species populations and identify areas where research and new technology may be needed to better control invasive species in the military environment.

24-8 Forest Management

a. **Management of Navy Forests.** Navy forest management shall maintain and improve the economic and ecological value, health and diversity of the forest resources and related ecosystems. Such management actions shall produce financial returns to the government, and contribute commercial forest products to the economy. It is Navy policy to manage forestlands by restoration, enhancement, and improvement of forest resources. The Navy shall accomplish this through an active program of professional forest management, based on soil-site capabilities, in a multi-disciplinary, ecologically sound manner. Navy forest management shall include, as appropriate, harvest, reforestation, afforestation, and silvicultural treatments that shall foster forest health and vigor, structural and biological diversity, and regeneration.,

Installations with forests or lands with the potential for the growth and production of forest products will provide for optimum sustainable yield of forest products and the improvement of forest resources, consistent with the military mission and installation INRMP. INRMPs will, when appropriate, include current forest inventories, conditions, trends, and potential uses; silvicultural goals; maintenance of forested areas and access roads; forest and stand improvement methods; harvesting and reforestation methods and schedules; and protection and enhancement of other natural resources. All Navy installations with commercial forestry programs shall employ or use a professional forester to manage forest resources. This includes preparation and oversight of all forestry service and sales contracts and monitoring the use of reimbursable forestry funds provided to support the program. NAVFAC provides the technical and administrative functions of this program in accordance with reference (p).

b. **Use of Clearcutting.** Installations shall use clearcutting as a standard harvest management practice only where essential to meet specific forest plan objectives, as defined in the installation-specific INRMP, or for cleanup of natural catastrophes such as hurricanes, tornadoes, wildfires, etc. The Navy shall judiciously use alternative harvest methods, instead of clearcutting, whenever possible.

c. **Management of Late Successional Forests.** The harvest of mature/late successional forests shall be based on balanced economic, social, and environmental values identified during the management/planning process. It is Navy policy to maintain old-growth forests in their natural state to preserve their biological, scientific, and aesthetic benefits.

d. **Product Sales.** Navy contracts for sale of forest products will include requirements for orderly harvesting, operational procedures, and payment for sold products. The Navy will not give away, nor abandon, nor carelessly destroy forest products, nor use them to offset costs of contracts, nor trade them for products, supplies, or services. Proceeds collected from the disposal or sale of all merchantable forest products produced on a Navy installation will be turned over to the servicing Navy accounting and finance officer and deposited in the Navy Forestry Account. For each installation generating forest product sales, records will be kept to show sales proceeds generated by fiscal year for determining payments to States, as required by 10 U.S.C. 2665. Criteria and procedures for administering timber sale contracts are contained in Chapter 3 of reference (b).

e. **Accounting and Use of Forestry Proceeds.** Navy installations or commands incurring obligations for the production and sale of forest products shall receive reimbursement from collections made from the sale of such products. Forest management program obligations must be related directly to the economic production and sale of forest products and the enhancement, protection, conservation and

management of Navy forests. These anticipated program expenses must be identified in the installation or command Annual Increment each year. Insofar as they meet this test, obligations may include funding of cooperative agreements and research agreements with appropriate agencies. Reimbursable program obligations do not include expenses incurred for operations that, while related to the land and forest, are for other purposes, nor do they include expenses for the protection of forests that are incapable of economic production of forest products. Nonessential program expenses will be limited to ensure a balanced program as required by reference (s), reference (t) and Chapter 3 of reference (b).

f. **Export Lumber.** The 1990 Forest Resources Conservation and Shortage Relief Act (16 U.S.C. 620 et seq.) prohibits the export of unprocessed timber originating from Federal lands west of the 100th meridian in the contiguous 48 States and restricts substitution of unprocessed Federal timber for timber exported from private lands. All Navy solicitations and contracts for timber sales affected by this statutory limitation will contain a provision restricting the export of unprocessed timber obtained on Navy lands.

g. **Forest Pest Suppression.** Navy shall cooperate fully in the planning, coordination, and execution of field operations to prevent and suppress damaging forest insect and disease outbreaks, consistent with the terms of the Forest Pest Suppression Memorandum of Agreement (MOA) between the Department of Agriculture and the DOD of 11 December 1990, and whenever it is determined to be necessary by either the Regional U.S. Forest Supervisor or cooperating State forestry department or commission.

24-9 Outdoor Recreation

Opportunities for natural resources-based outdoor recreation improve quality of life for Navy personnel, allow close partnership with the local community, improve knowledge of the natural world and the Navy's stewardship of natural resources. It is Navy policy to provide outdoor educational and recreation opportunities appropriate to the mission and the resources of the installations. Through their INRMP, installations are encouraged to develop their own programs and cooperate with other groups in programs such as Watchable Wildlife. Natural resources managers are encouraged to continue the development and enhancement of hunting, fishing, and other outdoor uses of natural resources by the disabled. The Sikes Act requires that installations provide public access for natural resources uses to the extent it is appropriate and consistent with the military mission and in accordance with the INRMP.

a. **National Park Service.** A Memorandum of Understanding (MOU) between the Department of Defense and the Department of the Interior provides guidance on the management of natural resources for outdoor recreation. Cooperative agreements with the National Park Service, in conjunction with the INRMP, are the mechanism for a program of planning, development, maintenance, and coordination of outdoor recreation on Navy lands.

b. **Off-Road Vehicles.** Off-road recreational vehicle use on Navy land is permissible only on designated areas and trails. See Chapter 5 of reference (b) for policies, procedures, and criteria for establishing designated off-road areas and trails.

24-10 Environmental Restoration

a. **Natural Resources Damage Assessments (NRDA).** Navy policy is to restore, rehabilitate, or replace natural resources within its management or control injured by spills of oil or hazardous substances. Entities designated as natural resource trustees must determine the injury to and loss of natural resources that occur as the result of a release of hazardous substances or oil. Chapter 26 more fully discusses these requirements.

b. **Ecological Risk Assessments (ERAs).** The Navy shall use natural resources professionals, familiar with the site and trained in NRDA, to assist in assessing ecological risks in site cleanup decisions. Where sensitive habitats are involved, they shall also review sites and work plans, evaluate contractor qualifications, and assist in remedial action and site restoration planning.

24-11 Natural Resources Miscellaneous

a. **Natural Resources Awards.** Navy installations are encouraged to participate fully in the Navy, DOD, and other awards programs open to them, in order to promote conservation and demonstrate a leadership role in protecting the environment. Guidance on military awards programs is included as appendix D.

b. **Partnerships.** Navy installations shall encourage the use of partnerships and volunteers to complete projects under the direction and approval of Navy professional natural resources personnel. Programs that foster pride in accomplishment among volunteers, partners and the Navy are encouraged. Examples of effective partnership programs are Coastal America, Partners in Flight, Student Conservation Association, and the Chesapeake Bay Initiative.

c. **Use of Volunteers.** Navy installations shall use appropriate volunteers to enhance natural resource conservation programs whenever practicable. Professionally trained natural resources managers shall direct the performance of this work, following procedures and guidelines described in 10 U.S.C. 1588(a)(2).

d. **Ecological Reserve Areas.** Any proposals to designate ecological reserve areas on Navy installations shall be approved by the BSO and CNO.

e. **Enforcement of Resource Protection Laws.** Enforcement of laws, primarily aimed at protecting natural resources (and recreation activities that depend on natural resources) shall be an integral part of a natural resources program and shall be coordinated with or under the direction of the natural resources manager for the affected area. Natural resources law enforcement training shall be budgeted for, and each installation with hunting, fishing, or protected species shall ensure trained personnel are available.

f. **Natural Resources Data Call Station.** The Natural Resources Data Call Station is a web-based/on-line tool for submitting, compiling, and retrieving information about the NRM Program. The goal is to obtain and maintain the most current information possible to track the status of various natural resources programs and to have current data to respond to various program inquiries and generate accurate reports. BSOs must assign a specific installation point-of-contact to keep the system up to date.

24-12 Training

Every person preparing, implementing, supervising and managing natural resources programs shall receive environmental and natural resources training outlined in chapter 28 of this instruction. They shall receive comprehensive natural resources training specific to their job assignment, and familiarize themselves with the provisions of this chapter and the procedures outlined in reference (b). Continued professional training shall be an integral part of responsible NRM and BASH.

24-13 Responsibilities

22-13.1 CNO (N45) shall serve as principal leader, overall Navy program manager and advisor for the Navy in matters related to NRM and, including but not limited to:

(a) Ensure an adequate, Navy-wide organizational capability at headquarters and in the field to meet the demands and challenges of natural resource management dictated by DOD and legislative requirements.

(b) Ensure the programming of resources necessary to establish and maintain an integrated natural resources program consistent with legislative requirements, DOD policy, and stewardship of Navy lands and resources.

(c) Provide policy needed to establish and maintain a program for the management, conservation, and enhancement of natural resources on Navy lands.

(d) Coordinate and ensure resolution of natural resources issues affecting the Navy mission.

(e) Provide a natural resources professional to serve on the DOD Conservation Committee.

(f) Coordinate pertinent aspects of the Navy Natural Resources Program and issues with headquarters elements of other Federal agencies, military services, and other environmental organizations.

(g) Make staffing recommendations for natural resources personnel, including designation or assignment of Navy natural resources representatives for DOD, DON or other natural resources working groups, initiatives, commitments of programs.

24-13.2 Regional Commanders/Area Coordinators shall report new conservation regulatory requirements (i.e. proposed listings of threatened and endangered species, proposed critical habitat restrictions, biological opinions, NEPA mitigation measures, etc,) via the chain of command, in coordination with the EFDs/EFAs and NAVFACHQ, to (N45) that impact Naval readiness and sustainability. This assessment may be accomplished via the Natural Resources Data Call Station or by written report by 15 November for the preceding fiscal year. This assessment should be very detailed on the particular impacts on readiness, sustainability and training (for instance to include: days of training lost due to Natural Resources Restrictions, endangered species impacts and costs for mitigation and protection, limitations on night operations, limitations on training capability, costs of mitigation related to endangered species, migratory birds, and any other issues or impacts that are important to Navy to support overall readiness and sustainability etc.).

(a) Participate in the preparation of INRMPs for installations within their area of cognizance. Coordinate an ecosystems approach to NR Management and INRMP development with other military services.

(b) Endorse INRMPs and promote and coordinate their implementation with the appropriate BSO and EFD/EFA.

(c) Advise CNO (N45) of situations that require national-level coordination with other Federal agencies.

(d) Maintain close liaison with CNO (N45), COMNAVFACENGCOM and EFDs/EFAs, to promote and ensure regional efficiencies.

(e) Use the services of the EFDs/EFAs for preparation/implementation of INRMPs, development/administration of Cooperative Agreements and contracts, and other natural resources support, as needed.

(f) Evaluate and validate POM submittals and other requests for funds for Natural Resources projects.

24-13.3 COMNAVFACENGCOM shall:

(a) Serve as Navy Natural Resources Technical Program Manager. Assist BSOs in implementing Navy policy to ensure stewardship of Navy lands and resources and compliance with natural resources laws and regulations

(b) Provide technical expertise to evaluate and validate POM submittals and other requests for funds for natural resource projects.

(c) Provide technical assistance to develop and implement, in conjunction with CNO (N45) sponsorship, a Navy-wide Natural Resources Conference every year for Navy Natural Resources Personnel.

(d) Assist BSOs in implementing policy for managing and conserving soil, water, forest, land, grounds, fish and wildlife, wetlands, floodplains and natural areas.

(e) Determine the potential for NRM programs on installations that contain land and water areas suitable for the conservation and management of natural resources.

(f) Gather information from installations, EFDs/EFAs, and BSOs; maintaining NRM Program information needed to satisfy reporting requirements, legislative information requests and to support project requests in a Natural Resources Data Center.

(g) Provide professional staffing on a regional basis via the EFDs/EFAs to:

(1) Implement program management guidance and appropriate Navy-wide instructions for INRMPs.

(2) Approve budgets and plans for management of Navy forests and allocate forestry program funds. A report showing the expenditures, purposes for expenditures and all uses of forestry funds shall be forwarded once per year to CNO (N45). This report is due by 15 December.

(3) Manage and allocate agricultural outlease funds from proposals endorsed and validated, by the region, BSOs and NAVFAC, for all projects and other requests for these funds. A report showing the expenditures, purposes for expenditure and all uses of agriculture funds shall be made once per year and forwarded to CNO (N45). The report is due by 15 December.

(4) Provide technical oversight and budget approval of installation fish and wildlife/hunting and fishing fee and permit programs in consultation with the installation and regional environmental office.

(h) Provide technical and administrative guidance and assistance necessary for the development of INRMPs.

(i) Evaluate and incorporate new methods, policies, technologies, and procedures for the preservation, management and enhancement of natural resources.

(j) When requested by BSOs and subordinate commands, coordinate NRM requirements with other Federal, State or local professional authorities, including section 7 consultations under the ESA.

(k) Provide technical oversight, documents and contracts for the Navy forestry program.

(l) Develop, manage and execute agricultural out-leasing programs, provide appropriate technical expertise and conservation planning, prepare reports, documents and contracts.

(m) Provide the technical and administrative guidance for the development of cooperative agreements to implement natural resources plans and execute cooperative agreements on behalf of installation commanders upon request.

(n) Provide functional and technical support to CNO (N45) and Navy Regions for national and regional professional workshops, forums, and conferences for information/technology transfer and exchange.

(o) Resolve natural resources impact issues in support of the environmental impact analysis process, including identification, location and quantification of compensatory, remedial or mitigative NRM measures to offset project impacts.

(p) Ensure that current and planned activities (e.g. master planning, construction requests and design) are effectively coordinated in a timely manner with appropriate natural resources managers.

(q) Provide technical assistance to regional environmental coordinators, area commanders, and installations in carrying out their responsibilities.

(r) Provide natural resources expertise and contract authority for natural resource matters to Marine Corps installations, upon funded request.

(s) Provide technical expertise in management of BASH programs.

(t) Develop and maintain liaison with appropriate Federal, State, local agencies, and other organizations to facilitate implementation of INRMPs.

24-13.4 BSOs and intermediate commands shall:

(a) Require, ensure, and assist subordinate installation's NRM planning and program implementation, and training for NR professionals and coordinators at the installations.

(b) Program and budget resources to fund both routine and recurring costs to operate and maintain NRM planning and INRMP implementation. Evaluate and validate POM submittals and other requests for funds for Natural Resources projects.

(c) Ensure that subordinate installation COs act as stewards of natural resources under their jurisdiction. Promote cooperative projects with Federal, State, and local organizations.

(d) Ensure that effective NRM is an identifiable function, and is specifically accountable in performance evaluations, at each command level.

(e) Ensure that installation NRM program implementation and effectiveness are evaluated by natural resources professionals as part of EQAs (See chapter 3).

(f) Ensure that adequate NRM expertise is available to installation COs for the inventory, protection, management, identification, and mapping of wetlands and other natural resources features.

(g) Ensure that contracts for operation of government owned, contractor operated (GOCO) installations include provisions for complying with policies and procedures as prescribed in this chapter and instruction.

(h) Ensure adequate natural resources programs are in place at installations scheduled for closure to continue to manage and protect the resources until land has been officially transferred to another owner.

(i) Maintain records necessary to monitor and evaluate natural resources under their management, and provide requested information to agencies with jurisdiction and to the public.

(j) Take appropriate action necessary to assure that actions authorized, funded, or carried out comply with the ESA.

(k) Coordinate proposals for new and continuing actions that affect natural resources with the managers of those resources, and ensure that State best management practices for nonpoint source pollution are incorporated into these proposals.

(l) Work with NAVFAC EFD/As to develop and maintain liaison with appropriate Federal, State, and local agencies, and other organizations to facilitate implementation of INRMPs.

(m) Implement Navy policy to ensure stewardship of Navy lands and resources and compliance with natural resources laws and regulations

(n) Implement policy for managing and conserving soil, water, forest, land, grounds, fish and wildlife, wetlands, floodplains and natural areas.

24-13.5 COs of shore activities holding Class 1 plant accounts shall:

(a) Act as stewards of natural resources under their jurisdiction, develop and maintain an effective conservation program as outlined in this instruction, and use technical assistance from the EFD/As as necessary.

(b) Integrate natural resources requirements into the day-to-day decision-making process.

(c) Request funding sufficient to ensure support of an integrated program as prescribed by this chapter and the NAVFAC P-73, Vol. II, including personnel support and training.

(d) If not exempt, ensure the preparation and implementation of an INRMP and systematically apply the conservation practices set forth in plan.

(e) Appoint, by letter, an installation Natural Resources Manager/Coordinator whose duties include ensuring that the CO is informed regarding: natural resources issues, conditions of natural resources, objectives of the INRMP, and potential or actual conflicts between mission requirements and natural resources mandates. Designated installation POC's are responsible for the inherently governmental decisions made on behalf of the installation and CO with regard to Sikes Act compliance.

(f) Implement programs to reduce the potential for collisions between aircraft and birds or other animals if the installation supports a flying mission.

(g) Ensure that current and planned mission activities are effectively coordinated in a timely manner with appropriate natural resource managers.

(h) Ensure incorporation of soil and water conservation measures and landscaping in the preliminary engineering, design, and construction of facilities involving ground disturbance in coordination with EFD/As. Ensure that state-approved erosion prevention/control measures are included as requirements in the specifications for all ground disturbing construction projects. Include these costs as a specific item in new project investigations and preliminary engineering reports.

(i) Review all non-excess land to identify areas that may be suitable and available for agricultural outleasing or commercial forestry. Document the results of this review as described in chapters 2 and 3 of reference (b).

(j) Enter into fish and wildlife and outdoor recreation cooperative agreements developed on behalf of the Secretary of Defense as required by the Sikes Act.

(k) Seek the aid of, and coordinate the NRM program with, Federal, State, and local agencies.

(l) Coordinate proposals for new and continuing actions that affect natural resources with the managers of those resources.

(m) Conduct surveys and other appropriate actions as necessary to document the presence of threatened or endangered species, identify currently used and periodically/indirectly used habitat for these species and assist in the determination of whether any such habitats should be designated as "critical habitats." COs shall conduct surveys to determine the presence and distribution of candidate species and State/territory rare and endangered species.

(n) Properly consider any action affecting natural resources in the environmental review and public notification process. (See Chapter 5).

(o) Maintain records necessary to monitor and evaluate natural resources under their management, and provide requested information to agencies with jurisdiction and to the public.

(p) Integrate NRM principles with environmental protection programs to coordinate an effective overall environmental program.

(q) Inventory, evaluate and delineate wetlands on the installation and develop management prescriptions for the protection and enhancement of these wetlands to meet the Navy’s “No Net Loss” goal.

(r) Provide and budget for Natural resources law enforcement by personnel trained in natural resources law enforcement for installations with hunting, fishing, or protected species.

CHAPTER 25

COASTAL ZONE MANAGEMENT

25-1 Scope

The Coastal Zone Management Act (CZMA), reference (a), establishes National policy to protect resources in the coastal zone. To this end, the CZMA imparts an obligation upon Federal agencies whose activities affect any land or water use or natural resource of the coastal zone to be consistent to the maximum extent practicable with the enforceable policies of Federally approved State Coastal Management Programs (CMPs). This chapter contains policy and guidance to ensure that Navy activities with the potential to affect coastal uses or resources are in full compliance with the Federal consistency provisions of CZMA.

25-1.1 References. Relevant references are:

(a) 16 USC Sections 1451 to 1464, Coastal Zone Management Act of 1972, as amended;

(b) 15 CFR Part 923, Coastal Zone Management Program Regulations; and

(c) 15 CFR Part 930.58(a) (2006), as amended, 71 Fed. Reg. 787-831, 828 (January 5, 2006), Coastal Zone Management Act Federal Consistency Regulations.

25-2 Legislation. The purpose of the CZMA is to "preserve, protect, develop, and where possible, restore and enhance the resources of the Nation's coastal zone for this and succeeding generations." The Act encourages coastal States to properly manage use of their coasts and coastal resources, prepare CMPs for areas requiring special attention, and provide for public and governmental participation in decisions affecting the coastal zone.

25-3 Terms and Definitions. Unless otherwise specified, the term “Navy” means “Department of the Navy.”

25-3.1 Action Proponent. The commander, commanding officer, or civilian director of a unit, activity or organization that is responsible for initiating and/or carrying out a proposed action. In general, the action proponent should be at the lowest level in the chain of command that “owns” the entire action being proposed.

25-3.2 Any Coastal Use or Resource. Any land or water use or natural resource of the coastal zone. Coastal uses include, but are not limited to: public access, recreation, fishing, historic or cultural preservation, development, hazards management, marinas and floodplain management, scenic and aesthetic enjoyment, and resource creation or restoration projects. Natural resources include biological or physical resources that are found permanently or cyclically within a State's coastal zone. Biological and physical resources include, but are not limited to: air, tidal and non-tidal wetlands, ocean waters, estuaries, rivers, streams, lakes, aquifers, submerged aquatic vegetation, land, plants, trees, minerals, fish, shellfish, invertebrates, amphibians, birds, mammals, reptiles, and coastal resources of national significance. Coastal uses and resources also include uses and resources described in the State's CMP.

25-3.3 Associated Facilities. All proposed facilities which are specifically designed, located, constructed, operated, adapted, or otherwise used, in full or in major part, to meet the needs of a Navy action proponent (e.g., activity, development project, licensee, permittee, or assistance recipient) and without which the action, as proposed, could not be conducted.

25-3.4 Classified Activity. Any action for which a Navy action proponent is required to protect from disclosure national security information concerning the national defense or foreign policy, provided it has been properly classified in accordance with the substantive and procedural requirements of an executive order. Even when an action is classified, the Navy action proponent shall conduct the action consistent to the maximum extent practicable with the enforceable policies of a State's CMP, unless exempted by the President. The Navy action proponent shall provide to the cognizant State agency a description of the action and coastal effects that the action proponent is legally permitted to release and does not otherwise breach the classified nature of the activity.

25-3.5 Coastal Management Program. The program of a coastal State or Territory, which has been approved by NOAA pursuant to reference (b), and which includes, but is not limited to, a comprehensive statement in words, maps, illustrations, or other media of communication, prepared and adopted by the State, that sets forth objectives, policies, and standards to guide public and private uses of lands and waters in the coastal zone.

25-3.6 Coastal States. States of the U.S. bordering on the Atlantic, Pacific, or Arctic Oceans, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. The term also includes Puerto Rico; the Virgin Islands; Guam; the Commonwealth of the Northern Mariana Islands; the Trust Territories of the Pacific Islands; and American Samoa.

25-3.7 Coastal Zone. Coastal waters (including lands lying in coastal waters and submerged there under and adjacent shore lands) within the meaning of Section 304(1) of the CZMA and as more fully defined and described in each coastal State's Federally-approved CMP. Excluded from the coastal zone is any Navy facility or real estate owned, held in trust, or exclusively used by the Navy in performance of its mission.

25-3.8 Consistent to the Maximum Extent Practicable. The Navy is required by the CZMA to ensure its activities affecting any coastal use or resource to the "maximum extent practicable," which is defined in Section 930.32(a)(1) of reference (c) as "fully consistent" with the enforceable policies of the CMP unless Navy compliance is prohibited by law. The Navy action proponent will not use a general claim of lack of funding or insufficient funds or failure to include the cost of being fully consistent in the federal budget and planning process as a basis for not being consistent to the maximum extent practicable with an enforceable policy of a Federally-approved State CMP. The only circumstances where the Navy action proponent may rely on a lack of funding as a limitation on full consistency with such an enforceable policy is the Presidential exemption described in the CZMA.

25-3.9 *De minimis* Activities. Activities that are expected to have insignificant direct or indirect (cumulative and secondary) effects and for which a mutual agreement exists between the Navy and a State agency that the action is not subject to further State agency review. The Navy shall document its decision to proceed with an action listed as a *de minimis* activity in a Memorandum to Record.

25-3.10 Effect on any Coastal Use or Resource. Any reasonably foreseeable effect on coastal uses or resources resulting from a Navy action or activity. These reasonably foreseeable effects can take the form of:

– Direct effects - effects that occur at the same time or place as the Navy action.

– Indirect effects - secondary and cumulative effects that result from the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects are effects resulting from the incremental impact of the Navy action when added to other past, present, and reasonably foreseeable actions, regardless of what agency or individual undertakes such actions. This definition is consistent with the CEQ's definition of cumulative effects (40 CFR 1508.7).

25-3.11 Effects Test. Test by which the Navy action proponent factually determines compliance with the Federal consistency requirements of CZMA Section 307 and the implementing regulations set forth at 15 CFR Part 930.

25-3.12 Enforceable Policies of a State CMP. State policies that are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone and which are incorporated in a Federally-approved State CMP. An enforceable policy contains standards of sufficient specificity to guide public and private uses, but need not establish detailed criteria, such that an action proponent is capable of determining the consistency of an activity without interaction with the State agency.

25-3.13 Land Use. A use or activity conducted in, or on, the shore lands within the coastal zone.

25-3.14 Listed Activities. Activities or actions listed by State agencies in their CMPs that, in the opinion of the State agency, will have reasonably foreseeable coastal effects.

25-3.15 Navy Action or Activity. Any function performed by or on behalf of the Navy action proponent in the exercise of its statutory responsibilities (e.g., facilities development, tests, or exercises). The term "action" is used interchangeably with the term "activity" in this instruction.

25-3.16 Navy Development Project. A Navy action that involves: (a) the planning, construction, modification, or removal of public works facilities or other structures within the coastal zone or occurring outside the coastal zone but that could result in effects being felt within the coastal zone; and (b) includes the acquisition, use, or disposal of any coastal use or resource. All Navy development projects within the coastal zone shall be deemed to cause coastal effects unless excluded from State agency review as *de minimis* activities.

25-3.17 Thorough Consistency Assessment. An assessment of coastal effects fully meeting the requirements of CZMA Section 307 and the implementing regulations set forth at 15 CFR Part 930. Navy policy is that an EA or EIS (prepared by the Navy action proponent pursuant to the requirements of NEPA constitutes a "thorough consistency assessment") if that document includes an analysis of effects to coastal uses or resources for which there are enforceable policies under the States CMP.

25-3.18 Unlisted Activities. Activities or actions not specifically listed in a State's CMP, but which may have reasonably foreseeable coastal effects and for which a State may advise the Navy action proponent that a consistency review is required.

25-3.19 Water Use. A use or activity conducted in or on waters within the coastal zone.

25-4 Requirements

25-4.1 Consistency Review Process. CZMA and the regulations implementing Federal consistency requirements require the Navy and other Federal agencies proposing actions, whether within or outside of a State's coastal zone, to determine if the action is reasonably likely to directly or indirectly (cumulatively or secondarily) affect any land or water use or natural resource within that coastal zone. A consistency review should result in one of the following actions: preparation of a Consistency Determination; preparation of a Negative Determination; or a determination that no further action is necessary (see Figure 25-1). During consistency review, the Navy action proponent may conduct a thorough consistency assessment in the context of preparing an EA or EIS, as required to comply with NEPA.

25-4.2 Determining Effects. The proponent of the Navy action shall conduct an effects test to factually determine whether an action will affect any coastal use or resource in a coastal State. The effects test shall be undertaken regardless of whether or not the action will be conducted within the coastal zone, as defined in the State's Federally-approved CMP. If an action initiates a series of events where direct and/or indirect effects on a coastal use or resource are reasonably foreseeable, the Navy action shall be consistent to the maximum extent practicable with the enforceable policies of a State's Federally-approved CMP. In carrying out its effects test, the Navy action proponent shall:

- Review the Federally-approved State CMP's relevant enforceable policies for compliance, keeping in mind the definitions of coastal uses and resources;

- Consider the definition of effects as identified in paragraph 25-3.10; and

- Assess whether the effects of the action taking place outside of a State's coastal zone will be felt by: (1) a State's coastal uses or resources within the coastal zone; and/or (2) coastal resources that may occur (e.g., migrate) outside the State coastal zone.

25-4.3 Documentation Requirements. Figure 25-1 provides a flowchart for determining documentation requirements for Navy actions under this instruction. The Navy activity or action proponent is responsible for preparing the appropriate documentation necessary to satisfy the Federal consistency provisions of the CZMA and implementing regulations. See paragraphs 25-4.3.a.5 and 28-4.3.b.3 for more detailed discussion of the contents of Consistency and Negative Determinations. Some States (e.g., Puerto Rico) require Consistency Determinations and Negative Determinations be documented using specific State forms. Federal regulations do not require that Consistency Determinations and Negative Determinations be provided on the State form, as long as such determinations comply with the requirements of the CZMA regulations, but using such forms, where practical, is recommended to avoid unnecessary conflict.

a. **Navy Activities Where Coastal Effects are Reasonably Foreseeable**

(1) **Consistency Determination**

(a) A Consistency Determination must be submitted to each affected coastal State when an action may have a reasonably foreseeable direct or indirect effect(s) on any coastal use or resource.

(b) A Consistency Determination shall be submitted for all Navy development projects occurring within the coastal zone (e.g., Navy housing development occurring outside Navy or Federal lands but within the defined State coastal zone).

(2) **General Consistency Determinations.** A General Consistency Determination may be prepared in cases where the Navy action proponent will be performing a repeated action (other than a development project), which cumulatively has an effect upon any coastal use or resource.

(a) A General Consistency Determination may only be used in situations where the incremental actions are repetitive and do not affect any coastal use or resource when performed independently.

(b) Navy and State agencies may mutually agree on a General Consistency Determination for *de minimis* activities or any other repetitive activity or category of activities.

(c) If a General Consistency Determination is issued, the Navy action proponent shall thereafter periodically consult with the State agency to discuss the manner in which the incremental actions are being undertaken.

(3) **Phased Consistency Determinations.** A Phased Consistency Determinations may be provided in cases where the decisions of the Navy action proponent related to a proposed development project or other action will be made in phases based upon developing information that may not be available at the time of the original Consistency Determination. In this case, a Consistency Determination will be required for each major decision.

(4) **National or Regional Consistency Determinations.** The Navy action proponent may provide coastal States with Consistency Determinations for activities that are national or regional in scope and that affect any coastal use or resource of more than one State. Single Consistency Determinations may be prepared that address common State coastal management issues and enforceable policies. Where coastal effects and enforceable policies are unique to particular States, the Consistency Determination shall contain separate sections addressing these unique effects and policies.

National Consistency Determinations shall be approved by and coordinated with the Director, Environmental Readiness Division, CNO (N45). Regional Consistency Determinations shall be approved by and coordinated with the AECs.

(5) **Content of a Consistency Determination.** The level of detail and information provided in a Navy Consistency Determination shall be commensurate with the expected effects of the

action on the coastal zone. At a minimum, the Consistency Determination shall include the following elements:

- A brief introductory statement indicating whether or not the proposed action will be undertaken in a manner consistent, to the maximum extent practicable, with the enforceable policies of the relevant Federally-approved State CMP;

- A detailed description of the action and its associated facilities, and reasonably foreseeable coastal effects;

- Comprehensive data and information sufficient to support Navy's Consistency Determination. Where practicable, language contained in related documentation prepared pursuant to NEPA may be directly incorporated into the Consistency Determination;

- An evaluation of each relevant State enforceable policy and how the Navy action is or is not consistent to the maximum extent practicable (the Navy action proponent should give consideration to State CMP provisions that are in the nature of recommendations). If the Navy action proponent asserts that full consistency with the enforceable policies of the State CMP is prohibited, the Navy action proponent must clearly describe to the State agency the statutory provisions, legislative history, or other legal authority that limits the Navy action proponent's discretion to be fully consistent. In addition, CNO (N45) must be notified regarding assertions that full consistency with the enforceable policies of a State CMP is prohibited; and

- In the case of a classified activity or action, the Navy action proponent is required only to provide to a State a description of the action and effects that will not breach the classified nature of the activity. However, the Navy action proponent must conduct the classified activity consistent to the maximum extent practicable with the State CMP.

(6) **Consistency Determinations in Emergency or Similar Unforeseen Circumstances.** In the event of an emergency or similar unforeseen circumstances (i.e., increased threat conditions requiring immediate action), the Navy action proponent may deviate from full consistency with the enforceable policies of the State CMP. However, to the extent that the emergency or unforeseen circumstance allows, the action proponent shall attempt to seek State agency concurrence prior to taking action. Upon addressing exigent circumstances or completing emergency response activities, the Navy action proponent shall provide the State agency with a description of its actions and impacts to the coastal zone.

(7) **Timing of Consistency Determination Submission and State Concurrence**

(a) Submission of a Consistency Determination by the Navy action proponent must be no later than 90 days before final approval of the Navy action is given for the proposed action, unless both the Navy action proponent and the State agency agree to an alternative notification schedule.

(b) The Navy action proponent may presume State agency concurrence if a response is not received within 60 days from receipt of the Navy action proponent determination. However, State agency concurrence shall not be presumed when an extension of time is requested to review the matter.

(c) The Navy action proponent must approve at least one State agency request for an extension period of 15 days or less.

b. **Documentation Requirements for Navy Activities that Do Not Have Coastal Effects**

(1) **Negative Determination.** A Negative Determination must be submitted to an affected State(s) when a Navy action proponent determines an action does not have an effect(s) on any coastal use or resource, and:

- The action or activity is identified as a "Listed Activity" by a State agency; or
- The State has notified the Navy action proponent that as a result of its case-by-case monitoring of Unlisted Activities that a Navy action may have reasonably foreseeable coastal effects and that the Federal consistency provisions of CZMA Section 307 apply; or
- The action is the same as, or similar to, actions for which Consistency Determinations have been prepared in the past; or
- The action was the subject of a "thorough consistency assessment" (see paragraph 25-3.17) that was undertaken by the Navy action proponent and resulted in initial findings that the action has no coastal effects.

(2) **General Negative Determinations.** A General Negative Determination may be prepared in cases where the Navy activity or action proponent will be performing a repeated action, which will not have reasonably foreseeable coastal effects, whether preformed separately or cumulatively.

(a) A General Negative Determination must describe in detail the activity covered by the general negative determination and the expected number of occurrences of the activity over a specific period of time.

(b) If a General Negative Determination is issued, the Navy action proponent shall thereafter periodically assess whether the General Negative Determination is still applicable.

(3) **Content of a Negative Determination.** Navy Negative Determinations shall contain the following information:

- A brief description of the action including its location;
- The basis for the Navy action proponent's determination that the action will not affect any coastal use or resource; and
- A discussion of the relevant enforceable policies reviewed by the Navy action proponent when making its Negative Determination.

(4) **Timing of Negative Determination Submission and State Concurrence**

(a) Submission of a Negative Determination by the Navy action proponent must be no later than 90 days before final Navy approval of the proposed action, unless both the Navy action proponent and the State agency agree to an alternative notification schedule.

(b) A State is not obligated to respond to a Negative Determination. Consequently, the Navy action proponent may presume State agency concurrence if a response is not received within 60 days from receipt of the Navy determination. However, State agency concurrence shall not be presumed when an extension of time is requested to review the matter.

(c) The Navy action proponent shall approve at least one State agency request for an extension period of 15 days or less.

c. **No Documentation Required.** No documentation is required pursuant to CZMA Section 307 if there are no effects on any coastal use or resource and none of the provisions of paragraphs 25-4.3.b.1 are triggered.

d. **Relationship Between Consistency and Negative Determinations and NEPA Documentation.** Consistency Determinations and Negative Determinations shall be prepared as stand-alone documents. Such stand-alone determinations may be incorporated, as an appendix, into documentation prepared pursuant to NEPA. The Navy action proponent and the relevant State agencies should mutually agree on how best to coordinate the requirements of CZMA and NEPA.

25-4.5 State Agency Objections and Notification

a. **Proceeding with an Action.** If a State agency issues a conditional concurrence, the activity or action proponent shall work with the State agency (1) to remove conditions that are not acceptable to the Navy; (2) to modify the conditions to those that can be implemented by the action proponent; or (3) implement the conditions . A conditional concurrence differs from a concurrence that merely contains recommendations. The Action Proponent must consider the recommendations, but has no obligation to implement the recommendations and is not required to notify the state if it decides not to implement. Notification via the chain of command to CNO (N45) is required if not all of the recommendation are implemented. Action proponents will discuss the potential for agreement to conditions that may set adverse precedent for future Navy actions through the Chain of Command with CNO (N45).

In the event that these conditions remain as a condition of State agency concurrence and they are unacceptable to the Navy, the Navy shall treat the conditional concurrence as an objection by the State agency.

If a State agency objects to a Navy Consistency or Negative Determination, the action proponent shall not proceed with the action over those objections unless the action proponent provides written notification to:

- CNO (N45) for review and coordination; and
- The State agency objecting to the action. Such notification shall state that the:
  - Navy action proponent has concluded that under existing law, it is prohibited from the standard of being fully "consistent to the maximum extent practicable" with a Federally-approved State CMP (see paragraph 25-4.3.a.5) and clearly describe the legal impediments to full consistency; or
  - Navy action proponent has concluded that its action is fully consistent with the enforceable policies of the State CMP.

b. **Serious Disagreements.** In the event of a serious disagreement between the Navy action proponent and a State agency regarding the consistency of a proposed Navy action affecting any coastal use or resource, either party may request mediation from the NOAA's Office of Ocean and Coastal Resource Management or the Secretary of Commerce. In such cases, the action proponent shall notify CNO (N45) prior to requesting or accepting mediation.

25-5 Navy Policy

25-5.1 State Coastal Non-point Pollution Control Programs

The Navy shall support the development and implementation of State coastal non-point pollution control programs on Navy lands by identifying non-point sources, specifying corrective measures, and coordinating non-point source compliance efforts with State programs. The Navy shall also identify areas of sensitive natural resources of the coastal zone, minimize the loss or degradation of coastal wetlands, enhance the natural value of wetlands, and protect water quality. The Navy shall encourage research and development efforts to address non-point sources of pollution in order to identify and understand Navy impacts on the coastal and marine environment.

25-6 Responsibilities

25-6.1 CNO (N45) shall:

(a) Develop and implement Navy policy regarding CZMA compliance;

(b) Advise commands of the requirement for submitting Consistency Determinations or Negative Determinations;

(c) Coordinate with NOAA, the OSD, ASN (I&E), and other DOD components and Federal agencies concerned with coastal zone matters; and

(d) Provide Navy representation, along with the BSO, when NOAA has been asked to mediate differences between the Navy action proponent and State CMP agencies.

25-6.2 BSOs, Regional Commanders, COs of Shore Activities, Training and Operations Planners, Weapons Systems Acquisition Program Managers, and Science and Technology Program Managers shall:

(a) Ensure that all appropriate instructions, including those requiring written justification for actions, collectively or separately, RDT&E, MILCON, O&M, Navy WCF, urgent minor construction, land acquisitions, NRM, weapons and support system procurement, and special projects, include the requirements for funding and scheduling for CZMA documentation, as necessary; and

(b) Participate in the formulation of, and ensure commitment to, any mitigation and monitoring requirements established in a Consistency or Negative Determination.

(c) Comply with the requirements outlined in paragraph 25-6.4 if acting as an action proponent.

25-6.3 RECs shall:

(a) Participate in the preparation of Consistency and Negative Determinations for proposed activities that affect areas of their concern or cognizance;

(b) Provide Navy representation, along with the action proponent, at any formal hearings/meetings of State CMP agencies where the proposed Navy action proponent is on the agenda for discussion and approval;

(c) Actively participate in the review process of proposed changes to State CMPs to ensure that the Navy's interests are protected; and

(d) Identify and negotiate *de minimis* and General Consistency Determinations for Navy activities with State CMP agencies.

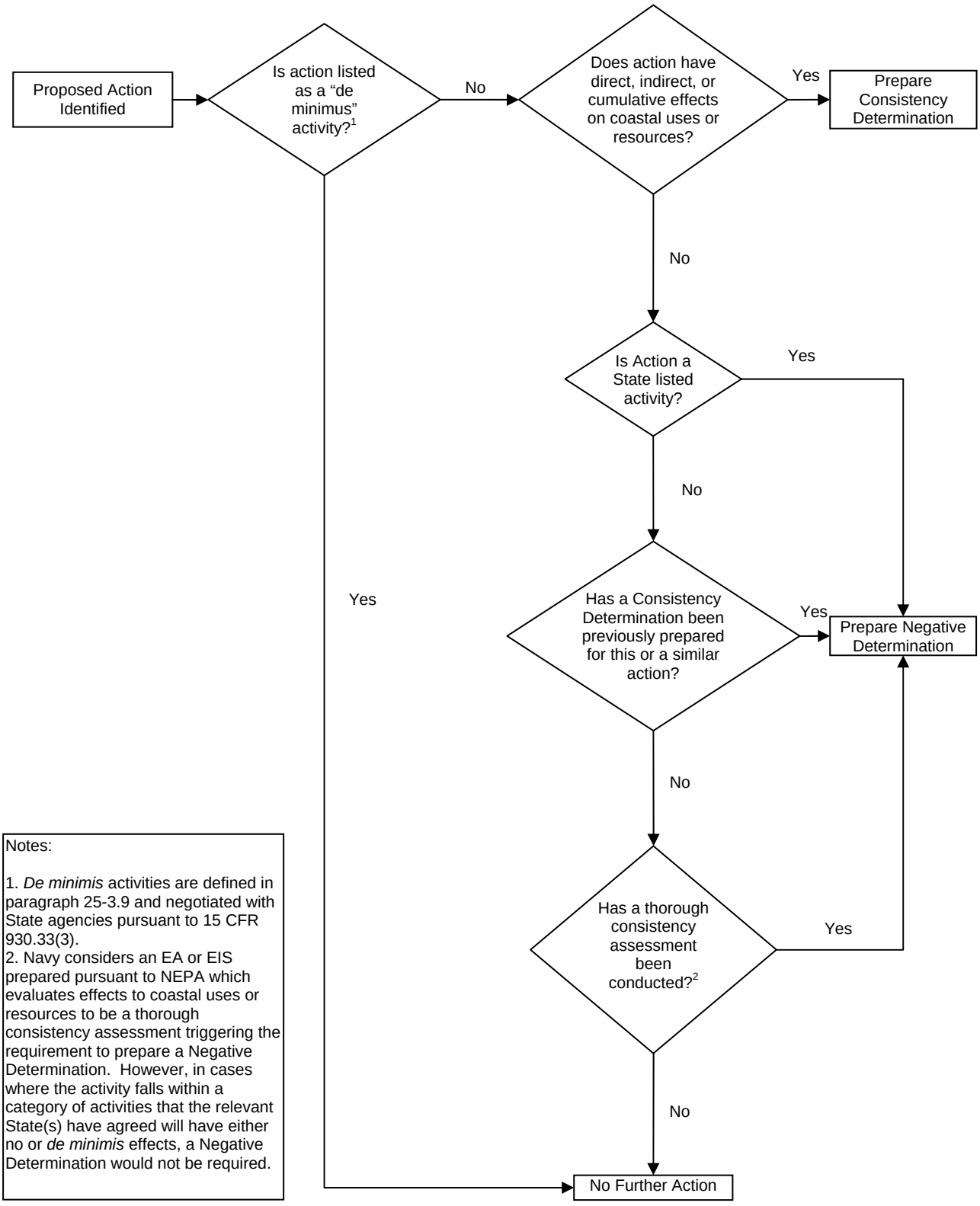
25-6.4 Activity or Action Proponents shall:

(a) Prepare and submit Consistency and Negative Determinations for Navy activities as provided in paragraphs 25-4.3.a.1 and 25-4.3.b.1;

(b) Provide Navy representation, along with the AEC or REC, at any formal hearings/meetings of State CMP agencies where the proposed Navy action is on the agenda for discussion and/or approval; and

(c) Provide notification to CNO (N45) in the event of a serious disagreement between the Navy action proponent and a State agency regarding the consistency of a proposed Navy action or when the action proponent elects to proceed with an action over the objection of a State agency.

Figure 25.1 CZMA Federal Consistency Flow Chart



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CHAPTER 26

NATURAL RESOURCES DAMAGE

26-1 Scope

26-1.1 General.

a. This chapter establishes CNO requirements, guidelines and standards for the assessment of damages arising from the release of OHS that injures or threatens to injure the natural resources of the United States. This chapter also describes the responsibilities and conduct of the Navy REC when acting as the Federal Trustee for Natural Resources (the Trustee) on behalf of the SECDEF.

b. SECDEF has not permanently delegated Trustee authority under OPA 90 to the Services; nor has ASN (I&E) permanently delegated Trustee authority to CNO under CERCLA. Accordingly, Navy RECs should ask CNO (N45) for assistance in securing authority to proceed as a Natural Resource Trustee when required.

26-1.2 Application. This chapter applies to OHS releases from ***any source,*** that injure or threaten to injure natural resources of the United States ***within Navy management or control***. In addition, this chapter also applies to OHS releases originating from ***Navy sources (including public vessels),*** that injure or threaten to injure the natural resources of the United States ***wherever found***.

26-1.3 References.

(a) 15 CFR 990, National Oceanic and Atmospheric Administration, Department of Commerce, Natural Resource Damage Assessment Procedures;

(b) 43 CFR 11, Department of Interior (DOI), NRDA Procedures;

(c) 40 CFR 300.600, National Oil and Hazardous Substances Pollution Contingency Plan (NCP);

(d) DODI 4715.3, Environmental Conservation Program of 3 May 1996 (NOTAL);

(e) E.O. 12777, Oil Pollution Act Implementation;

(f) E.O. 12580, Superfund Implementation (as amended by E.O. 13016);

(g) DODI 4715.7, Environmental Restoration Program of 22 April 1996 (NOTAL);

(h) 40 CFR 6, U.S. Environmental Protection Agency, NEPA Procedures;

(i) U.S. Coast Guard, National Pollution Funds Center (NPFC) User Reference Guide, June 1996 (NOTAL).

26-2 Legislation

The following Federal statutes assign Trustee responsibilities for the protection of natural resources and the assessment of damages caused by OHS releases:

26-2.1 Comprehensive Environmental Response, Compensation and Liability Act. CERCLA, 42 USC 9601, et seq., authorizes Natural Resource Trustees to recover damages for injury to, destruction of or loss of natural resources resulting from the release of a hazardous substance. Federal and State officials are designated to serve as Natural Resource Trustees under CERCLA. CERCLA also recognizes the authority of Indian Tribes to act as Natural Resource Trustees.

26-2.2 Federal Water Pollution Control Act of 1972 (FWPCA) as amended by the Clean Water Act of 1977. The FWPCA, 33 USC 1251, et seq., authorizes the President, in the case of an OHS release, to take any action necessary to mitigate damage to the public health and welfare; including, but not limited to fish, shellfish, wildlife, public and private property, shorelines and beaches. Natural Resource Trustees are authorized to recover damages for injury to, destruction of or loss of natural resources resulting from a discharge or the substantial threat of discharge, of oil into navigable waters. Federal and State officials may be designated to serve as Natural Resource Trustees.

26-2.3 National Environmental Policy Act. NEPA, 42 USC 4321 et seq., requires Federal agencies to disclose the environmental impact of each major Federal action that may significantly affect the quality of the human environment. Reference (a) suggests procedures for compliance with NEPA, 15 CFR 990.23, but only where consistent with regulations adopted by each Federal Trustee. Guidance on NEPA regulations is provided at chapter 2.

26-2.4 Oil Pollution Act of 1990. OPA 90, 33 USC 2701, et seq., provides for the prevention of, liability for, removal of and compensation for the discharge or substantial threat of discharge, of oil into or upon the navigable waters, adjoining shorelines or the EEZ of the United States.

The Act provides for the designation of Federal, State, Indian Tribe and Foreign Natural Resource Trustees. The Trustees determine whether injury to, destruction of or loss of use of natural resources has resulted from such a discharge. The Act authorizes Trustees to present claims for damages (including the reasonable cost of assessing damages), to collect such damages and to restore, rehabilitate or replace natural resources under their Trusteeship.

26-3 Terms and Definitions

In some cases, references (a) and (b) define identical terms differently. In those cases, the definitions provided below combine elements of each reference to best accommodate Navy policy. In any case, the following definitions are provided only for the purpose of issuing Navy policy.

26-3.1 Baseline. The condition of the natural resources and services that would have existed had the OHS release not occurred. Baseline data may be estimated using historical data, reference data, control data or data on incremental changes, alone or in combination, as appropriate.

Types of information that may be useful in evaluating baseline include: information collected regularly for a period of time prior to the incident; information identifying historical patterns or trends; information collected from areas unaffected by an incident that are similar to the affected area; and

information from the area of the incident after particular natural resources or services have recovered. This information may be obtained from INRMPs, Base Master Plans, Natural Resource Management Plans, NEPA Documents, special studies and other such documents.

26-3.2 Cost-effective. The least costly activity among two or more activities that, in the judgment of the Trustee, provides the same or comparable level of benefit.

26-3.3 Damages. Each party responsible for the release or threatened release of OHS affecting the natural resources of the United States is liable for monetary compensation for injury to, destruction of, loss of or loss of use of natural resources, including the reasonable assessment costs. (See 26-3.23.)

26-3.4 Discharge (Spill). Any emission (other than natural seepage), intentional or unintentional, including, but not limited to, leaking, pumping, pouring, emitting, emptying or dumping.

26-3.5 Exclusive Economic Zone. A zone extending 200 nm from the territorial sea baseline, unless a maritime boundary with another country is closer than 200 nm.

26-3.6 Exposure. Direct or indirect contact with the released OHS, including indirect injury as a result of disruption within an organism's food web. Exposure does not apply to response-related injuries and injuries resulting from a substantial threat of an OHS release.

26-3.7 Facility. Any structure, group of structures, equipment or device (other than a vessel) that is used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting OHS. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

26-3.8 Facility Response Team. Emergency response personnel (formerly known as On-Scene Operations Teams) who are designated, trained and equipped to provide rapid response to OHS releases that occur on or from their facility.

26-3.9 Federal On-Scene Coordinator. The United States government official pre-designated by the EPA or the USCG to coordinate and direct the Federal Response under the NCP. In the case of HS releases from Navy facilities or vessels, the Navy OSC is the Federal OSC.

26-3.10 Federal Trustees for Natural Resources. OPA 90 and CERCLA designate the President as the Trustee for Federally protected or managed natural resources on behalf of the public. E.O.'s, in turn, designate the heads of specified departments, including SECDEF, as Natural Resource Trustees.

26-3.11 Hazardous Substance.

a. Any substance so designated by the CWA;

b. Any element, compound, mixture, solution or substance so designated by CERCLA;

c. Any solid waste having the characteristics of or listed as, a HW as defined under RCRA (but not including any waste that has been exempted by Act of Congress);

d. Any toxic pollutant listed under the CAA;

e. Any imminently hazardous chemical substance or mixture for which the administrator of the EPA has taken action under TSCA.

f. The term does not include crude oil or any refined petroleum product (such as gasoline or fuel oil) that is not otherwise specifically listed or designated as a HS;

g. The term does not include natural gas, natural gas liquids, liquefied natural gas or synthetic gas useable for fuel (or mixtures of natural gas and synthetic gas), unless otherwise defined by State regulations.

26-3.12 Incident. Any occurrence or series of occurrences having the same origin, involving one or more vessels, facilities or any combination thereof, resulting in the release or substantial threat of release of OHS.

26-3.13 Injury. An observable or measurable adverse change in a natural resource or the impairment of its services. Injury includes the destruction, loss or loss of use of a natural resource or service resulting from an OHS release or the threat of such release. Injury may be found to have occurred directly or indirectly so long as a pathway from the release to the injury can be established. Reference (b) contains resource-specific conditions for injury.

26-3.14 Lead Administrative Trustee (LAT). The Trustee selected by mutual agreement among Trustees having jurisdiction over the natural resources affected by an OHS release to coordinate joint assessments, to avoid duplicate damage claims and to serve as the Trustees' primary point of contact with response agencies, the Responsible Party and the public. The LAT provides general administrative support to the restoration process, unless the Trustees decide otherwise.

26-3.15 National Oil and Hazardous Substances Pollution Contingency Plan. The NCP, reference (c), addresses the identification, investigation and study of, as well as response to OHS release incidents.

26-3.16 Natural Resource Damage Assessment. The process of collecting and evaluating information to determine the nature and extent of injury to natural resources resulting from an incident; determining whether and which restoration measures may be necessary to bring the injured resources and services back to baseline; and seeking to make the public whole for interim lost use of those resources and services.

26-3.17 Natural Resources. Includes land, fish, wildlife, biota, air, surface water, ground water, drinking water, and other such resources belonging to, managed by, held in trust by or otherwise controlled by the United States (including the resources of the **EEZ**).

26-3.18 Navigable Waters. The waters of the United States, including the territorial seas and:

– All waters that are currently used, were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

- Interstate waters, including interstate wetlands;

- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

  - That are or could be used by interstate or foreign travelers for recreational or other purposes;

  - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

  - that are used or could be used for industrial purposes by industries in interstate commerce;

- Any impoundment of waters otherwise defined as navigable waters above;

- Tributaries of waters identified above; and

- Wetlands adjacent to waters identified above, provided that waste treatment systems (other than cooling ponds that otherwise meet the criteria of this subsection) are not waters of the United States. (See also the definition of wetlands in the USACE 1987 Wetlands Delineation Manual).

26-3.19 Navy On-Scene Coordinator. The Navy official pre-designated to coordinate Navy OHS pollution contingency planning and direct Navy OHS pollution response efforts in a pre-assigned area. U.S. shoreside NOSCs are normally RECs pre-designated by the area environmental coordinators. (For a complete discussion of these designations, please see chapter 12).

26-3.20 Oil. Animal, vegetable or petroleum-based oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil. In practice, this includes refined products such as gasoline, diesel, jet fuel and cooking oil.

26-3.21 OPA 90. The Oil Pollution Act of 1990, 33 USC 2701, et. seq., See subsections 26-2.4 and 26-4.1.a of this chapter.

26-3.22 Preliminary Impact & Exposure Report (PIER). A rapid "first-order" report made on-site by the FRT to determine whether and to what extent to which natural resources have been exposed to an OHS release. (See appendix M for an exemplar.)

26-3.23 Reasonable Assessment Costs. Generally, the costs of assessments conducted under references (a) and (b). Trustees may recover their reasonable assessment costs, even absent restoration, provided that assessment actions undertaken were premised on the reasonable likelihood of injury and need for restoration. Reasonable assessment costs also include administrative and some legal costs necessary to restoration planning, implementation and monitoring as well as the costs associated with public participation in these processes.

26-3.24 Rebuttable Presumption. An evidentiary rule of law that presumes without further proof that damages assessed by the Trustees using the procedures specified in either references (a) or (b) are

reasonable—shifting the burden of proof to the Responsible Party to demonstrate that the damages so assessed are not reasonable.

26-3.25 Recovery. The return of injured natural resources and services to baseline.

26-3.26 Release. Any actual or threatened spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of OHS into the environment; the abandonment or discarding of barrels, containers, or other closed receptacles containing OHS. The term "release" does ***not*** include:

- Activities that result in exposure to persons solely within a work space;
- Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine;
- The release of nuclear material; or
- The normal application of fertilizer and herbicides which are applied in accordance with manufacturer's labeled directions

26-3.27 Response. The containment and/or removal of OHS released into the natural environment; The taking of other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, injuries to fish, shellfish, wildlife, public or private property.

26-3.28 Responsible Party (RP). Any person (legal or natural) who, in the view of the Trustees, may ultimately be found liable for damages resulting from the actual or threatened release of OHS affecting natural resources under their Trusteeship, including the following:

- **Vessels**, including the owner, operator or bare boat charter of such vessel;
- **Onshore Facilities**, including the owner or operator of such facilities; and
- **Offshore Facilities**, including the owner or operator of such facility, the lessee or permit holder of the area in which the facility is located or the holder of a right of use and easement within such area;
- **Pipelines**, including the owner or operator of it**.**

Any person who owns or operates an HS disposal facility; arranges for the disposal, treatment or transportation of HS; or accepts HS for transport to a disposal or treatment facility may also be deemed an RP under CERCLA.

26-3.29 Restoration. Any action (or alternative) or combination of actions (or alternatives) intended to restore, rehabilitate, replace or acquire the equivalent of injured natural resources and services.

26-3.30 Services or Natural Resource Services/Functions. The physical or biological functions performed by a natural resource that benefit another natural resource or the public. For example, the delivery of oxygen and nutrients to aquatic life would be a "natural resource service" provided by a healthy river. Similarly, recreational fishing at the river would be a "natural resource service" to the public.

26-3.31 Trustees (Natural Resource Trustees). Resource agencies designated by the President, State Governors and American Indian Tribes who prosecute claims for damages and act on behalf of the public to protect and restore natural resources within their jurisdiction. (Section 26-4 of this chapter provides an overview of the legal authority for those appointments, while section 26-7 outlines Trustee responsibilities under controlling statute and regulation.)

26-3.32 Value. The maximum amount of goods, services or money an individual is willing to forgo to obtain other goods or services. The minimum amount of goods, services or money an individual is willing to accept to forgo other goods or services. A measure of the public's willingness to pay for a service.

26-4 Requirements

Reference (d) states "All DOD Components shall develop and promulgate criteria and procedures for assessing natural resource damage claims in the event natural resources under DOD control are damaged [injured] by oil or a hazardous substance released by another party." The requirements of this chapter, however, go beyond reference (d) and apply to natural resource injury occasioned by OHS releases from both DOD and non-DOD sources. This instruction maintains a distinction between physical *injury* to natural resources and the monetary *damages* arising at law from such injury.

26-4.1 In the Case of Oil Spills

a. OPA 90, 33 USC 2701, et seq., provides for the designation of Federal, State, Indian Tribe and Foreign Natural Resource Trustees empowered to determine if injury to natural resources and services under their Trusteeship has resulted from a discharge, or substantial threat of discharge, of oil into or upon the navigable waters or adjoining shorelines of the United States. Trustees are responsible for the assessment of natural resource damages resulting from those injuries; the presentation of claims for damages; the recovery of damages; and the development and implementation of a plan for the restoration, rehabilitation, replacement or acquisition of equivalent natural resources or services.

b. OPA 90 also provides that the President, acting through the Department of Commerce, NOAA, shall issue regulations for the assessment of natural resource damages resulting from a discharge of oil. Assessments performed by Federal, State or Tribal Trustees under these regulations, are accorded a rebuttable presumption of reasonableness.

c. Accordingly, NOAA has issued a Final Rule, reference (a), for the use of authorized Trustees in executing such assessments.

d. E.O. 12777, reference (e), in turn, designates SECDEF as an authorized Federal Trustee for Natural Resources and directs Trustees to exercise the duties defined in the NCP, reference (c). This

Order also designates the Secretaries of Interior, Agriculture, Commerce and Energy as Federal Trustees for Natural Resources.

e. At the time of this writing, SECDEF has not delegated standing Trustee authority under OPA 90 to the component services.

26-4.2 In the Case of Hazardous Substance Releases

a. CERCLA, 42 USC 9607 et seq., provides for the designation of Federal and State Natural Resource Trustees who assess damages for injury to, destruction of, loss of or loss of use of, natural resources under their Trusteeship as a result of the release of a hazardous substance. CERCLA also recognizes the authority of Indian Tribes to commence actions as Natural Resource Trustees. Damages recovered by the Federal and State Trustees are available for use only to restore, replace or acquire the equivalent of the natural resources impacted by the release.

b. CERCLA requires the issuance of two types of regulations for the assessment of these natural resource damages. Assessments performed by Federal and State Trustees under either regulation are accorded a rebuttable presumption of reasonableness. The President delegated the promulgation of these regulations to DOI under E.O. 12580, reference (f).

c. Accordingly, DOI has issued reference (b), establishing two types of natural resource damage assessment regulations: Types A and B. The Type A rule sets forth standard procedures for simplified assessments requiring minimal field observation and relies upon a computer model to measure injury to the natural resources using historical data or reference data from appropriate literature. The Type A rule is only applicable to minor spills in coastal and marine environments or the Great Lakes. The Type B rule establishes alternative protocols for calculating natural resource damages based upon the cost of restoring, rehabilitating, replacing or acquiring equivalent resources and is used when the Type A rule is not applicable. The Type B rule also allows for the assessment of all uses lost to the public pending restoration or rehabilitation of the injured resource.

d. Reference (f) also designates the Secretaries of Defense, Interior, Agriculture, Commerce and Energy as Federal Trustees for Natural Resources under CERCLA. Paragraph 6(a) of reference (g), in turn, delegates that authority to the Secretaries of the Military Departments.

e. At the time of this writing, the ASN (I&E) has not delegated standing Trustee authority under CERCLA to CNO.

26-4.3 Disposition of Funds Recovered. Reference (d) directs that "funds recovered by the DOD as a result of natural resource damage claims shall be used for restoration, replacement or acquisition of equivalent natural resources ... on the installation where the [injury] occurred."

26-5 Navy Policy

The Navy is committed to the restoration, rehabilitation or replacement of natural resources and services within its management or control injured by OHS releases to the environment. Where releases from Navy vessels and/or facilities may be responsible for injury to natural resources not within Navy control, the Navy will participate in natural resource damage assessment and restoration processes instituted by lawfully directed Natural Resource Trustees. The policy of the United States Navy, when

acting on behalf of SECDEF as Federal Trustee for Natural Resources, is to seek compensation and/or financial participation from parties responsible for injuries to natural resources within Navy management or control.

26-5.1 Oil. Where an oil spill, regardless of source or physical location, injures or threatens to injure natural resources within Navy management or control, reference (a) shall serve as guidance to Navy activities in the mitigation, assessment and collection of natural resource damages occasioned by such spill. Where oil spills from Navy vessels and/or facilities result in injury to natural resources not within Navy control, the Navy will encourage Trustees conducting Natural Resource Damage (NRD) assessments to use the procedures in reference (a).

26-5.2 Hazardous Substances. Where the release of hazardous substances, regardless of source, injures or threatens to injure natural resources within Navy management or control, reference (b) shall serve as guidance to Navy activities in the assessment and collection of natural resource damages occasioned by such release. Where HS releases from Navy vessels and/or facilities may be responsible for injury to natural resources not within Navy control, the Navy will encourage Trustees conducting NRD assessments to use the procedures in reference (b).

26-6 Responsibilities

26-6.1 CNO (N45) shall:

(a) Develop, issue, review and provide execution oversight of Navy policy on Natural Resource Trusteeship;

(b) Develop, issue, review and provide execution oversight of Navy policy on natural resource damage assessment and restoration procedures; and

(c) Provide assistance to the Navy REC in securing authority to proceed as a Natural Resource Trustee when appropriate.

26-6.2 The Navy REC shall:

(a) Act on behalf of the CNO as Federal Trustee for natural resources within Navy management or control when so authorized. (The Navy REC's specific responsibilities when acting as Federal Trustee are enumerated in section 26-7.)

(b) Establish procedures consistent with the provisions of this chapter and references (a) and (b) to assess damages resulting from OHS releases into or upon natural resources within the Navy REC's management or control.

(c) Provide executive oversight to the efforts of the following Navy personnel under this chapter:

- Regional counsel;
- Regional comptrollers;
- Facility Commanders;

- FEC representatives.

(d) Ensure that activities within the REC's AOR incorporate a PIER report into the standard operating procedure of the local FRT.

(e) Annually exercise local FEC representatives, regional counsel, comptrollers and FRTs in the execution of Natural Resource Trustee responsibilities:

- Annual exercises may take the form of comprehensive tabletop drills or RECs may conduct them in combination with area spill response exercises, including PREP events.

- Contracted support personnel relied upon in local contingency plans should also be invited to participate in these exercises.

a. **The Navy REC Counsel** shall:

(a) Coordinate the Navy REC's communications and negotiations with the RP and/or non-Navy Trustees having jurisdiction over natural resources affected or threatened by the release.

(b) Negotiate with the RP and/or Trustees a MOU regarding the funding of and procedures to be used in natural resource damage assessment and restoration planning. (See also paragraph 26-7.2.e.)

(c) Attend relevant Trustee meetings and report the status of Trustee negotiations in writing to the Admiralty Claims Division of the Navy JAG and CNO (N45) biannually.

(d) Periodically advise the Environment and Natural Resources Division of the DOJ on the status of natural resource damage claim negotiations and refer such claims to DOJ when negotiations with the RP have reached an impasse or have otherwise failed to implement the Trustees' restoration plan within a reasonable period of time.

(e) Assist the Navy REC in the planning and execution of natural resource damage assessment and restoration activities within the REC's AOR.

(f) Annually exercise the responsibilities identified above.

b. **The Regional Comptroller** shall:

(a) Document all Navy costs related to natural resource damage assessment and restoration activities, including but not limited to pre-assessment, restoration planning, plan execution and monitoring costs. (See 43 CFR 11.15 and 15 CFR 990.30)

(b) Report these costs in writing to CNO (N45) each year that natural resource damage assessment or restoration activities are pending in the REC's AOR.

(c) Assist the Navy REC in the planning and execution of natural resource damage assessment and restoration activities within the REC's AOR.

(d) Annually exercise the responsibilities identified above.

26-6.3 COMNAVFACENGCOM shall:

(a) Act as natural resource technical consultant to the Navy, providing technical support in the planning and execution of natural resource damage assessment and restoration activities.

(b) Coordinate with the FECs to develop expertise in natural resource damage mitigation, assessment and restoration.

26-6.4 FECs shall, upon request:

(a) Act as the Navy REC's primary point of contact for the planning and execution of natural resource damage assessment and restoration activities within the REC's AOR.

(b) Act as the Navy RECs primary repository of natural resource baseline information until the REC determines that local activities in his/her AOR have sufficient resources and training to assume this function. (See paragraph 26-7.1.c.)

(c) Assist the REC in developing local area guidance on natural resource damage assessment and restoration procedures in consonance with the provisions of this chapter and references (a) and (b). Coordinate the development of this guidance with installation/facilities, where they have knowledge concerning on-site resources.

(d) Act as the Navy RECs primary contracting authority in retaining technical assistance from the private sector to facilitate the planning and execution of natural resource damage assessment and restoration activities within the REC's AOR.

(e) Assist the Navy REC in the planning and execution of natural resource damage assessment and restoration activities within the REC's AOR.

(f) Annually exercise the responsibilities identified above.

26-6.5 FRTs shall:

(a) Report whether and the extent to which natural resources have been exposed to an OHS release.

(b) Compile and sign a PIER report (an example of which is provided in appendix M) within 6 hours of being notified of an OHS release in their AOR.

(c) Deliver the PIER report to the cognizant Navy REC not later than the close of business on the next business day following notification of an OHS release in their AOR.

(d) Annually exercise the responsibilities identified above.

26-6.6 The RP. When a Navy vessel or facility is deemed the RP for an OHS release**,** the cognizant Navy command shall:

(a) Fully cooperate with the Trustees in the natural resource damage assessment planning, restoration and monitoring process.

(b) Enter into an MOU with the Trustees to fund the reasonable cost of pre-assessment activities and to meet the other objectives of subparagraph 26-7.2.e.2.

(c) Pay to the Trustees the reasonable cost of natural resource damage assessment planning, restoration and monitoring activities as may be negotiated between the RP and the Trustees.

26-7 Trusteeship

As described in section 26-4 of this chapter, the President appointed SECDEF to act as Federal Trustee for Natural Resources within DOD management or control.

26-7.1 Prior to the Incident. As a Trustee of these resources, the Secretary is responsible for conducting pre-incident planning to help ensure that the assessment results in technically sound and cost effective restoration and to restore to baseline resources injured by OHS releases.

a. **Pre-incident Planning.** As described in section 26-6, CNO (N45) may call upon the Navy REC to act on behalf of SECDEF as Federal Trustee for natural resources within Navy management or control. Consequently, the Navy REC shall coordinate with OHS response organizations and other Trustees in its AOR to identify:

- Natural resource damage assessment teams;
- Trustee notification systems;
- Support services;
- Natural resources and services at risk;
- Area and regional response agencies and officials;
- Available baseline information;
- Data management systems;
- Assessment funding issues and options; and
- State Trustee natural resource damage assessment methodologies with reduced procedural requirements for small-scale restoration plans.

b. **Regional and Area Contingency Planning.** The Navy REC shall represent the interests of the Navy in regional and area contingency planning activities, including but not limited to contingency plan development, drills and exercises. The Navy REC shall ensure that NOSC plans incorporate Navy natural resource expertise into the management of spill response -- both real time and on-scene -- to evaluate and to mitigate potential injury to natural resources. NOSC plans should be seamlessly integrated with Regional and Area Contingency Plans and provide for coordination between DOD and non-DOD Natural Resource Trustees.

c. **Baseline Assessment.** The collection and maintenance of ecological information required by chapter 22 are essential to pre-incident planning on behalf of the Navy REC. Baseline data may include, but should not be limited to:

- USCG Shoreline Assessment Maps;
- NOAA Environmental Sensitivity Index Maps;
- Studies conducted by and/or reports issued by regional educational institutions and/or governmental agencies that describe natural resources within Navy management or control;
- INRMPs; and
- Navy studies and/or reports including those conducted for purposes other than natural resource management describing natural resources within Navy management or control (such as Environmental Assessments and Impact Statements).

26-7.2 During the Incident

a. **Pre-assessment Phase.** Upon notification of an OHS release incident, the Trustees must first determine whether certain threshold criteria have been met to authorize commencement of the damage assessment process and to establish which assessment procedure, if any, may be applicable.

(1) Each Navy activity FRT shall execute a PIER report (an example of which is provided in appendix M) within 6 hours of release notification.

(2) The PIER report records observable injury to natural resources and services by an OHS release.

(3) The FRT shall, by close of business the next business day, deliver the PIER report to the Navy REC.

(4) When, in the view of the Navy REC, the PIER report warrants a more detailed survey of natural resource injuries, the Navy REC shall activate FECs, regional counsel and comptrollers to execute the responsibilities outlined in section 26-6 above.

(5) The Navy REC staff shall, in turn, maintain a record of all command PIER reports for at least 3 years.

b. **Mitigation of damages.** Upon notification or discovery of an injury or threat of injury to natural resources within Navy management or control, the Navy REC shall take appropriate action to mitigate such injury both during and after spill response activities.

c. **Coordination with the Federal OSC.** Some damage assessment activities, such as data collection and analysis, will require coordination with the OSC in charge of the spill response. The OSC will also require advice from the Trustees regarding potentially affected resources, environmental sensitivities and environmentally prudent response alternatives. Trustees should communicate requirements and advice to the OSC via the LAT and/or the government liaison official in the OSC's Unified Command (UC).

d. **Coordination with other Trustees.** Trustee responsibilities for natural resources may overlap between various agencies depending upon the resource threatened and the extent to which Trustee authority has been vested in a particular agency.

(1) For example, the Secretary of Commerce acts as the Federal Trustee for natural resources found in, under or using the navigable waters of the United States, its EEZ and outer continental shelf. These resources include marine fisheries, anadromous (migrating) fish, endangered species, marine mammals and the resources of National Marine Sanctuaries and National Estuarine Research Reserves.

(2) The Secretary of Interior, on the other hand, acts as Federal Trustee for natural resources managed or controlled by DOI. These resources include migratory birds, anadromous fish, endangered species, marine mammals, Federally-owned minerals, certain Federally–owned lands and certain Federally managed water resources.

(3) These agencies have broad authority over the resources within their management or control, as well as over resources within the management or control of other Federal agencies.

(4) Similarly, the States and Indian Tribes may exercise Trustee roles. For example, SECDEF may share Trustee responsibilities with the Governor of the State of Alaska and the Secretary of the Interior for the same migratory birds located on property managed by the U.S. Navy in Alaska.

(5) Consequently, the coordination of damage assessment, mitigation and restoration activities with non-DOD Trustees is an important part of the Navy REC's responsibilities and should be among his/her primary and immediate concerns when notified of potential injury to natural resources.

e. **Coordination with the RP.** The Trustees are required to invite the party or parties responsible for natural resource damages to participate in the damage assessment and restoration planning process. Reference (a) requires delivery of such invitations in writing to the RP not later than the Notice of Intent to Conduct Restoration Planning. Reference (b) requires delivery of written invitations to the RP before preparation of an Assessment Plan.

(1) To mitigate the adversarial nature of the damage assessment process, however, the Navy REC shall endeavor to include the RP in Trustee activity at the earliest possible opportunity to promote a climate of cooperation and mutual trust.

(2) To facilitate cost-effective cooperation, the Navy REC shall negotiate with the RP and endeavor to enter into a MOU that provides, among other things, for:

– the funding of Navy assessment and restoration activities;

– the consolidation of technical expertise;

– the review of relevant data;

– assessment, planning, implementation and monitoring milestones; and

– dispute resolution procedures.

26-7.3 After the Incident. The Trustees are responsible for the assessment of damages to natural resources, the presentation of claims for damages to the RP, the recovery of damages and the development and implementation of a plan for restoration of the injured natural resources or services.

a. **Formal Assessment.** The Trustee must quantify the degree and extent of injuries to natural resources. The Trustees must determine the source of exposure, pathway and adverse change to natural resources or services because of an OHS release incident. The Trustees must also assess injuries to a natural resource caused by spill response and clean-up activities.

b. **Restoration Planning.** The Trustees must also develop and implement a plan for restoration. Reference (a) requires that restoration planning by Federal Trustees be subject to NEPA. "NEPA becomes applicable when Federal Trustees propose to take restoration actions, which begins with the development of a Draft Restoration Plan." 15 CFR 990.23(b).

Restoration actions required by reference (b) are ***not*** subject to NEPA because these actions occur under CERCLA authority which has procedures and public involvement requirements that are "functionally equivalent" to NEPA.

(1) **Evaluation and Selection of Restoration Alternatives.** The Trustees must evaluate the restoration alternatives developed. This evaluation must be based upon the criteria listed in references (a) or (b) as appropriate.

(2) **Draft Restoration Plan.** The Trustees may use a Regional Restoration Plan or existing restoration project where such a Plan or project is determined to be the best alternative among a range of feasible restoration alternatives considered. In any case, the Draft Restoration Plan must be capable of meeting the Trustees' obligation to restore the injured natural resources and services and endeavor to compensate the public for interim loss of use.

Because Federal agencies have adopted differing NEPA procedures, Trustees must agree upon the NEPA procedures to use when assessing NRD for a particular spill.

Where the Navy is a Trustee, the Navy REC should promote the Navy's NEPA procedures found at chapter 2 of this Instruction. The Navy REC shall consult with CNO (N45) on relevant NEPA requirements before initiating negotiations with co-Trustees.

(3) **Public Review and Comment.** Once the Trustees have decided to proceed with restoration, they must publish a written Notice of Intent to Conduct Restoration or make available to the public an administrative record documenting the basis for the Trustees' decision to proceed with restoration. The Notice must give the public a reasonable opportunity to review and comment upon the record and Draft Restoration Plan.

(4) **Final Restoration Plan.** Once Trustees have taken public comment on the Draft Restoration Plan, they must develop a Final Restoration Plan.

c. **Damage claims**

(1) **Oil.** Under reference (a), the Trustees may settle claims for natural resource damages, with or without completing the damage assessment process, provided that the settlement is fair, reasonable and in the best interest of the public. In the judgment of the Trustees, the settlement must satisfy the goals of OPA 90 with particular consideration for the ability of the settlement to restore injured natural resources or services. Funds recovered in the settlement of such claims may be expended only in accordance with the restoration plan. Costs incurred by the Trustees in the assessment, planning and implementation process, however, may be reimbursed from these funds. (See paragraph 26-9.1.a.)

(2) **Hazardous Substances.** Under reference (b), the Trustees may settle claims for natural resource damages, with or without completing the damage assessment process, provided that the settlement is fair, reasonable and in the best interest of the public. Funds recovered in the settlement of such claims may be expended only to restore, replace, rehabilitate or acquire the equivalent of the injured natural resources or services in accordance with the Final Restoration Plan. Costs incurred by the Trustees in the assessment, planning and implementation process, however, may also be reimbursed from these funds.

d. **Restoration Implementation.** At the conclusion of damage assessment and restoration planning activities, as described by references (a) and (b), the Trustees:

- Shall open an administrative record to document restoration implementation phase decisions, actions and expenditures, as well as modifications to the Final Restoration Plan;

- Shall present the RP with a written demand for the damages determined per references (a) and (b) by certified mail or such other means to establish the date of receipt by the RP. The demand must also include:

  - Identification of the incident from which the claims arise;

  - Identification of the Trustees asserting the claims and a statement of the statutory basis for Trusteeship;

  - A brief description of the injuries for which the claim is being sought;

  - An index to the administrative record;

- A Final Restoration Plan or Notice of Intent to Use a Regional Restoration Plan or Existing Restoration Project; and

- A request for reimbursement of reasonable assessment costs, the costs of emergency restoration and interest on the amounts so claimed.

– Shall open an account for recovered damages per references (a) and (b). Joint Trustee recoveries may be deposited in a joint account under the registry of the applicable Federal court where an enforceable agreement is established to govern management of such an account.

e. **Restoration Monitoring.** The Trustees shall assess the success of restoration implementation under the monitoring provisions of the Final Restoration Plan.

26-8 Damage Assessment

26-8.1 Oil Spills. Under reference (a), the NRDA process incident to a discharge of oil includes three phases: Pre-assessment; Restoration Planning; and Restoration Implementation. This subsection summarizes those damage assessment procedures as detailed in reference (a). Navy policy (see sub-section 26-5.1 of this chapter) calls for the use of reference (a) procedures regardless of the location of the spill, the provisions of OPA 90 (33 USC 2702) notwithstanding.

a. **Pre-assessment Phase.** The Pre-assessment Phase is a preliminary fact-finding exercise that provides the information necessary to determine whether: (a) the Trustee has jurisdiction over a particular incident and (b) if restoration planning is necessary.

(1) **Determining Jurisdiction under OPA 90.** Upon notification of a spill or release incident, the Trustees must first determine whether an incident has occurred as defined by reference (a) subpart (c), and whether natural resources within Navy management or control have been or may be, injured as a result of the Incident. If the conditions of subpart c are met, the Trustees may assume jurisdiction and pursue restoration under OPA 90, provided that the release is not:

– Permitted under a permit issued by Federal, State or local authority;

– From a public vessel; or

– From an onshore facility subject to the Trans-Alaska Pipeline Authority Act, 43 USC 1651.

(2) **Determining Need to Conduct Restoration Planning.** If jurisdiction under OPA 90 is satisfied, Trustees must decide whether to conduct restoration planning. Criteria to determine whether restoration planning may be appropriate include:

– Whether injury to natural resources has resulted from or is likely to result from the Incident;

– Whether response actions have adequately addressed or are expected to address the injury;

– Whether feasible primary and compensatory restoration alternatives exist to address potential injury.

(3) **Threshold Requirements.** If the criteria of either subpart (a) or (b) of this part are not met, the Trustees may not take additional action to pursue restoration under OPA 90. However, the Trustees may take additional action to finalize these determinations and to recover from the RP all reasonable assessment costs.

(4) **Notice of Intent to Conduct Restoration.** If the criteria recited at subparts (a) and (b) above have been met and the Trustees decide to proceed with damage assessment, they must prepare a Notice of Intent to Conduct Restoration Planning. Trustees must make this Notice available to the public and deliver it to the RP. (See 15 CFR 990.44.)

(5) **Public Record.** If Restoration Planning is to proceed, the Trustees are required to make available to the public an administrative record documenting the basis for all decisions pertaining to the Restoration Plan. (See 15 CFR 990.45.)

b. **Restoration Planning.** If Restoration Planning is justified, the Trustees must conduct injury determination, injury quantification and restoration selection.

(1) **Injury Determination.** The Trustees must determine whether:

– the definition of injury has been met; and

– the injured resource has been exposed to the oil, a pathway can be established from the discharge to the injured resource and the injury resulted from the discharge; or

– an injury to a resource or an impairment of a natural resource service has occurred as a result of response actions or a substantial threat of discharge of oil.

When selecting the potential injuries to assess, the Trustees should consider the following factors:

– the natural resources and services of concern;

– the procedures available to evaluate and quantify injury including time and cost requirements;

– the evidence indicating exposure;

– the pathway from the incident to the natural resource and/or service of concern;

– the adverse change or impairment constituting injury;

– the evidence indicating injury;

– the mechanism by which injury occurred;

– the potential degree, spatial and temporal extent of the injury;

– the potential natural recovery period; and

– the kinds of primary and/or compensatory restoration actions that are feasible.

(2) **Injury Quantification**. Upon determining that injury has occurred, the Trustees must quantify the extent of injury relative to baseline. To quantify injury, the Trustees must estimate, quantitatively or qualitatively, the time for natural recovery without restoration, considering the following factors:

– The nature, degree and spatial and temporal extent of injury;

– The sensitivity and vulnerability of the injured resource or service;

– The reproductive and recruitment potential;

– The resistance and resilience of the affected environment;

– The natural variability; and

– The physical/chemical processes of the affected environment.

(3) **Primary Restoration.** Primary restoration is action, including natural recovery, that returns injured natural resources and services to baseline.

(a) *Natural Recovery* – The Trustees must consider a natural recovery option in which no human intervention would be taken directly to restore injured natural resources and services to baseline.

(b) *Active Primary Restoration* – The Trustees should also consider whether accelerated recovery due to direct human intervention may be preferable to natural recovery to restore natural resources and services to baseline.

(4) **Compensatory Restoration.** For each alternative, the Trustees must consider compensatory restoration actions to compensate for the interim loss of natural resources and services pending recovery. When evaluating compensatory restoration actions, the Trustees must consider if the actions provide services of a comparable type, quality and value to those injured and scale the actions accordingly.

(5) **Draft Restoration Plan.** The Draft Restoration Plan is generally subject to the requirements of NEPA and reference (h). Trustees should make the plan available for public review and comment. Where appropriate, the Trustees may propose a Regional Restoration Plan or existing restoration project as a feasible restoration alternative. These plans or projects must satisfy the Trustees' obligation to "restore, rehabilitate, replace or acquire the equivalent of the injured natural resources and services and compensate for interim losses". At a minimum, the Draft Restoration Plan must include:

- a summary of injury assessment procedures used;
- a description of the nature, degree, spatial extent and temporal extent of injuries resulting from the incident;
- the goals and objectives of restoration;
- the range of restoration alternatives considered and a discussion of how they were developed and evaluated under 15 CFR 990;
- the Trustees' tentative preferred alternatives;
- a description of the past and proposed involvement of the responsible parties in the assessment; and
- a description of the monitoring procedures required to document the effectiveness of the restoration action taken, including performance criteria used to determine the success of restoration or the need for interim corrective action.

(6) **Final Restoration Plan.** Following an opportunity for public review and comment, the Trustees develop a Final Restoration Plan to include the elements recited at subparagraph 26-8.1.c, responses to public comment, indicating where changes were made to the Draft Restoration Plan, if any. The Trustees must then present a written demand to the RP under 15 CFR 990.62.

c. **Restoration Implementation.** The Trustees should give the RP a reasonable opportunity—90 days under NPFC rules—to either implement the Final Restoration Plan or to fund the Trustees' implementation of the Plan. While RP implementation and management of the restoration project is probably in the best interest of the public, the guiding principle should be the settlement of damage claims without litigation. Should the RP decline to settle the claim, the Trustees should refer the claim to the Environment Division of the DOJ for collection and civil action in Federal Court if required.

d. **Restoration Monitoring.** In accordance with the monitoring component of the final restoration plan, see subparagraph 26-8.1.b.5, the Trustees should gauge the success of restoration implementation by monitoring both reference and control sites reasonably calculated to assess the progress and performance of the action taken.

26-8.2 Hazardous Substances. Under reference (b), the natural resource damage assessment process for hazardous substances has four phases: Pre-assessment, Assessment Planning, Assessment and Post-assessment.

a. **Pre-assessment.** The first phase of a natural resource damage assessment conducted under reference (b) involves a Pre-assessment screen to determine if further assessment actions are warranted and to determine the procedures most appropriate to Assessment Planning in the instant circumstances. The Pre-assessment screen includes the following criteria:

- whether a HS release has occurred;

– whether natural resources have been or are likely to be adversely affected by the release;

– whether the quantity or concentration of HS sufficient to cause injury;

– whether assessment data is readily obtainable or likely to be obtained at reasonable cost; and

– whether response actions will sufficiently remedy the injury to natural resources without further action.

b. **Assessment Planning.** The goal of this phase is to draft an Assessment Plan that adequately describes the methods that the Trustees intend to use to conduct natural resource damage assessment in the most cost-effective manner. Trustees must make the Assessment Plan available for public review and comment. The Assessment Plan must include a description of the natural resources and geographic area involved; a statement of the authority for asserting Trusteeship; and a description of the procedures that the Trustees intend to use to conduct injury determination, quantification and damage determination. During the planning phase, the Trustees must choose between Types A and B assessment methodology. The methodology so chosen will facilitate the execution of the Assessment Plan.

c. **Assessment.** During this phase, the Trustees execute the protocol described in the Assessment Plan determining injury and quantifying damages under Type A or B assessment procedures.

(1) **Type A Procedures.** In a Type A Assessment, the Trustees perform Injury Determination, Quantification and Damage Determination using standardized procedures involving minimal fieldwork. Typically, Type A procedures involve the use of a computer model to assess damages from small HS releases in coastal and marine environments.

(2) **Type B Procedures.** In a Type B Assessment, the Trustees perform the same determinations using a range of alternative scientific and economic methodologies. Type B procedures are more labor intensive in the collection and analysis of available data and, consequently, significantly more expensive and time consuming.

d. **Post-assessment.** Whether the Trustees elect Type A or Type B assessment procedures, reference (b) requires the Post-assessment preparation of a Report of Assessment, the establishment of an escrow account to receive damage payments and the development of a Restoration Plan.

26-9 Funding

26-9.1 Oil Spill Liability Trust Fund (OSLTF). OPA 90 (33 USC 2712) states funds shall be made available from the OSLTF for the payment of costs incurred by the Trustees in assessing natural resource damages and in developing and implementing plans for the restoration, rehabilitation, replacement or acquisition of equivalent natural resources. The NPFC administers the OSLTF.

a. **Assessment Costs.** Federal Trustees have access to the OSLTF to fund the cost of:

– notifying and coordinating with other Trustees and the Federal OSC;

– pre-assessment determination;

– damage assessment determination;

– data collection and analysis; and

– report preparation

b. **Damage Claims.** Under a 1997 inter-agency ruling, the NPFC may pay uncompensated NRD claims from the OSLTF Funds without seeking further appropriation.

c. **Requests for Funds.** The Trustees should first seek funding from the RP for both the costs of assessment and natural resource damage claims. If the RP is unknown, unable or unwilling to cooperate with the reasonable requests of the Trustees, the Trustees may petition the NPFC for funding from the OSLTF.

(1) **Inter-Agency Agreement.** To access the Fund, the LAT must conclude an interagency agreement with the NPFC for each OPA 90 Incident requiring OSLTF Funds. The LAT must submit the request on behalf of all of the affected Trustees to the cognizant NPFC Regional Manager. The request for OSLTF Funds must provide the information specified in chapter 2 of reference (i), Procedures for Accessing the OSLTF to Initiate Natural Resource Damage Assessments.

(2) **Reimbursement and Cost Recovery.** According to the interagency agreement, the NPFC will review the Trustees' request and advise them whether funding will be available for assessment costs and/or damage claims. To trigger access to OSLTF Funds, the Trustees must submit to the NPFC an USCG SF-180 or equivalent together with cost documentation.

d. **Record keeping.**

(1) **Cost Documentation.** The LAT and each participating Trustee are required to establish a system to record and to document costs, including the cost of personnel, equipment and services.

(2) **Content of Documentation.** The NPFC does not specify a format that cost documentation must take; however, Navy RECs are advised to follow the format identified in chapter 6 of reference (i).

(3) **Trustee Reports.** Where the OSLTF advances funds, Trustees are required to submit a final report of costs to the NPFC. Trustees must submit documentation to the NPFC within 60 days of completing the funded activity. The LAT should review the cost documentation submitted by each of the Trustees and certify that the expenses were both reasonable and necessary. A narrative summary in layman's language describing the activity and the rationale for it must accompany the cost documentation.

26-9.2 CERCLA Superfund. Section 111 of CERCLA establishes a Hazardous Substance Response Trust Fund (the "Superfund"). Section 112 directs the President to establish forms and procedures for the filing of claims against the Superfund. Congressional appropriations language, however, expressly prohibits the payment of natural resource damage claims or assessment costs from the Superfund.

26-9.3 RP Funding

a. **MOU Accounts.** Where a Memorandum of Understanding between the Trustees and RP so provides, the RP may establish an account from which funds may be drawn to cover the cost of pre-assessment and/or damage assessment activities. The availability of such accounts notwithstanding, Trustees may ultimately be required to invoke the statutory funding mechanisms described at subsection 26-9. Accordingly, Trustees may be well advised to establish a cost accounting system similar to that described in paragraph 26-9.1.d.

b. **Revolving Escrow Accounts.** DOI and NOAA have secured, via special legislation, Congressional authorization to establish a revolving escrow account for the receipt of funds from non-Federal sources in the settlement of natural resource damage claims. DOI also has used its account to receive funds in settlement of claims interposed by Federal Trustees other than DOI where DOI served as co-Trustee in the same action. Whether the DOI or NOAA account would be available to receive funds in settlement of claims interposed by Navy RECs acting on behalf of SECDEF as Federal Trustee for Natural Resources has yet to be determined by inter-agency agreement.

TABLE 26.1 NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) PLANNING CONSIDERATIONS
Designate point of contact for NRDA issues.
Publish the point of contact in Area and Regional Contingency Plans (ACPs/RCPs).
Provide technical/scientific assistance/information on NRDA in the preparation of ACPs/RCPs.
Identify special concerns related to natural resources under your management.
Identify sources for baseline condition information (Natural Resource Management Plans, Environmental Impact Statements, Area and Regional Contingency Plans, etc.).
Identify local agency NRDA contacts in your FRP.
Identify funding protocol for contracting private sector NRDA expertise.

TABLE 26.2 NATURAL RESOURCE DAMAGE ASSESSMENT PROCESS FLOWCHART	
ACTION	**PARTIES RESPONSIBLE**
Notification of spill or release Incident	Party discovering spill/release
Survey injury to natural resources within 6 hours of notification: Preliminary Impact & Exposure Report (PIER). Deliver PIER to REC NLT COB next business day.	FRT
Review PIER. Determine whether further assessment will be required. Notify other Trustees *(Federal, State, Indian, Foreign Government).*	REC
Determine whether injury has occurred to resources. Notify Responsible Party of intent to conduct NRDA.	Trustees
Assess extent of injury by comparing to baseline condition. Determine monetary damages using: Type A Assessment (for OHS), Type B Assessment (for HS) or Any other mutually agreeable assessment method	Trustees
Seek monetary damages from Responsible Party. Seek participation from Oil Spill Liability Trust Fund.	Lead Administrative Trustee
Develop restoration plan. Seek public comment on proposed plan.	Trustees
Implement restoration plan. Monitor implementation as required by NEPA.	Trustees

CHAPTER 27

CULTURAL RESOURCES MANAGEMENT

27-1 Scope

27-1.1 General. This chapter states Navy policy regarding the management of cultural resources and establishes Navy responsibilities under pertinent legislation. It conforms with reference (a), which provides policy and assigns responsibilities for the management of cultural resources under DON control.

27-1.2 Applicability. Cultural resources management requirements apply to all real properties under the control of the Navy by ownership, lease, or similar instrument that are located in the United States, the District of Columbia, and the commonwealths, territories and possessions of the U.S. (reference (b)), and other properties eligible for or listed in the National Register of Historic Places. (Navy does not have management responsibility for historic properties it does not own, but may have compliance responsibilities associated with its undertakings that affect them.) Waters contiguous to land areas may contain archaeological resources and historic Navy properties or may be significant due to a historic event; therefore, this instruction applies to land and water areas under direct control of the Navy and to submerged historic properties owned by the Navy, and to undertakings financed by Navy funds regardless of whose land they affect. Activities in foreign countries shall manage their cultural resources in accordance with Chapter 21 and Section 27-6.9, below.

27-1.3 References. Relevant references are:

(a) SECNAVINST 4000.35A, Department of the Navy Cultural Resources Program;

(b) 36 CFR 800, Protection of Historic Properties;

(c) 63 Federal Register 20496, The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act;

(d) 36 CFR 79, Curation of Federally owned and Administered Archaeological Collections;

(e) DOD American Indian and Alaska Native Policy, 20 Oct 98;

(f) DOD Instruction 4715.3, Environmental Conservation Program;

(g) 43 CFR 10, Native American Graves Protection and Repatriation Act Regulations;

(h) OPNAVINST 11170.2, Navy Responsibilities Regarding Undocumented Human Burials;

(i) Defense Installations Strategic Plan (DISP) (updated every other year);

(j) E.O. 13007, Indian Sacred Sites;

(k) E.O. 13006, Locating Federal Facilities on Historic Properties in our Nation's Central Cities;

(l) SECNAVINST 11010.14A, Department of the Navy Policy for Consultation with Federally Recognized Indian Tribes;

(m) P.L. 108-375, Sunken Military Craft Act;

(n) E.O. 13287, Preserve America;

(o) E.O. 13327, Federal Real Property Asset Management;

(p) 32 CFR 229, Protection of Archaeological Resources: Uniform Regulations (DOD);

(q) 32 CFR 767, Application Guidelines for Archeological Research Permits on Ship and Aircraft Wrecks Under the Jurisdiction of the Department of the Navy;

(r) OPNAVINST 5750.12J, Annual Command Operations Report;

(s) SECNAVINST 5212.5D, Navy and Marine Corps Records Disposition Manual.

27-2 Legislation

27-2.1 American Indian Religious Freedom Act (AIRFA). Requires Federal agencies to consult with native traditional religious leaders and to consider, but not necessarily defer to, Native American religious values. Agencies should permit access to religious sites, when possible.

27-2.2 Antiquities Act of 1906. Requires the issuance of permits for study, removal, or excavation of any ruins, sites, structures, or objects of historical or scientific interest.

27-2.3 Archeological Resources Protection Act (ARPA). ARPA authorizes Federal land managers to protect archaeological resources through permits authorizing excavation and/or removal of archaeological resources; through civil and criminal penalties for unauthorized excavation and/or removal, damage, alteration, or defacement of archaeological resources or attempts to perform such unauthorized acts; through provisions for the preservation of archaeological resource collections and data; and through provisions for ensuring confidentiality of information about archaeological resources when disclosure would threaten the resource. Additional requirements include developing plans to survey all lands that are eligible for survey to determine the nature and extent of archaeological resources and prepare schedules to survey lands that are likely to contain the most scientifically valuable archaeological resources. ARPA also requires Federal agencies to create public awareness programs promoting resource protection.

27-2.4 National Historic Preservation Act. Established the National Register of Historic Places (National Register) and the Advisory Council on Historic Preservation (Advisory Council). Additionally, requires each Federal agency to designate a qualified Federal Preservation Officer who will coordinate that agency's activities under this Act. Section 106 of the Act requires Federal agencies to take into account the effects of their undertakings on historic properties. Federal agencies must also allow the Advisory Council an opportunity to comment whenever agency undertakings may affect historic properties or resources that are eligible for listing on the National Register. Section 110 of the Act requires Federal agencies to identify, evaluate, inventory, and protect historic properties (or resources that

are eligible for listing on the National Register) on properties that they control. NHPA imposes no absolute preservation requirement, as long as the Navy follows and documents mandated procedures for any Navy decision regarding undertakings that affect cultural resources. See reference (c) for further guidance.

27-2.5 Native American Graves Protection and Repatriation Act (NAGPRA). Requires each Federal agency to summarize and inventory Native American cultural items (including human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony) in their collections; to identify lineal descendants and culturally affiliated Federally-recognized Indian tribes and Native Hawaiian organizations; and to repatriate the cultural items in consultation with the specified groups. Section 3 requires notification of and consultation with lineal descendants, Federally-recognized tribes and Native Hawaiian organizations prior to the intentional excavation of NAGPRA cultural items from archaeological sites and establishes a process to follow in cases of their inadvertent discovery, including procedures for transfer of custody.

27-3 Terms and Definitions

27-3.1 Advisory Council on Historic Preservation. An independent Federal agency charged with advising the President, Congress, and Federal agencies regarding the protection of historic properties. Plays a key role in the Section 106 review process. 36 CFR 800, Appendix A provides the criteria for ACHP involvement in individual Section 106 cases.

27-3.2 Adaptive Use. A new or different use of a historic property which does not irreversibly alter its character defining features and is appropriate for the context and is consistent with the significance and character of the property.

27-3.3 Archeological Resources. Material remains of past human life that are capable of contributing to scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques. To qualify as "archaeological resources" under ARPA, the remains have to be at least 100 years old. Archaeological remains less than 100 years old may be eligible for listing in the National Register, and if so would be National Register resources for which NHPA compliance is required.

27-3.4 Archaeological Survey. Archaeological survey is a systematic analysis by a professional meeting Secretary of Interior Standards sufficient to allow categorization of archaeological potential to the degree required to make decisions. The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognizes several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important archaeological properties including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing.

a. **Reconnaissance survey.** A reconnaissance survey is an examination of all or part of an area conducted by a qualified professional in sufficient detail to make generalizations about type and distribution of archaeological properties that may be present. A reconnaissance survey will usually include archival research, and may include predictive modeling, remote sensing, surface inspection and subsur-

face testing to determine presence or absence of archaeological properties. Often referred to as a Phase I survey.

b. **Intensive survey.** An intensive survey is a systematic detailed examination of an area designed to gather information about historic properties sufficient to evaluate them against predetermined criteria of significance within specific historic contexts to determine eligibility for listing on the National Register. Appropriate survey methods vary widely for different environments and archaeological resource types. Often referred to as a Phase II survey.

27-3.5 Architectural Survey and Evaluation. A survey and evaluation effort to determine which real properties, sites, buildings, structures, works of engineering, industrial facilities, fortifications, and landscapes, are eligible for the National Register of Historic Places.

27-3.6 Consultation. The process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreement with them on how historic properties shall be identified, considered, and managed.

27-3.7 Cultural Resources. A generic term commonly used to include buildings, structures, districts, archaeological sites, historic landscapes, cemeteries, Traditional Cultural Places, Indian sacred sites, and objects of significance in history, architecture, archaeology, engineering or culture. The term also includes associated documents and records.

27-3.8 Cultural Resources Manager. A staff person not necessarily qualified as a cultural resources professional who performs routine cultural resources compliance functions (often as a collateral duty), and contracts out for professional expertise as needed for specific projects. Such an individual is not necessarily qualified as a cultural resources professional, but must complete appropriate training to perform the Cultural Resources Manager duties.

27-3.9 Cultural Resources Professional. A person who meets the professional standards and qualifications established by the Secretary of the Interior in the appropriate disciplines.
Such an individual is not necessarily qualified as a cultural resources manager, and must complete appropriate training to perform the Cultural Resources Manager duties.

27-3.10 Curation. The management and preservation of an archaeological collection, including all associated documentation, according to professional museum and archival practices, in accordance with 36 CFR 79 (reference (d)), to insure long term care and protection of these resources.

27-3.11 Designated Tribal Representative. A tribal official appointed by the tribe's governing body to represent tribal interests in issues with the potential to impact protected tribal resources or tribal rights off reservation.

27-3.12 Federal Trust Responsibility. The federal trust responsibility between American Indians and the Federal government is an outgrowth of the Federal treaty period where tribes ceded lands in return for protection and certain assurances. Treaties are construed as the tribes would have understood them at the time they were signed, with ambiguities being resolved in favor of the tribes because of the disproportionate bargaining power between the tribes and the United States. Among the Federal assurances were that the tribes retained any rights that were not expressly ceded, such as the use of their ances-

tral lands for fishing, hunting, and gathering in usual and accustomed places and tribal sovereignty. The concept of Federal Trust Responsibility is discussed in the Department of Defense American Indian and Alaska Native Policy (reference (e)).

27-3.13 Heritage Assets. Plant, Property, and Equipment (PP&E) items that are unique due to historical or natural significance, cultural, educational or artistic importance, or significant architectural characteristics for the purposes of accountability under the Chief Financial Officers (CFO) Act. "Heritage Assets" as addressed by CFO Act procedures and "historic properties" as addressed by NHPA are related but separate categories.

27-3.14 Historic property. Broad concept that includes all resources that meet National Register significance criteria, even if the resources have not yet been formally listed, identified or acknowledged as significant. National Register regulations set the criteria for definition of a historic property. "Historic properties" addressed by NHPA and "heritage assets" as addressed by CFO Act procedures are related but separate categories.

27-3.15 Indian Tribe. Any Tribe, band, nation, or other organized group or community, including any Alaska native village that is recognized by the Bureau of Indian Affairs as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. A list of federally acknowledged Indian Tribes for the contiguous 48 states and Alaska is published by the Department of Interior's Bureau of Indian Affairs "Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs".

27-3.16 Integrated Cultural Resources Management Plan (ICRMP). An ICRMP is a plan that defines the process for the management of cultural resources on DOD installations and is required of all DOD installations in accordance with reference (f).

27-3.17 Memorandum of Agreement. Written product of Section 106 consultation, signed by the Navy, the SHPO, Tribal Historic Preservation Office (THPO), other interested Federally-recognized Indian tribes, other interested groups and individuals, and under certain circumstances the Advisory Council, specifying how an undertaking will be carried out so as to avoid, minimize, or mitigate adverse effects.

27-3.18 National Historic Landmark. A historic property designated by the Secretary of the Interior as having exceptional significance in the nation's history and which is subject to additional consultation requirements.

27-3.19 The National Register of Historic Places. NHPA authorizes the Secretary of the Interior to maintain a National Register that lists sites, districts, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. Historic properties may be of local, State, or national significance. The purpose of the National Register is to aid Federal agencies in project planning. Each Federal agency is authorized to include preservation costs of historic property as eligible project costs for all undertakings.

27-3.20 Native Hawaiian. Any descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawaii.

27-3.21 Program Alternatives. May be used as an alternative to case-by-case NHPA Section 106 consultation. Program alternatives provide a way to streamline compliance with regard to categories of similar undertakings, categories of similar effects, or regional or multi-State programs. Implementation and use of program alternatives generally requires up-to-date inventories and a comprehensive management approach. 36 CFR 800.14 defines several Program Alternatives, including programmatic agreements, program comments, standard treatments, exemptions, and alternate procedures. Adopting any Program Alternative requires consultation with relevant stakeholders, and for regional or national alternatives, coordination with the chain of command and other affected commands and agencies.

27-3.22 Recordation. Measured drawings, photographs and other techniques permanently recording historic properties that must be destroyed or substantially altered. Recordation normally must meet the standards of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), as administered by the appropriate regional office of the National Park Service. Consultation may result in the use of other standards in lieu of HABS/HAER. Recordation supplements but does not replace the general documentation requirements of references (g) and (h).

27-3.23 State Historic Preservation Officer. Official appointed by the governor of each State and territory, responsible for administering cultural resources programs within a given jurisdiction. Plays a key role in the Section 106 review process. SHPO may assist the Navy in other cultural resource matters as well.

27-3.24 Tribal Historic Preservation Officer. Individual officially designated by a federally-recognized Indian tribe to direct a program approved by the National Park Service under the authority of Section 101(d)(2) of the National Historic Preservation Act. The THPO must have assumed some or all of the functions of State Historic Preservation Officers on Tribal lands. Navy commands typically consult with tribes on matters of tribal interest on Navy lands vice tribal lands, and so typically consult with a designated tribal representative (see 27-3.11).

27-3.25 Undertaking. A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency. Undertakings that may affect historic properties are subject to NHPA Section 106 review.

27-3.26 Undertaking Proponent. The commander, commanding officer, or civilian director of a unit, activity, or organization who has the legal and financial authority to commit the Navy to agreements undertaken in compliance with cultural resources laws and regulations regarding a particular undertaking.

27-4 Requirements

27-4.1 Preservation Program. In accordance with the NHPA, each Federal agency must establish a preservation program for the identification, evaluation, nomination to the National Register, and protection of historic properties and designate a qualified Preservation Officer. In accordance with NHPA Section 110, an agency must manage and maintain historic properties under its jurisdiction or control in a manner that considers the preservation of their historic, architectural, archaeological, and cultural values. The DISP (reference (i)) requires services to adequately maintain their facilities, including historic properties, to avoid their falling into disrepair and obsolescence. Furthermore, federal

agencies shall ensure that such resources are not inadvertently transferred, leased, sold, demolished, substantially altered, or allowed to deteriorate significantly. Each Agency must, to the maximum extent feasible, use historic properties available to it in carrying out its responsibilities, and shall carry out related activities in consultation with other Federal, State and local agencies, Indian tribes, Native Hawaiian organizations engaged in historic preservation planning, and the private sector. Failure to identify resources that meet National Register criteria does not exempt an agency from any legal responsibilities.

a. **Planning and Management.** In accordance with NHPA Sections 110 and 112, an agency shall provide for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions. This includes properties of traditional religious and cultural significance to Indian tribes or Native Hawaiian organizations in accordance with NHPA Section 101 and Indian sacred sites in accordance with E.O. 13007 (reference (j)). Additionally, ARPA and 32 CFR 229.21 (require that Federal land managers must develop plans to survey all lands that are eligible for survey to determine the nature and extent of archaeological resources and prepare schedules to survey lands that are likely to contain the most scientifically valuable archaeological resources following guidance provided by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation.

(1) **Historic Inventory Identification and Management.** The purpose of Navy's historic inventory management program is to allow Navy to take into account its effects on historic properties and conduct consultation using the most accurate information concerning what properties are historic, what makes them historic, and what are the best technical and operational practices for keeping historic properties in current mission use. National Register eligibility recommendations must be conducted by a qualified person, must identify the characteristics that make the property historic, must include an analysis of the property's historic integrity, and must be reviewed by a Navy cultural resources professional before adoption by the Navy. Properties previously determined eligible or ineligible may periodically require re-evaluation due to the passage of time, evolving understanding of historical significance, or inadequate previous evaluations.

(2) **National Register Nomination.** The decision to pursue National Register nomination of a particular property is reserved to the Echelon 2 commander responsible for the property, in coordination with the local command directly responsible for the property. The Echelon 2 commander responsible for a property will be informed of requests received for Navy comment on National Register nominations originated by SHPOs or other persons under the provisions of 36 CFR 60.

b. **Phased Approach.** The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognizes several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important historic properties including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing as appropriate. In compliance with Federal requirements and the DISP (reference (i)) all Navy lands are to be systematically analyzed by qualified professionals, using appropriate survey methodology, sufficient to make generalizations about type and distribution of historic properties that may be present, for purposes of master planning. Systematic detailed examinations to determine National Register eligibility will be conducted prior to initiation of any project with the potential to affect any historic properties or sites of religious or cultural significance to Indian tribes.

c. **Integrated Cultural Resource Management Plans.** DISP (reference (i)) and DODI 4715.3 require that all installations develop and implement ICRMPs in consultation and partnership with State Historic Preservation Officers and other appropriate consulting parties. The ICRMP is the planning tool for consolidating the inventory and management requirements of NHPA and other statutes, and so is an essential element in legal compliance with those statutes. Navy develops ICRMPs as a management tool to insure the most time- and cost-efficient method of integration with project and operations planning to facilitate mission. All ICRMPs will be reviewed annually and updated as required.

d. **Program Alternatives.** Program alternatives, as defined in 36 CFR 800.14, may be used as an alternative to case-by-case NHPA, Section 106 consultation. Appropriate applications are described in 36 CFR 800 and include efforts to streamline compliance with regard to categories of similar undertakings, categories of similar effects, or programmatic approaches that apply state, regional, or nationwide. Implementation and use of program alternatives requires up-to-date inventories and a comprehensive approach to managing cultural resources. As applicable, cultural resources staff shall incorporate the terms of existing programmatic alternatives into NHPA, Section 106 consultations as appropriate. Such programmatic alternatives include programmatic agreements, program comments, standard treatments, exemptions & alternate procedures. Adopting any Program Alternative requires consultation with relevant stakeholders, and for regional or national alternatives, coordination with the chain of command and other affected commands and agencies

e. **Use of Historic Structures.** Federal agencies will use available historic buildings, when feasible, prior to new construction, lease, or any acquisition of a building for the purpose of carrying out its responsibilities. Additionally, NHPA Section 111 requires a federal agency to establish and implement alternatives, including adaptive use, for historic properties that are not needed for current or projected agency purposes. Furthermore, Section 111 authorizes federal agencies to lease, exchange, or enter into contracts for management of any of its historic properties to insure their preservation. The economic analysis of alternatives should include an evaluation of life-cycle maintenance costs, utility costs, replacement costs and other pertinent factors for both new construction and rehabilitation/conversion alternatives. Potential reuse should be considered before deciding to demolish or dispose of a historic property. See reference (k) for further guidance.

27-4.2 Compliance. Case-by-case compliance with the requirements of NHPA section 106, including a step-by-step description, is governed by 36 CFR 800. Because termination of consultation requires the participation of the Secretary of the Navy and OSD in the specified process of Navy notification of termination, Advisory Council comment, and Navy consideration of comment, internal requests to consider termination must be coordinated well in advance, and with full consideration of both costs and benefits of termination.

27-4.3 Consultation

a. **Consultation with Stakeholders.** Requirements regarding consultation with outside parties such as Advisory Council, SHPO, THPO, Indian tribes, Native Hawaiian Organizations (NHOs), and interested public vary according to specific legislation. In general, Federal agencies are to consult with interested parties at earliest stages in the planning process to allow consideration of all possible alternatives that facilitate timely completion of the project or mission while avoiding or mitigating impact to a historic property.

b. **Tribal Consultation.** NHPA, AIRFA, NAGPRA, and the Federal Trust Responsibility require Navy commands to consult with federally recognized Indian tribes on a government-to-government basis about proposed actions with the potential to effect sites of religious or cultural importance to the tribe. In most cases, this requirement also extends to Native Hawaiian organizations. Consultations with tribes shall be conducted in accordance with SECNAVINST 11010.14A (reference (j)). There are three different ways in which consultation may take place. If the tribe has assumed the responsibilities of the SHPO for tribal lands, then the Navy will consult with the tribe's THPO in lieu of the SHPO for undertakings affecting Indian lands. If the tribe has not assumed the duties of the SHPO, then the Navy will consult with both the designated tribal representative and the SHPO for undertakings potentially affecting Indian lands. For undertakings that do not affect tribal lands, the Navy will consult with designated tribal representatives regarding sites of religious or cultural importance to the tribe.

c. **Agreement Documents with Tribes.** Navy policy requires consultation with tribes to develop and implement protocol agreements. Such agreements will outline which issues are of interest to individual tribes and the manner in which consultation is to occur. E.O. 13007 (reference (j)), AIRFA, and the Federal Trust Responsibility require Federal agencies to protect and provide access to Native American sacred sites and treaty resources, the management of which can be outlined in a Memoranda of Understanding. Other agreements with tribes include Comprehensive Agreements under NAGPRA, to structure the process and disposition of inadvertently discovered Native American human remains, funerary objects, sacred objects and objects of cultural patrimony. Agreement documents with tribes are recommended as best practice in Navy policy as a way to document adequate consultation within the administrative record as well as streamline Navy actions and facilitate mission.

27-4.4 Native American Graves Protection and Repatriation Act. NAGPRA requires each Federal agency to summarize and inventory Native American cultural items (including human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony) in their collections; to identify lineal descendants and culturally affiliated Federally-recognized Indian tribes and Native Hawaiian organizations; and to repatriate the cultural items in consultation with the specified groups. Section 3 requires notification of and consultation with lineal descendants, Federally-recognized tribes and Native Hawaiian organizations prior to the intentional excavation of NAGPRA cultural items from archaeological sites and establishes a process to follow in cases of their inadvertent discovery, including procedures for transfer of custody.

27-4.5 National Historic Landmarks. NHPA Section 101 provides for inclusion of National Historic Landmarks (NHLs) in the National Register. Section 110(f) imposes more requirements on NHLs than other historic properties, requiring the heads of federal agencies, to the maximum extent possible, to undertake planning and actions necessary to minimize harm to any National Historic Landmark. Federal regulations (36 CFR Part 65) outline procedures for consultation with the SHPO, the

Advisory Council, and possible NPS review and afford consulting partners adequate time to comment on any undertakings with the potential to effect an NHL.

a. **Monitoring of National Historic Landmarks.** The NPS maintains a continuing relationship with owners of National Historic Landmarks. Navy cooperates in periodic visits or contacts with SHPOs and other appropriate means that the NPS uses to compile its annual report to Congress on threats to the integrity of NHLs, to advise agencies concerning accepted preservation standards, and to update administrative records on NHL properties.

b. **Landmark Designation Actions.** The decision to initiate pursuit of NHL designation of a particular property is reserved to the Echelon 2 commander responsible for the property, in coordination with the local command directly responsible for the property.

27-4.6 Archeology

a. **Permitting for Archaeological study.** In accordance with ARPA and 32 CFR 229 (reference (p)), any person proposing to study, remove, and/or excavate archeological resources from Navy lands requires a permit under ARPA and/or the Antiquities Act. However, under 32 CFR 229.5(c), persons carrying out official duties under the Federal land manager's direction need not apply for permits as long as Federal land manager insures that all provisions of ARPA have been met by other documented means. Permit requests must explicitly address and ensure professional curation of all remains, samples, and documentation in accordance with 36 CFR 79 (reference (d)). In accordance with the Sunken Military Craft Act (SMCA) (P.L. 108-375) (reference (m)) and 32 CFR Part 767, any person proposing to engage in an activity that would disturb, remove, or injure a sunken military craft under the jurisdiction of the DON for archaeological, historical, or educational purposes, shall apply to the Naval Historical Center (NHC) for a permit. The NHC may issue a permit to any qualified person, subject to appropriate terms and conditions.

(1) Commanders and commanding officers of Class I property, in coordination with COMNAVFACENGCOM and in consultation with concerned stakeholders including Indian tribes, are delegated the authority to issue permits for archeological work on Navy lands.

(2) In cases where the Navy contracts with an archaeologist (or a Navy contractor subcontracts with an archaeologist) to perform archaeological work for the Navy, commands may consider a brief compliance statement in the contract or subcontract as the equivalent of a permit. In cases where employees of the Navy perform archaeology on Navy lands, satisfy legal permitting requirements by ensuring that such employees are professionally qualified archaeologists (as defined by current Federal regulations).

b. **Curation.** ARPA and 36 CFR 79 (reference (d)) establish that archaeological collections excavated or removed from lands owned by the United States remain Federal property. Federal agencies are required to deposit these collections and all associated documentation in an institution with adequate long-term curatorial capabilities to provide for their maintenance, physical security and research. Agencies are to regularly monitor the care of collections and the capacity of the repository to continue meeting the standards stipulated under federal regulations.

c. **Penalties.** ARPA authorizes criminal and civil penalties against any person who violates any prohibition of the act. According to reference (m), the Sunken Military Craft Act (P.L. 108-375) authorizes civil penalties against any person who violates any prohibition under the act.

d. **Archaeological Site Location Protection and Management.** NHPA requires Federal agencies to withhold information from the public regarding nature and location of archaeological sites if disclosure of this information might create a risk of harm to such resources. The FOIA Exemption b (3) permits the restriction of such information. NHPA authorizes withholding information after consultation with the Department of Interior, Departmental Consulting Archaeologist, in order to protect the resource from potential harm. The release or distribution of precise or exact site location data or information must be limited to the absolute minimum number of individuals who need to know. Access to such information in databases and geographic information systems should be limited to cultural resource managers and professionals and others with a substantial need to know.

27-4.7 Public Outreach and Heritage Tourism. ARPA and E.O. 13287 (reference (n)) require agencies to create public awareness and education programs promoting significance and protection of archaeological resources and other historic properties.

27-4.8 NEPA Integration. The statutory requirements of NHPA and NEPA, although independent, are interrelated. Agency officials may use the NEPA process and documentation required for the preparation of NEPA documents to comply with Section 106 in lieu of the procedures set forth in 36 CFR 800.3-800.6; the agency official must notify in advance the SHPO/THPO and the Council that it intends to do so and follows the standards discussed in 36 CFR 800.

27-5 Navy Policy

27-5.1 Navy Policy is:

- Incorporate preservation considerations into routine Navy management of historic buildings, districts, sites, ships, aircraft, and other cultural resources. The Navy shall use preservation-specific materials and techniques to achieve cost-effective cultural resources stewardship.

- Initiate timely consultation with SHPO/THPOs, the Advisory Council on Historic Preservation, American Indian Tribes, Native Hawaiians, other interested agencies, and the public whenever the DON conducts or supports undertakings that may affect historic properties. The Navy retains ultimate authority over treatment and use of its historic properties.

27-5.2 Integrated Cultural Resources Management Plans

a. **ICRMP Implementation.** An ICRMP is a plan that defines the process for the management of cultural resources on Navy installations, and should be referenced in the regional shore installation plans (RSIP's) that:

- Identify the areas of probability for historic properties, based on overviews and surveys performed by cultural resources professionals.

- Contain an inventory and evaluation of installation cultural resources, and/or a strategy for phased inventory and evaluation of unevaluated areas or resources. The inventory and evaluation process will also be used to enter or validate and update historic property information held in data repositories such as real property information systems.

- Recommend treatment categories and management priorities as appropriate, and describe applicable legal compliance strategies that avoid potential conflicts between Navy mission and preservation considerations. The ICRMP should incorporate applicable existing local and national agreements, and discuss whether new or revised agreements are recommended.

- Provide a recommended interpretation strategy to ensure that appropriate information about Navy historic properties is disseminated to Navy members, employees, families, and the general public.

- Recommend compliance actions to be taken if Navy undertakings affect historic properties.

b. **Development of ICRMP.** Shore installations shall:

- Approval authority for ICRMPs rests with the regional commander, who may delegate to the installation level if desired

- ICRMP plans are to be consistent with State and Federal preservation programs, culturally affiliated or interested Indian tribes, and other Navy planning documents and processes. ICRMPs are reviewed annually and revised when required. OCONUS commands will conduct inventory and evaluation of historic properties and develop ICRMPs that are consistent with the particular installation management situation at their location.

- Make the information contained in the ICRMP widely available to planners, facilities managers, and other installation and regional personnel in the performance of their duties, subject to the confidentiality restrictions placed on the dissemination of information about archeological sites and certain Native American resources.

- Provide an electronic copy of the final signed ICRMP to the regional commander, to the regional engineer environmental office and to the Deputy Federal Preservation Officer (DFPO) for the Navy.

- Request a waiver from the requirement to prepare an ICRMP as allowed by paragraph 6b(12) of (reference (a)) if a survey has shown that the installation is without cultural resources, or for small installations with so few cultural resources that individual property management plans are as effective and more efficient than an ICRMP. Waiver requests are submitted through the chain of command to the Department of the Navy Federal Preservation Officer.

27-5.3 Training

Personnel with cultural resources compliance responsibilities shall receive cultural resources training appropriate to his or her job assignment as outlined in the Navy Training Plan and Chapter 28 of this

instruction. This training is particularly important for individuals outside the cultural resources management organization whose duties nevertheless affect the management of historic properties.

27-6 Responsibilities

27-6.1 Director, Ashore Readiness Division, Office of Chief of Naval Operations (N46) shall:

(a) Provide guidance for cultural resources programs at Navy shore installations, historic ships in the inactive fleet, and cultural resources aspects of Navy environmental programs (reference (f)). As resource sponsor, the DCNO (Fleet Readiness and Logistics) (CNO (N4)) provides fiscal support for qualified cultural resources staffing, training, surveys, plans, and other management requirements to achieve compliance with applicable statutes, regulations, and instructions.

(b) Ensure a cultural resource management program is appropriately integrated with other planning and management processes to provide the most effective and efficient management of Navy historic properties.

(c) Designate a qualified staff person to oversee and coordinate the Navy's cultural resources programs. This person will serve as the Deputy Federal Preservation Officer (FPO) for the Navy if so appointed by the DON Federal Preservation Officer (DON FPO).

(d) Identify Navy-wide priorities for cultural resources surveys and other stewardship actions so as to achieve compatibility with Navy missions and budgets.

(e) Provide guidance on implementation of cultural resources policy and advise all levels of command regarding compliance with cultural resources legislation, regulations, and professional standards.

(f) Review interagency cultural resources compliance agreements and National Register nominations, as recommended by subordinate commands, and prepare nominations for DON FPO signature.

(g) Coordinate interagency consultation concerning cultural resources and Indian tribes/NHOs at shore installations, in the inactive fleet, underwater, or affected by Navy programs.

(h) Ensure full coordination with Marine Corps and other military services to avoid duplication of effort.

(i) Coordinate response(s) to Congressional inquiries and requests for cultural resources information from Federal, State or private interests.

27-6.2 COMNAVFACENGCOM shall:

(a) Act as principal advisor to BUMED, CNIC and CNO (N4) in matters related to historic buildings, structures (except ships, shipwrecks, and aircraft), sites, districts, terrestrial archaeological sites, Traditional Cultural Properties, Indian sacred sites, disposition of archaeological collections, and other cultural resources not assigned elsewhere.

(b) Designate and train cultural resources professional staff as necessary at headquarters and field activities to perform cultural resources management functions.

(c) Maintain a list of the Navy's historic properties, integrated with the appropriate designated authoritative inventory management system for the property type in question.

(d) Provide technical assistance to identify, evaluate, inventory, nominate, plan, maintain, and protect cultural resources under Navy control.

(e) Cooperate with SHPOs and other preservation officials in their regions so as to expedite Navy projects and programs affecting cultural resources.

(f) Assist installations in negotiating MOAs and Program Alternatives that protect, preserve, and manage cultural resources and facilitate Navy projects and programs.

(g) Provide technical and legal support in resolving questions related to cultural resource management legal requirements, as requested.

(h) Provide preservation training opportunities and guidance concerning appropriate cultural resource management procedures, techniques and material.

27-6.3 COMNAVSEASYSCOM shall:

(a) In coordination with Deputy FPO, DON FPO and Director, Naval Historical Center (DNHC) manage historic property, historic ships afloat, and historic ships in the inactive fleet under COMNAVSEASYSCOM control, and coordinate with other commands.

(b) Fully comply with the NHPA and other legislation applicable to stewardship of cultural resources under COMNAVSEASYSCOM control.

(c) Coordinate with the Naval Historical Center for the protection, preservation, and management of historic ships afloat and historic ships in the inactive fleet and other historic artifacts under COMNAVSEASYSCOM control.

(d) Designate and train qualified staff responsible for compliance actions regarding cultural resources.

27-6.4 CNIC and other BSOs with responsibility for historic properties shall:

(a) Program, budget, and allocate funds for qualified staffing, training, surveys, plans, curation and studies to facilitate the identification, evaluation, inventory, planning, maintenance, and protection of historic properties and other cultural resources at installations under their cognizance.

(b) Ensure that all real property under their control is either addressed by an ICRMP, or is the subject of an ICRMP waiver request to the DON FPO.

(c) Revise instructions and other appropriate documents, if necessary, to reflect requirements of this chapter.

(d) Ensure subordinate commands and shore installations, as applicable, designate and train cultural resources managers responsible for compliance with applicable cultural resources laws, regulations and policy.

(e) Coordinate with each other to ensure that cultural resources management for all Navy real property is performed effectively and efficiently.

27-6.5 Regional Commanders shall:

(a) Coordinate among subordinate and tenant activities to achieve maximum efficiency regarding compliance with cultural resources management requirements within the region. This includes developing and implementing regional ICRMPs and compliance agreements when appropriate.

(b) Program and budget for adequate compliance with cultural resources management legislation that applies to resources under their control.

(c) Designate and train staff personnel as necessary to serve as cultural resources managers and deal with cultural resources.

(d) Provide for the professional identification, evaluation, inventory, nomination, and protection of resources under their control that appear to be eligible for the National Register, and ensure that the appropriate data management systems, including spatial data systems, accurately reflect the historic status of such resources. See reference (o) for further guidance.

(e) Follow all legally mandated procedures if historic properties under their control are to be transferred, leased, sold, demolished, or substantially altered.

(f) Develop, implement, and integrate ICRMPs with other planning documents and routine procedures applicable to activity projects and programs.

(g) Consult with the SHPO and other consulting parties, interested groups and individuals when undertakings are the type of activity that has the potential to cause effects on historic properties, and when required enter into agreements regarding resolution of adverse effects. See reference (b) for further guidance.

(h) Consult with Native American tribes prior to any Navy action that may impact Native American interests as defined by applicable laws and regulations, including NAGPRA's planned excavation and inadvertent discovery provisions. See references (b), (g), (j), (n), and (l) for further guidance.

(i) Ensure that inadvertently discovered archaeological resources are protected at the site of discovery, ensuring that the chain of command is kept informed. See references (b), (g), and (h) for further guidance..

(j) Use historic buildings when available and practical instead of new acquisition(s), construction, or leasing to satisfy mission requirements.

(k) Process applications and issue ARPA permits authorizing professional excavation and removal of archaeological resources, as appropriate.

(l) Provide for storage and professional curation of archaeological collections, including samples and associated records that might accrue in carrying out legal compliance actions. See references (b), (p), and (d) for further guidance.

(m) Determine whether to disclose potentially sensitive cultural resources information that may be protected from release under ARPA and NHPA.

(n) Request a waiver from the requirement to prepare an ICRMP as allowed by paragraph 6b(12) of (reference (a)) if a survey has shown that an installation is without cultural resources, or for small installations with so few cultural resources that individual property management plans are as effective and more efficient than an ICRMP.

(o) Delegate above responsibilities in writing to the Installation Commanding Officers as appropriate if desired.

27-6.6 Director, Naval Historical Center shall:

(a) Act as principal advisor for the Navy in matters related to historic naval ships, shipwrecks, and aircraft.

(b) Designate a qualified professional to oversee and coordinate the Navy's cultural resources programs related to historic ships, shipwrecks, and aircraft.

(c) Designate and train qualified staff responsible for compliance actions regarding cultural resources.

(d) Identify priorities for historic ship and aircraft surveys, inventories, and other stewardship actions so as to achieve compatibility with missions and budgets.

(e) Advise all levels of commands having historic ships and aircraft regarding compliance with cultural resources legislation, regulations, and professional standards.

(f) Review interagency compliance agreements and National Register nominations of historic ships, shipwrecks, and aircraft as recommended by subordinate commands, and prepare nominations for DON FPO signature.

(g) Negotiate MOAs and Program Alternatives that protect, preserve, and manage naval shipwrecks and aircraft wrecks as historic properties or archaeological resources.

(h) Process applications for and issue research permits for the professional study and excavation of Navy ship and aircraft wrecks in compliance with 32 CFR 767 (reference (q)).

27-6.7 Undertaking proponents shall:

(a) Make no open-ended commitment of navy resources without CNO (N4) authorization.

(b) Plan, program, and budget for adequate compliance with cultural resources management legislation in project development for undertakings.

(c) Coordinate as required with other commands and organizations to perform particular cultural resources management activities associated with their undertakings.

27-6.8 Cultural Resources Managers shall:

(a) Locate, inventory, evaluate and protect historic buildings, structures, districts, archeological sites, ships, aircraft and other cultural resources in accordance with Section 110 of NHPA and Navy policy, or supervise or program for these activities for subordinate commands, as appropriate to the command.

(b) Prepare or supervise the preparation of ICRMPs in accordance with applicable guidelines.

(c) Manage cultural resources consistent with professional standards, and provide technical oversight for contractors engaged in cultural resources activities on behalf of the Navy.

(d) Formulate preservation alternatives for consideration when cultural resources are proposed for demolition, deactivation, reactivation, rehabilitation, transfer or disposal.

(e) Perform timely interagency consultation and compliance with Section 106 of NHPA whenever a Navy-funded, licensed, permitted or assisted undertaking may affect historic properties.

(f) Disseminate technical guidance regarding maintenance, storage and protection of cultural resources and proper procedures for interagency consultation.

(g) Coordinate the maintenance of cultural resource records in the appropriate data management systems, to assure that accurate information regarding Navy cultural resources can be provided to Congress, the DON FPO, and other interested parties when required.

(h) If not a Cultural Resources Professional, seek the advice of a qualified Cultural Resources Professional in the appropriate discipline before making decisions or decision recommendations for which technical expertise in that discipline is required. In particular, recommendations concerning the eligibility of Navy properties for the National Register shall be reviewed by a Cultural Resources Professional trained in the appropriate discipline before being submitted to the decision maker.

27-6.9 OCONUS Navy commands, installations and other components shall:

(a) Take into account the effect of any Federal undertaking outside the United States that may directly or adversely affect a property that is on the World Heritage List or on the applicable country's equivalent of the National Register.

(b) Take into account applicable provisions of status of forces agreements, international agreements, and Admiralty law.

CHAPTER 28

ENVIRONMENTAL, NATURAL AND CULTURAL RESOURCES TRAINING

28-1 Scope

This chapter defines environmental, natural and cultural resources training required for Navy personnel (including military personnel and civilian employees of non-appropriated fund activities) to accomplish all Navy missions in an environmentally responsible manner, and to comply with Federal, State, and local laws and regulations. Cultural Resources training is managed outside of the environmental community, however it is included here to better serve the environmental community overall and emphasize the need for training across facilities business lines. This chapter provides the Navy's environmental, natural and cultural resources training program for implementing the aforementioned policy. Environmental training courses described in this chapter are official courses for the training of Navy personnel. As applicable, individual technical chapters within 5090.1C include specific training mandated by law, regulation, or Executive Order (E.O.)

This chapter applies to all Navy shore and afloat commands. Additionally, it directs all hands training, so that newly reporting personnel are provided with a meaningful environmental, natural and cultural resources summary. Environmental responsibilities are often collateral duties and not always assigned to fulltime personnel. For this reason, environmental, natural and cultural resources subject matter must be integrated into training for facilities, operations, planning, and other personnel.

Commanding officers should note that formal (non Navy-specific) school training does not substitute or eliminate the requirement for a comprehensive Navy command-specific environmental, natural and cultural resources training program.

28-2 References. Relevant reference is:

(a) N45-NTSP-X-10-00-01A, Navy Environmental Training Program (NETP) Navy Training System Plan (NTSP), November 2006.

28-3 Terms and Definitions

28-3.1 Interactive Multimedia Instruction/Distance Learning. A combination of methods used to deliver training. It usually consists of new technologies that include computer-based training (CBT) and CD-ROM, Internet usage, videos, DVDs, and video teletraining delivered both via satellite and landlines. Training delivery is determined through formal instructional design processes and look to provide training efficiencies as well as the best methods to train students.

28-3.2 Interservice Environmental Education Review Board. A standing board of the Interservice Training Review Organization (ITRO). The ISEERB has a goal of ensuring that environmental, and natural and cultural resource education and training in the Services is accomplished with as little redundancy as possible. An ISEERB-approved course is an endorsement given to specific environmental education and training courses that have been reviewed by Subject Matter Experts (SMEs) from DOD, the military services and USCG, and found to have a common content suitable for use by more than one component. The course may be a Navy lead course or another service may have the lead.

28-3.3 Interservice Training Review Organization (ITRO). An organization established by the Joint Chiefs that the Services have participated in since 1972. ITRO is established under provisions of the Interservice Training Regulation, AR 351-9, OPNAVINST 1500.27E, MCO 1580.7D and AFI 36-2230(1). The goal of ITRO is the elimination of unnecessary duplication and training redundancy without negatively impacting training quality or Service mission.

28-3.4 Navy Environmental Training Program (NETP). The NETP includes training for environmental compliance, pollution prevention, natural resources, cultural resources, resource asset management, tribal issues and planning as well as transportation, homeland security, human health and safety issues when they cross into environmental law and regulations (i.e., HAZWOPER and environmental risk communication).

28-3.5 Navy Training System Plan (NTSP). The CNO planning document (OPNAVINST 1500.76) that identifies validated training requirements and resources to implement the requirements. The NETP NTSP (reference (a)) is updated every 3-5 years and addresses the life cycle of all Navy-approved and ISEERB environmental courses in 3-year cycles. The NTSP tasks the NETC to implement the plan's requirements.

28-3.6 Subject Matter Expert (SME). An individual, who, based on education and/or experience in an environmental area, identifies training needs, reviews curriculum, assists in developing technical aspects of curriculum or acts as a guest speaker in courses.

28-3.7 Technical Content Review (TCR). NETP process that consists of a technical review of the curriculum content, delivery and effectiveness of a course. A TCR is conducted, at a minimum, every 3 years of the continuing life cycle of a course. The TCR process is also used for new course/training development.

28-4 Navy Policy

The Navy's environmental training policy is to implement an efficient and effective NETP that provides the right training to the right people at the right time as required to support the Navy's mission.

28-4.1 NETP Steering Committee. The NETP Steering Committee provides oversight to the environmental, natural and cultural resources training programs. The programs are resourced by CNO (N45) with input from N46 for cultural resource training. The NETC provides manpower for the two environmental schoolhouses to implement the program based upon requirements in the Environmental NTSP. The NETP Steering Committee partners with the ISEERB when appropriate to leverage environmental training and ensure the best use of Navy resources.

The Steering Committee will meet, as necessary, to review schoolhouse performance, evaluate potential new courses and delivery systems, and to assist in ensuring proper resources are available.

Membership of the NETP Steering Committee includes representatives from the following organizations:

- CNO (N45) (Chair);
- Naval Installations Command (CNIC);

- U.S. Fleet Forces Command (FFC);
- U.S. Pacific Fleet (COMPACFLT);
- Naval Education and Training Command (NETC);
- U.S. Naval Forces, Europe; (NAVEUR)
- Naval Facilities Engineering Command (NAVFACENGCOM);
- Naval Sea Systems Command (NAVSEA);
- Naval Air Systems Command (NAVAIR);
- Bureau of Medicine and Surgery (BUMED);
- Naval Civil Engineer Corps Officer's School (CECOS);
- Navy Occupational Safety and Health and Environmental Training Center (NAVOSHENVTRACEN); and
- Naval Supply Command (NAVSUP).

The Steering Committee Chair may invite representatives from the Regions or other commands to meetings as non-voting members upon his/her discretion.

28-4.2 Ashore and Afloat Working Groups. The NETP Steering Committee shall have two permanent work groups: an Ashore work group and an Afloat work group. The Ashore and Afloat Working Groups will provide field functional input to identify environmental training gaps, or new or revised requirements. Both Working Groups will consist of a core framework made up of a Steering Committee appointed Chair and a member from the appropriate NETP School. When a training need is identified the working group chair will activate an adhoc working group from an established cadre of appropriate SMEs to address the new requirement. These adhoc groups will dissolve after the need is either validated by the Steering Committee, met by one of the NETP Schools or not Steering Committee approved. Connectivity will be maintained by the Working Group Chairs.

28-4.3 Environmental Training Organizations. CECOS and the NAVOSHENVTRACEN are the two training organizations defined by the environmental NTSP that will develop and deliver environmental training to support the NETP. Some of the training required by the NTSP may have overlaps with other required training and may be embedded into other NTSPs and Training Schools as appropriate.

28-4.4 Environmental Training Courses. The existing NETP courses for this chapter are defined in Appendix P and are the basis of the program.

a. The fleets, commands and their representative SMEs via the Steering Committee and its two work groups are involved in the identification, validation, development, life cycle determination,

review and funding of the training to ensure it meets the Navy mission. Non-standard courses do not promote implementation of standardized and official Navy policy and management approaches and are not the best use of Navy resources.

b. It is Navy policy that the NETP courses/training be advertised to Navy personnel every year. Course advertisements will include course descriptions and scheduled offerings. Naval Personnel Development Center (NPDC), via CECOS and NAVOSHENVTRACEN, will make registration procedures and access to their training as user-friendly to the Navy student as possible.

28-4.5 Duplicative and Redundant Training. It is Navy policy to prevent duplicative and redundant training efforts in order to best use Navy resources. Therefore, training offered outside of the NETP should be evaluated closely by questioning requirement and cost. The Navy discourages the use of non-standard courses, unless:

- A specific course is unavailable through Navy sources, or
- An ISEERB-approved course for Navy personnel does not exist, or
- A commercially available course equivalent to a Navy source course is determined to be time sensitive due to an enforcement action or
- The NETP course offerings do not meet or cannot be modified to meet the legal requirements of the State or location in which the command is located.

28-4.6 Training Requirements and Validation. The NETP Steering Committee manages the NETP that sets training requirements and identifies and ensures implementation of the training for the shore/afloat community. Figure 28.1 defines the NETP training identification and approval process. Unmet training requirement will be identified through either the Ashore or Afloat Working Group. The NETP Steering Committee validates when and/or if the training will be incorporated into the NTSP for implementation. Training for on-board ship P2 and collection, holding and transfer system (CHT) related equipment is not part of this NTSP, however training for such equipment is assessed by the Afloat Working Group through review of appropriate NTSPs.

28-4.7 Environmental Training Integration into other Programs. Environmental subject matter, including natural and cultural resources, shall be integrated into training for acquisition, operation, planning, facilities, range, real estates, resource asset management, and construction personnel. Addressing environmental compliance up front in these areas can prevent loss of assets and minimize impacts to the Navy's mission.

28-5 Environmental Training Requirements

28-5.1 General Environmental Awareness Training. Commanders and Installation Commanding Officers (ICOs) will conduct general environmental awareness training for all hands afloat and ashore, and include:

- The Navy's Environmental Management System (EMS) Program policy and command practices that may have an impact on mission and the environment;

- The command's specific environmental responsibilities and its accompanying environmental awareness and compliance programs, including employee liability and protection of natural and cultural resources, pollution prevention, recycling, and hazardous material control and management;

- The command's commitment to a strong, protective environmental ethic and stewardship of natural and cultural resources;

- The role of the individual in achieving Navy environmental, natural, and cultural resources asset management and goals;

- The role of Federal, State, and local environmental laws and regulations;

- The command's environmental points of contact and telephone numbers and emergency telephone numbers.

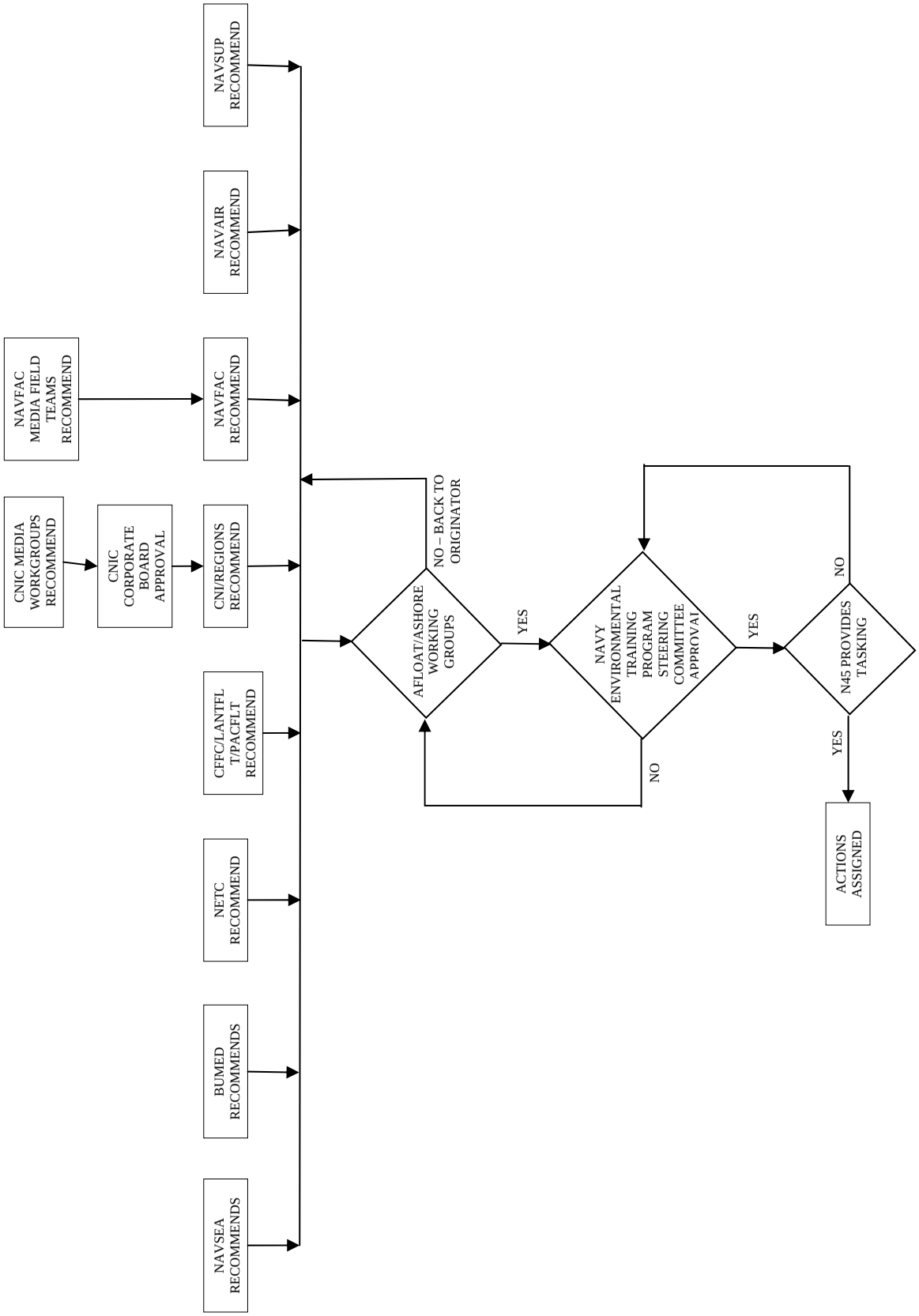

Figure 28.1 – NETP Requirements Process

The Navy produces and provides environmental awareness training videotapes, DVDs and computer-based training modules and Internet on-line training via Navy Knowledge On-line (NKO) for distribution to all commands when funding is available. Commands should use these supplemental training tools to assist in accomplishing general environmental awareness training. Records for annual awareness training will be maintained by Commands and/or their appropriate Departments and tenant Commands on-site to ensure continued compliance with this section.

28-5.2 Competence, Training, and Awareness. EMS Appropriate Facilities shall ensure practice owners performing tasks that have the potential to cause a significant environmental impact are competent on the basis of appropriate education, training or experience and shall retain associated records. EMS Appropriate Facilities shall identify training needs associated with its environmental aspects and its EMS, provide training or take other action to meet these needs, and retain associated records. Procedures shall be established and maintained such that practice owners are made aware of the following:

- Importance of conformity with the environmental policy, procedures, and requirements of the EMS, including emergency preparedness and response requirements.

- Significant environmental aspects and impacts associated with their work and environmental benefits of improved personal performance.

- Their roles and responsibilities in the EMS and specific procedures they will use to control environmental impacts of their activities, products and services.

- How to address the consequences (impacts) if the procedures fail to provide environmental protection.

28-5.3 Specialty Environmental Training

a. **Surface warfare officers.** Surface warfare officers shall receive environmental and pollution prevention training through the Surface Warfare Officers' School Command as part of their curriculum.

b. **Supply officers.** Supply officers shall receive environmental training at the Naval Supply Corps School and NAVOSHENVTRACEN as part of an appropriate curriculum.

c. **Naval aviators.** Naval aviators shall receive environmental compliance and pollution prevention training as part of flight training, or soon thereafter. Embarked squadrons or detachments shall participate in their ship’s training program. All involved in potential animal related air strikes will take the CECOS Bird Air Strike Hazard DVD and on-line training.

d. **Submarine officers.** Submarine officers shall receive environmental compliance and pollution prevention training at the earliest opportunity as part of prospective commanding officer or prospective executive officer, department head, and basic submarine officer training.

e. **Navy Judge Advocate General officers.** At the earliest opportunity, Staff Judge Advocate (SJA) shall receive environmental training at the SJA Course at Naval Justice School.

f. **Afloat Environmental Protection Coordinators (AEPC).** AEPCs will attend the Afloat Environmental Protection Coordinator course (A-4J-0021) or equivalent. They will ensure that proper personnel complete Watchstation 304 in the Hazardous Material/Environmental Protection Programs Afloat Personnel Qualification Standards (PQS), (NAVEDTRA 43528), within 6 months of assignment. One petty officer per firefighting or repair party will qualify on Watchstation 303 - HM Spill Response Scene Leader. One petty officer will also qualify as Watchstation 305 - Oil/Hazardous Spill Response Scene Leader (NAVEDTRA 43528). For submarines, type commanders will specify requirements for completion of PQS 303 and 305, such that appropriately qualified individuals will be present at the scene of any HM or oil spill. For MSC ships, COMSC will specify AEPC requirements.

g. **Shipboard Training Enhancement Program (STEP).** STEP is a program of computer-based training that will be used, prior to assignment, in Navy shipboard training as an alternative to formal, classroom training, and to satisfy course completion requirements (see Chapter 24). Testing is included in STEP to evaluate student understanding of the material. STEP courses have the potential for effectively and economically delivering environmental and natural resources training.

28-5.4 Billets Requiring Billet-Specific Environmental Training. The following Navy personnel ashore and afloat will receive billet specific environmental training:

- Regional Environmental Coordinators (RECs);
- ICOs;
- ICO's Staff (Deputy Commanders and Key Major Staff);
- Supply Officers;
- Public Affairs Officers (Ashore);
- Public Works Facilities Engineering and Acquisition Division (FEAD) Personnel and Resident Officers in Charge of Construction/Officers in Charge of Construction (ROICC)/(OICC);
- Public Works Officers (PWOs)/Assistant PWOs;
- Civil Engineer Corps (CEC) Officers;
- Environmental Staff Personnel;
- Facilities, Environmental, and Project Planners;
- Natural and Cultural Resources Managers;
- Installation Restoration (IR) and Munitions Response (MR) Personnel;
- Oil and Hazardous Substance Incident Responders;
- Environmental Sampling and Laboratory Personnel;

– Base Re-alignment and Closure (BRAC) Program Management Office personnel.

Appendix P includes environmental training courses for specific billets listed above.

28-5.5 Personnel interacting with Native American, Alaskan, Hawaiian, or other Native Peoples/Tribes. Training is required for personnel who conduct activities that may have the potential to affect protected tribal rights, land, or resources. In accordance with DODI 4710.02, such persons shall participate in training courses and workshops to raise their awareness of tribal culture and to learn about local tribal issues, especially access, use, and privacy issues that may be affected by military operations.

28-5.6 Reserve Component Environmental Training. Commanders and ICOs of Naval Reservists will provide environmental training appropriate for mobilization duties to the greatest extent possible. ICOs will ensure full time personnel are trained at their facility if they are responsible for the facility. Naval Reserve unit commanders and ICOs will obtain training for reservists that they consider the minimum for individual mobilization missions and responsibilities.

28-6 Responsibilities

28-6.1 CNO (N45) will:

(a) Establish policy for environmental, natural and cultural resources asset management and compliance training in the Navy. CNO (N4) will establish policy for cultural resource asset management and compliance; however CNO (N45) policy is to provide the training and connectivity with other environmental media to cultural resource personnel.

(b) Manage and maintain the environmental NTSP and initiate review in accordance with OPNAVINST 1500.8M.

(c) Act as the Resource Sponsor for Navy environmental, planning, natural and cultural resources compliance training.

(d) Work with the other Services and ISEERB components in the development and conduct of environmental training.

(e) Establish and manage NETP Steering Committee. Identify and validate required environmental training in response to new or changed laws and regulations.

28-6.2 NETC will:

(a) Develop and budget for personnel resources and training facilities to carry out the NETP NTSP.

(b) Assist in the resourcing of NETP environmental training schools to meet student loading.

(c) Develop and recommend sources to obtain training in each of the environmental topics for personnel identified in this chapter.

(d) Determine equivalent sources of training, if any, for those training courses specified in this chapter. Maintain a list of equivalent training courses and training resources and distribute Navy-wide.

(e) Establish formal training programs on the operation and maintenance of all environmental compliance systems and equipment developed for use aboard Navy ships.

(f) Oversee development of standard lesson plans, audio-visual aids, and computer-based training packages to assist commands in establishing effective environmental general and orientation training programs.

(g) Develop a program to measure the effectiveness of the training, identify shortfalls, and provide for response to those shortfalls, to correct them quickly.

(h) Investigate use of new technologies to develop, deliver, register and advertise environmental training more effectively and to larger audiences.

(i) Via ITRO role, support the Navy-lead ISEERB efforts to reduce costs to all services and deliver environmental training and eliminate redundant training efforts.

28-6.3 Commander, Naval Legal Service Command will:

(a) Ensure that effective environmental and natural and cultural resources compliance training for military lawyers is developed and maintained.

(b) Develop, budget for, and carry out the NTSP, as it pertains to military lawyers.

28-6.4 CNIC will:

(a) Provide technical support to the NETP Steering Committee, its Working Groups, and the environmental training schools (CECOS and NAVOSHENVTRACEN) on environmental, cultural and natural resources training, existing laws and regulations, and lessons learned.

(b) Support the Navy's training effort by:

- Assisting Schools in establishing a set of standards that the NETP NTSP must meet;
- Defining environmental training needs/requirements for each fiscal year;
- Proposing quotas, schedules and frequency of offerings for the Schools/Catalog.
- Assist in evaluating appropriate/alternative delivery methods;
- Appointing appropriate SMEs for course TCRs
- Assisting Schools in establishing Metrics/Business Case Analyses.
- Planning, programming, budgeting and executing funding requests to provide shore training needs/requirements.

28-6.5 COMNAVFACENGCOM will:

(a) Provide technical support to NETP Steering Committee, CECOS and NAVOSHENVTRACEN on environmental and natural resources training, existing laws and regulations, and lessons learned.

(b) Identify environmental planning, natural and cultural training requirements as appropriate through the NTSP process.

(c) Provide technical guidance on environmental and natural resources training to CNO (N45) via the NTSP process.

(d) Assist in the development of environmental and natural resources compliance training in the Navy.

(e) Provide appropriate SMEs for development and review of training curriculum and supplemental training tools.

(f) Provide appropriate SMEs and/or managers to act as guest speakers in Navy and ISEERB approved courses.

(g) Identify job categories appropriate to NAVFACENGCOM and quotas required for specific environmental courses and report to CNO yearly environmental training needs.

28-6.6 BSOs will:

(a) Ensure the development and implementation of effective environmental and natural resources training programs at both shore and afloat locations within their commands. Also provide guidance in support of this directive as required.

(b) Ensure suitable personnel receive EMS training.

(c) Develop/modify and ensure completion of Individual Development Plans for environmental personnel or those assigned environmental tasking(s) that require training.

(d) Provide requirements input to NETC on environmental, planning, natural, and cultural resources training.

(e) Coordinate with RECs to consolidate environmental training and work towards reducing duplication of effort within a region.

(f) Assist in identifying environmental training requirements through the NTSP process by providing a point of contact to work with the NETP Steering Committee and Working Groups to identify and validate emergent environmental training needs and prevent duplicative or redundant training efforts.

(g) Provide a point of contact to work with the Navy environmental training schools to ensure appropriate student loading for environmental courses, reduce duplicative training efforts and provide most effective environmental training at overall costs savings/avoidance to Navy.

28-6.7 RECs will:

(a) Coordinate regional training requirements and needs.

(b) Provide point of contact to work with CECOS and NAVOSHENVTRACEN to coordinate training efforts within the region (location of training rooms, VTT centers, dissemination of training tools etc.) to provide appropriate courses and number of offerings, ensure appropriate student loading, reduce duplicative efforts and save overall cost to Navy.

(c) At the invitation of the NETP Steering Committee, attend the Steering Committee meetings and/or its working group meetings and advise the committee as to the status of environmental training in specific regions.

(d) Coordinate State and local specific training requirements with NETP schools to ensure information is incorporated into appropriate courses as needed.

(e) Provide appropriate SMEs for development/review of environmental courses.

(f) Provide appropriate SMEs as guest speakers to provide local expertise and knowledge within the Region for courses that require training to regional, state or local specific requirements.

28-6.8 COs and ICOs will:

(a) Comply with the training requirements of this chapter, and amplifying guidance from issuing command.

(b) Request funding or billet support as required.

(c) Carry out effective command general and orientation training programs.

(d) Provide feedback on the adequacy and effectiveness of training received via the chain of command.

28-6.9 CFFC and COMPACFLT will:

(a) Ensure the development and implementation of effective environmental afloat training programs within the AOR. Also provide guidance in support of this directive as required.

(b) Fund training required for afloat commands, required per this chapter.

(c) Provide comments to CNO on environmental and natural resources training needs.

(d) Coordinate with NETP Steering Committee and/or its working groups on environmental, planning, natural, and cultural resources training, and work towards reducing duplication of effort.

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CHAPTER 29

SAMPLING AND LABORATORY TESTING

29-1 Scope

29-1.1 This chapter contains policy and guidance applicable to environmental sampling and laboratory testing. It identifies requirements and responsibilities for implementing environmental quality systems into Navy activities and programs involving the collection, management, and use of environmental data to ensure that the measurements and collected data are accurate, meet requisite acceptance or performance criteria, and are appropriate for their intended use by the Navy in making decisions concerning the environment.

29-1.2 The provisions of this chapter apply to all sampling and testing activities performed by the Department of the Navy, or by public and private organizations on behalf of the Navy. This chapter applies to activities and programs involving the collection, management, and use of environmental data at Navy operations, activities, and installations worldwide, including GOCO facilities.

29-1.3 This chapter applies to the collection and use of environmental data supporting all applicable Federal, State, and local laws and regulations including, but not limited to, CAA; SDWA; RCRA; CERCLA; NEPA; TSCA; CWA; OPA; PPA; OSHA (references (a) through (j) respectively); and relevant E.O.'s and DOD policies and procedures.

29-1.4 The requirements of this chapter do not apply to contractor-owned and contractor-operated facilities that are not on real property controlled by DOD.

29-1.5 For the purposes of this chapter, the term 'environmental data' refers to any measurement or information that describe environmental processes, locations, or conditions; ecological or health effects and consequences; or the performance of environmental technology. This chapter does not supersede more stringent requirements that may be invoked by other documents issued by EPA; the NAVOSH Program; the ER,N and BRAC Cleanup Program; other Federal, State and local regulations; or the NNPP.

29-1.6 This chapter implements DOD and intergovernmental quality systems policy, including the DOD Information Quality Guidelines, *Ensuring the Quality of Information Disseminated to the Public by the Department of Defense* (DOD IQG, reference (k)), *Department of Defense Quality Systems Manual for Environmental Laboratories* (DOD QSM, reference (l)), *Uniform Federal Policy for Implementing Environmental Quality Systems* (UFP-QS, reference (m)), and *Uniform Federal Policy for Quality Assurance Project Plans* (UFP-QAPP, reference (n)).

a. The DOD QSM (reference (l)) provides requirements and guidance developed by the DOD Environmental Data Quality Workgroup (EDQW) for the implementation of ISO/International Electrotechnical Commission (IEC) 17025:1999, *General requirements for the competence of testing and calibration laboratories* (reference (o)) and ISO/IEC 17011:2004, *Conformity assessment – general requirements for accreditation bodies accrediting conformity assessment bodies* (reference (p)). ISO/IEC 17025:1999 provides the minimum set of requirements for laboratory quality systems. ISO/IEC 17011:2004 provides the minimum set of requirements for laboratory accreditation. [Note: Laboratories that comply with ISO/IEC 17025:1999 will also meet the requirements of ISO 9000:2005, *Quality management systems—Fundamentals and vocabulary*, and ISO 9001:2000, *Quality management systems—Requirements* (references (q) and (r)).]

b. The UFP-QS (reference (m)) provides guidance and interpretation developed by the Intergovernmental Data Quality Task Force (IDQTF) and the DOD EDQW for the implementation of ANSI/ASQ E4-2004, *Quality systems for environmental data and technology programs – requirements with guidance for use* (reference (s)). ANSI/ASQ E4-2004 is the national consensus standard that provides the minimum set of requirements to enable organizations to plan, implement, and assess environmental quality systems.

29-1.7 References. An effective program for the management and control of environmental sampling and testing activities must integrate the relevant requirements contained in references (a) through (bb).

(a) Section 7401 of Title 42, United States Code (Clean Air Act);

(b) Section 300f of Title 42, United States Code (Safe Drinking Water Act);

(c) Section 6901 of Title 42, United States Code (Resource Conservation and Recovery Act);

(d) Section 9601 of Title 42, United States Code, as amended by Section 1101 of Title 42 United States Code (Comprehensive Environmental Response, Compensation, and Liability Act);

(e) Section 4321 of Title 42, United States Code (National Environmental Policy Act);

(f) Section 2601 of Title 15, United States Code (Toxic Substances Control Act);

(g) Section 1251 of Title 33, United States Code (Clean Water Act);

(h) Section 2701 of Title 33, United States Code (Oil Pollution Act);

(i) Section 13101 of Title 42, United States Code (Pollution Prevention Act);

(j) Section 651 of Title 29, United States Code (Occupational Health and Safety Act);

(k) Deputy Secretary of Defense Memorandum, Ensuring the Quality of Information Disseminated to the Public by the Department of Defense, (DOD IQG) February 10, 2003;

(l) Department of Defense Quality Systems Manual for Environmental Laboratories (DOD QSM), January 2006 (or latest version), DTIC # ADA 396793;

(m) Uniform Federal Policy for Implementing Environmental Quality Systems (UFP-QS), January 2004, DTIC # ADA 395303;

(n) Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), March 2005, DTIC # ADA 427785;

(o) ISO/IEC 17025:1999, General requirements for the competence of testing and calibration laboratories;

(p) ISO/IEC 17011:2004, Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies;

(q) ISO 9000:2005, Quality management systems – Fundamentals and vocabulary;

(r) ISO 9001:2000, Quality management systems – Requirements;

(s) ANSI/ASQ E4-2004, Quality Systems for Environmental Data and Technology Programs – Requirements with guidance for use;

(t) ISO/IEC Guide 2:1996, *Standardization and related activities – General vocabulary;*

(u) United States Nuclear Regulatory Commission, *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM), EPA 402-R-97-016, Revision 1, NUREG-1575, Rev-1, DOE/EH-0625, Rev-1, August 2000;

(v) Unites States Nuclear Regulatory Commission, *Multi-Agency Radiation Laboratory Analysis Protocol* (MARLAP), Volumes 1-3, EPA 402-B-04-001A-C, NUREG 1576, July 2004;

(w) NAVFAC, *Department of the Navy Environmental Restoration Program Manual*, August 2006;

(x) 40 CFR 792, EPA Good Laboratory Practice Standard;

(y) 49 CFR 100-199, DOT Hazardous Materials Regulations (in particular, 49 CFR 172-199);

(z) 29 CFR 1910.1200, OSHA Hazard Communication Standard;

(aa) 29 CFR 1910.1450, OSHA Occupational Exposure to Hazardous Chemicals in Laboratories;

(bb) OPNAVINST 5100.23D, NAVOSH Program Manual.

29-2 Legislation

The Navy requires sampling and testing to support environmental decision-making, promote the wise use of environmental resources, and determine compliance with environmental regulations. States and local agencies may invoke more stringent laws and regulations including requirements such as certification for sampling and testing. It is imperative that managers consult the applicable regulations and/or regulatory agencies in order to identify specific requirements.

29-3 Terms and Definitions

Definitions for the following terms come principally from the quality systems policy documents (references (l) through (n)) and the quality systems standards (references (o) through (s)), supplemented where necessary by definitions contained in ISO/IEC Guide 2:1996, *Standardization and related activities – General vocabulary* (reference (t)). Other documents may provide more specific definitions. Where the terms are defined in applicable laws, regulations, and associated test methods, those definitions take precedence.

29-3.1 Accreditation. Third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks. (ISO/IEC 17011:2004)

29-3.2 Accreditation body. Authoritative body that performs accreditation. (ISO/IEC 17011:2004)

29-3.3 Assessment. The evaluation process used to measure the performance or effectiveness of a system and its elements against specific criteria. (ANSI/ASQ E4-2004)

29-3.4 Certification. Procedure by which a third party gives written assurance that a product, process, or service conforms to specified requirements. (ISO/IEC Guide 2:1996)

29-3.5 Conformity. Fulfillment by a product, process or service of specified requirements. (ISO/IEC Guide 2:1996)

29-3.6 Consensus standard. A standard established by a group representing a cross section of a particular industry or trade, or part thereof. (ANSI/ASQ E4-2004)

29-3.7 Contractor. Any organization or individual contracting to furnish services or items or to perform work. (UFP-QAPP)

29-3.8 Environmental data. Any measurement or information that describes environmental processes, locations, or conditions; ecological or health effects and consequences; or the performance of environmental technology. (ANSI/ASQ E4-2004)

29-3.9 Graded approach. The process of basing the level of application of managerial controls applied to an item or work according to the intended use of the results and the degree of confidence needed in the quality of the results. (ANSI/ASQ E4-2004)

29-3.10 Improper action. Deviation from contract-specified or method-specified analytical practices, whether intentional or unintentional. (DOD QSM)

29-3.11 Laboratory. A body that calibrates or tests. (DOD QSM)

29-3.12 Proficiency testing. A means of evaluating a laboratory's performance under controlled conditions relative to a given set of criteria through analysis of unknown samples provided by an external source. (DOD QSM)

29-3.13 Quality. Degree to which a set of inherent characteristics fulfills the requirements. (ANSI/ASQ E4-2004)

29-3.14 Quality Assurance. Part of quality management focused on providing confidence that quality requirements will be fulfilled. (ANSI/ASQ E4-2004)

29-3.15 Quality Assurance Project Plan. A formal document describing in comprehensive detail the necessary QA, QC, and other technical activities that shall be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. (ANSI/ASQ E4-2004)

29-3.16 Quality Control. Part of quality management focused on fulfilling quality requirements. (ANSI/ASQ E4-2004)

29-3.17 Quality Management Plan. A formal document or manual, usually prepared once for an organization that describes the quality system in terms of the organizational structure, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, and assessing all activities conducted. (ANSI/ASQ E4-2004)

29-3.18 Quality System. A structured and documented management system describing the policies, objectives, principles, organizational authority, responsibilities, accountability, and implementation plan of an organization for ensuring quality in its work processes, products (items), and services. (ANSI/ASQ E4-2004)

29-3.19 Surveillance (quality). Continual or frequent monitoring and verification of the status of an entity and the analysis of records to ensure that specified requirements are being fulfilled. (ANSI/ASQ E4-2004)

29-3.20 Systematic planning process. A process that is based on the scientific method and includes concepts such as objectivity of approach and acceptability of results. Systematic planning is based on a common-sense, graded approach to ensure that the level of detail in planning is commensurate with the importance and intended use of the work and the available resources. This framework promotes communication among all organizations and individuals involved in an environmental program. Through a systematic planning process, a team can develop acceptance or performance criteria for the quality of the data collected and for the quality of the decision. (UFP-QS)

29-3.21 Test. Technical operation that consists of the determination of one or more characteristics of performance of a given product, process or service according to a specified procedure. (ISO/IEC Guide 2:1996)

29-3.22 Unethical (Illegal) action. Deliberate falsification of analytical or quality assurance results, where failed method or contractual requirements are made to appear acceptable. (DOD QSM)

29-3.23 Validation. Confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use are fulfilled. Validation is a sampling and analytical process evaluation that includes evaluating compliance with methods, procedures, or contracts, and comparison with criteria based upon the quality objectives developed in the project QAPP. The purpose of validation is to assess the performance associated with the sampling and analysis to determine the quality of specified data. (UFP-QAPP)

29-3.24 Verification. Confirmation by examination and provision of objective evidence that specified requirements (sampling and analytical) have been completed. This is a completeness check. (UFP-QAPP)

29-4 Requirements

29-4.1 Navy activities shall work with all applicable regulatory authorities and land management agencies, including those representing the Federal government, States, local governments, tribes, U.S. territories and possessions, and host nations to identify applicable requirements and to define procedures for the planning, collection, and use of environmental data, such that the data meet applicable requirements.

29-4.2 Navy activities shall implement environmental quality systems for the collection and use of environmental data consistent with the DOD QSM (reference (l)), UFP-QS (reference (m)), and UFP-QAPP (reference (n)).

29-4.3 Quality assurance practices and programs that conform to the *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (reference (u)) and the *Multi-Agency Radiation Laboratory Analysis Protocols* (MARLAP) (reference (v)) meet the intent of this chapter with respect to the collection, management, and use of radiological data for the NNPP.

29-4.4 In addition to the requirements of this chapter, sampling and testing activities performed by, or on behalf of, the Navy under ER,N and BRAC programs shall conform to the *Department of the Navy Environmental Restoration Program Manual* (reference (w)).

29-4.5 Sampling and testing activities performed by, or on behalf of, the Navy shall employ the principle of the graded approach, which is described in the UFP-QAPP (reference (n)), in the development of quality systems documentation. In this approach, the level of complexity and detail in quality systems documentation is matched to the importance or significance of the decisions to be made based on the data.

29-4.6 Navy activities shall maintain a basic standard of quality as required under the DOD IQG (reference (k)).

29-5 Navy Policy

29-5.1 Conformance with Uniform Standards. Navy activities, including contractors and subcontractors, shall perform sampling and testing per a documented quality system meeting the requirements of the UFP-QS (reference (m)) and Federal, State and local requirements, which shall be appropriate to the type and scope of sampling and testing performed. Quality systems documentation must describe all quality assurance surveillance activities as well as specific procedures that will be used to review and substantiate the quality of environmental data before it is disseminated to the public. Quality systems documentation must support, and be consistent with, established Navy administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with the DOD IQG (reference (k)). Organizations performing sampling and testing for Navy shall have a documented program to prevent improper, unethical, or illegal actions. In all cases where environmental sampling and testing services are performed, quality assurance surveillance must be performed by a Navy Quality Assurance Manager (QAM), however named.

29-5.2 Uniform Standards for Sampling. Navy activities, including contractors and subcontractors, shall perform environmental sampling activities according to a documented quality system. Quality systems documentation shall include the following:

a. Documentation of the sampling organization's Quality System (usually called a Quality Management Plan or QMP) in accordance with the UFP-QS (reference (m)).

b. Documentation of project-specific sampling, testing, QA, and QC activities (usually called a Quality Assurance Project Plan or QAPP) in accordance with the UFP-QAPP (reference (n)).

29-5.3 Uniform Standards for Laboratory Testing. Laboratories, including contractor and subcontractor laboratories, shall perform environmental testing according to a documented quality system. The laboratory must document its Quality System in accordance with the DOD QSM Version 3 (reference (l)) (or latest version). All laboratories must demonstrate the ability to generate acceptable results from the analysis of proficiency-testing (PT) sample(s), subject to availability, using each applicable method in the specified matrix. Upon request, laboratories must provide, to the Department of the Navy, the results of all PT samples analyzed by the laboratory during the project's period of performance. All laboratories are subject to project-specific, on-site assessments by authorized Navy or DOD representatives. Testing performed in the field, or in a mobile laboratory facility, is subject to the same requirements as testing performed in a permanent laboratory facility. Testing shall be performed by laboratories having appropriate credentials (e.g., certification or accreditation) to perform the specific type of testing, as required by the applicable regulatory agency. Any exceptions to the Uniform Standards contained in this paragraph must be approved by the Navy Laboratory Quality and Accreditation Office (LQAO).

a. **Certification.** Laboratories must possess any applicable State or host nation certification. A certification in one program, State or nation cannot be used as justification to perform testing in another program, State, or nation, unless reciprocity or equivalency of certification is recognized by the appropriate regulatory agency.

b. **Accreditation.** In the absence of certification requirements, laboratories must be accredited for each applicable test method by a nationally recognized laboratory accreditation body (e.g., an accrediting authority approved by the National Environmental Laboratory Accreditation Program

(NELAP) or the American Association for Laboratory Accreditation (A2LA)) operating in accordance with ISO/IEC 17011:2004 (reference (m)).

29-5.4 Prohibited Practices. Organizations performing sampling and testing on behalf of Navy are expected to adhere to professional standards of ethical conduct defined in quality systems documentation and must not engage in any prohibited practices. Following is a list of prohibited practices developed by the DOD EDQW. The following practices will be considered material non-compliance with these Uniform Standards and may result in contract termination or other remedies as appropriate:

- Fabrication, falsification, or misrepresentation of data, e.g.,:
  - Creating data for an analysis that was not performed
  - Creating information for a sample that was not collected
  - Using external analysts, equipment and/or laboratories to perform analyses when not allowed by contract
- Improper clock setting (time traveling) or improper date/time recording, e.g.,:
  - Resetting the internal clock on an instrument to make it appear that a sample was analyzed within holding time when in fact it was not
  - Changing the actual time or recording a false time to make it appear that holding times were met, or changing the times for sample collection, extractions or other steps to make it appear that holding times were met
- Unwarranted manipulation of samples, software, or analytical conditions, e.g.,:
  - Unjustified dilution of samples
  - Manipulating Gas Chromatography/Mass Spectrometry (GC/MS) tuning data to produce an ion abundance result that appears to meet specific QC criteria
  - Changing the instrument conditions for sample analysis from the conditions used for standard analysis (e.g., changing voltage)
  - Unwarranted manipulation of computer software, e.g., forcing calibration or QC data to meet criteria, removing computer operational codes such as the “manual” or “M” flag, inappropriately subtracting background, or improperly manipulating the chromatographic baseline
  - Turning off, or otherwise disabling, electronic instrument audit/tracking functions
- Misrepresenting or misreporting QC samples, e.g.,:
  - Representing spiked samples as being digested or extracted when this has not been done

- Substituting previously generated runs for a non-compliant calibration or QC run to make it appear that an acceptable run was performed

- Failing to prepare or analyze method blanks and Laboratory Control Samples (LCS) in the same manner that samples were prepared or analyzed

- Tampering with QC samples and results, including over spiking and adding surrogates after sample extraction

- Performing multiple calibrations or QC runs (including CCVs, LCSs, spikes, duplicates and blanks) until one meets criteria, rather than taking needed corrective action, and not documenting or retaining data for the other unacceptable data

- Deleting or failing to record non-compliant QC data to conceal the fact that calibration or other QC analyses were non-compliant

– Improper calibrations, e.g.,:

- Discarding points in the initial calibration to force the calibration to be acceptable

- Discarding points from a Method Detection Limit (MDL) study to force the calculated MDL to be higher or lower than the actual value

- Using an initial calibration that does not correspond to the actual run sequence to make continuing calibration data look acceptable when in fact it was not

- Performing improper manual integrations, including peak shaving, peak enhancing, or baseline manipulation to achieve QC criteria or to avoid corrective action

– Concealing a known analytical or sample problem from laboratory management and/or client

– Concealing a known improper or unethical behavior or action from management; and

– Failing to report the occurrence of a prohibited practice or known improper or unethical act to the appropriate laboratory or contract representative, or to an appropriate government official.

29-5.5 Contract Improvement. The uniform standards contained in this chapter shall be incorporated into all solicitations and contracts involving sampling or testing performed by, or on behalf of, the DON. This requirement also applies to orders placed by non- DOD agencies (e.g., GSA) on behalf of the Navy. The Navy shall require Contracting Officer's Representatives (CORs) to consult technically qualified personnel when providing contract support services for solicitations and contracts involving environmental sampling or testing. The Navy shall document non-conformance with contract specifications, including quality systems specifications, and execute contract remedies, where appropriate.

29-5.6 Training Requirements. Personnel involved in sampling or testing shall have the appropriate education, experience, and training to perform their assigned tasks. Sampling and testing organizations shall document training and keep records current, in accordance with their quality systems documentation.

a. **Training Requirements for Navy Environmental Professionals, Specialists and Technicians.** Personnel acting as environmental program managers, who routinely request sampling and testing and/or develop sampling and testing quality systems documentation as part of their management of a program shall have the following minimum training, provided via a documented training plan:

- Environmental laws and regulations relative to the specific environmental program for which sampling and testing are being conducted;

- Systematic Planning Process or development of Data Quality Objectives [Note: Successful completion of the *Uniform Federal Policy for Quality Assurance Project Plans* training course (A-4A-0095) sponsored by CECOS will satisfy this requirement]; and

- Training applicable to the specific area(s) of program management relative to sampling plan development (e.g., sampling and testing for NPDES compliance).

b. **Training Requirements for Sampling Personnel.** Documentation of training must include, at a minimum [Note: Successful completion of the Environmental Quality Sampling (EQS) course (A-4A-0026) sponsored by CECOS will satisfy these requirements]:

- Basic sampling techniques (e.g., grab sampling, composite sampling, how to avoid contamination, use of preservatives, etc.);

- Specific sampling techniques as required (e.g., NPDES sampling, bacteriological sampling, potable water sampling, etc.);

- Completion of sampling documentation (e.g., sample container labels, field logs, and chain-of-custody documentation);

- Health and safety training; and

- Ethics training.

c. **Training Requirements for Laboratory Personnel.** Documentation of training must include, at a minimum:

- Demonstrations of analyst proficiency;

- Training in the laboratory quality system;

- Training in general laboratory operations;

- Specific training applicable to the tests to be performed;

- Health and safety training; and

- Ethics training.

29-6 Responsibilities

29-6.1 CNO (N45) shall:

(a) Issue policy/guidance, as appropriate, based on recommendations made by the Navy Environmental Laboratory Advisory Council (ELAC) and Navy LQAO.

29-6.2 BSOs shall:

(a) Plan, program and budget for environmental sampling and testing;

(b) Ensure shore activities comply with the requirements of this chapter;

(c) Provide technical assistance and prepare appropriate manuals or other forms of guidance for implementing proper sampling and testing techniques at Navy activities; and

(d) When requested by the LQAO, provide a member to the ELAC (Note: this requirement applies only to major claimants that perform environmental sampling in-house, have environmental testing laboratories, or contract for at least $25,000 in laboratory services annually).

29-6.3 The Navy Laboratory Quality and Accreditation Office shall:

(a) Act as CNO's representative and Chair the Navy's ELAC;

(b) Coordinate meetings of the ELAC as needed to develop recommendations on guidance/policy for CNO;

(c) Provide overall guidance and direction for environmental sampling operations and laboratory testing improvement initiatives Navy-wide;

(d) Coordinate efforts across commands including continuous process improvement and cost efficiencies for Navy sampling and laboratory support services;

(e) Coordinate claimant approval and implementation of ELAC/LQAO recommendations;

(f) Develop an integrated approach to environmental sampling and testing;

(g) Recommend improvements in the Navy's sampling and testing program;

(h) Provide technical assistance and prepare appropriate manuals or other forms of guidance for implementing proper sampling and testing techniques at Navy activities; and

(i) Approve any exceptions to the Uniform Standards for laboratory testing contained in paragraph 29-5.3.

29-6.4 Environmental Laboratory Advisory Council shall:

(a) Assist the LQAO with the development of recommendations on guidance/policy for matters related to environmental sampling and testing.

29-6.5 COs of Shore Activities shall:

(a) Ensure that in-house environmental sampling operations and laboratories under their command comply with the requirements of this chapter;

(b) Ensure that mechanisms are in place so that environmental sampling and testing contracted out by the shore activity meet the Uniform Standards set forth in this Chapter, as well as Federal, State, local and other Navy sampling and laboratory testing requirements;

(c) Ensure that CORs, under their command, involved in oversight of sampling and testing contracts, consult with technically qualified scientists or technicians; and

(d) Ensure that training programs are established and maintained for sampling and testing personnel under their command, and that training is performed and properly documented.

CHAPTER 30

RADON ASSESSMENT AND MITIGATION

30-1 Scope

This Chapter discusses the Navy aspects of the Department of the Navy's Radon Assessment and Mitigation Program (NAVRAMP). The purpose of NAVRAMP is to identify, assess, and mitigate the infiltration of radon into existing Navy buildings and to incorporate preventive practices in the design and construction of new buildings. NAVRAMP provides for compliance with the procedural requirements of the TSCA. This radon chapter applies to all Navy activities worldwide. Mitigation and Prevention requirements of section 30-5.3.b and 30-5.3.c, respectively, do not apply to non-Navy owned buildings. Navy tenant activities should consider mitigation and advise the lesser when applicable radon concentrations exceed the action level of 4 pCi/L. Activities should adhere to the prevention requirements of section 30-5.3.c when considering the design and construction of new buildings for long term leases (e.g., lease, limited partnerships, etc.) or significant modifications to existing buildings. Activities must evaluate all existing and new lease agreements to ensure Navy occupancy is or will be under similar radon exposure protection obtained by implementing NAVRAMP in Navy owned buildings.

30-1.1 References. Relevant references are:

(a) Toxic Substance Control Act 15 USC 2601 et seq.;

(b) 29 CFR 1910.20C (8) OSHA Access to Employee Exposure and Medical Records.

30-2 Legislation

30-2.1 Toxic Substance Control Act. TSCA (reference (a)) required that all Federal departments or agencies that own Federal buildings conduct a study to determine the extent of radon contamination in such buildings. They must provide results of the study to EPA. As required by the TSCA, EPA submitted to Congress a consolidated report of the studies from Federal departments or agencies, including one submitted by the Navy.

30-3 Terms and Definitions

30-3.1 Mitigation System. Any system or steps designed to reduce radon concentrations in the indoor air of a building.

30-3.2 Occupied Building. A building occupied more than 4 hours per day. For the purposes of this chapter, the term "building" includes both housing and non-housing structures.

30-3.3 Modified Structure. A building significantly altered by either changing the original number or type of windows, doors, ground slabs, walls, or otherwise making modifications in any manner to significantly change the air exchange or flow in the structure.

30-3.4 Picocuries. A unit of measurement used to describe certain types of nuclear radiation. A curie is the amount of any radionuclide that undergoes exactly 3.7×10^{10} radioactive disintegrations per second. A picocurie is one trillionth (10^{-12}) of a curie, or 0.037 disintegrations per second.

30-3.5 Picocurie per liter (pCi/L). A common unit of measurement of the concentration of radioactivity in a fluid (liquid or gas). A picocurie per liter corresponds to 0.037 radioactive disintegrations per second in every liter of fluid.

30-3.6 Radon. Radon. A colorless, odorless, radioactive gas formed by the decay of radium. Radon exists in varying amounts in all soils, rocks, and some groundwater supplies worldwide. Under certain conditions, it can infiltrate into and concentrate to unacceptable levels in buildings.

30-3.7 Validated Monitoring Results. A radon test that meets the requirements of NAVRAMP (e.g., a type of radon detection device; sampling strategies, procedures, and intervals; QA/QC; etc.).

30-4 Requirements

30-4.1 General. Section 309(a) of TSCA required the head of each Federal department or agency that owned Federal buildings to conduct a study to determine the extent of radon in such buildings. In the case of Federal buildings using a nonpublic water source (such as a well or other groundwater), TSCA also required an evaluation of radon in the water.

The TSCA required the study submitted to the EPA not later than 1 June 1990. The Navy submitted the results available at that date, and submitted updated information two times since to EPA. Besides assessing the level of radon in Navy buildings, NAVRAMP, under certain conditions requires the mitigation of radon in existing buildings and the prevention of radon buildup in new buildings.

30-5 Navy Policy

30-5.1 General. The EPA approved NAVRAMP as the plan to identify, mitigate, and prevent radon in Navy-occupied buildings. All Navy installations shall implement the NAVRAMP testing program to identify the level of indoor radon. Navy installations shall undertake mitigation measures in buildings determined to have indoor radon levels above 4pCi/L. They shall incorporate appropriate radon reduction techniques into the design and construction phases of new structures and significantly modified structures as a preventive measure where necessary because of regulatory requirements, historical data, or geological conditions.

Naturally occurring radon exposure is part of natural radiation background, and background exposures are not considered occupational exposure. Reference (b) notes that, “Exposure or exposed means that an employee is subjected to a toxic substance or harmful physical agent in the course of employment … but does not include situations where the employer can demonstrate that the toxic substance or harmful physical agent is not used, handled, stored, generated, or present in the workspace in any manner different from typical non-occupational situations.”

30-5.2 Applicable Provisions. The U.S. Navy shall institute the following provisions under NAVRAMP:

- Identify activities where indoor concentration of radon in occupied buildings exceeds the EPA-recommended action level, currently 4 picocuries per liter (4pCi/L).

- Maintain a central data management system containing all validated monitoring results of Navy and Marine Corps buildings (both housing and non-housing) tested for radon under NAVRAMP.

- Mitigate the indoor radon levels in buildings to below EPA-recommended action level of 4pCi/L.

- Perform preventive maintenance on mitigation systems and periodic retesting of buildings with mitigation systems to ensure that subject systems are operating properly to reduce the building's radon levels.

- Ensure that building designs include appropriate radon resistant (prevention) techniques where necessary due to applicable regulatory requirements, historical data, and geological conditions at the location.

30-5.3 The NAVRAMP Program. The NAVRAMP consists of testing, mitigation, and prevention.

a. **Testing.** Activities shall test occupied buildings to determine indoor levels of radon. Radon testing of buildings in an activity typically consists of the following phases:

- **Screening.** Activities shall select a statistically significant sample of structures, mainly housing, hospitals, bachelor quarters, schools, child-care centers, and brigs. A "screening" becomes an "assessment" if the minimum statistically significant number of buildings (31 buildings per installation or 31 housing units per housing area) is equal to or greater than the total number of occupied buildings.

- **Assessment.** If during the screening process activities detect radon and confirm the level exceeds the EPA-recommended action level of 4pCi/L , then the activity shall measure every occupied building in the activity for radon.

- **Periodically Monitoring.** Activities shall periodically perform maintenance on mitigation systems and monitor structures where mitigation measures have been installed. They shall re-test structures that have been significantly modified to ensure that levels are still below 4pCi/L.

b. **Mitigation.** Activities shall install a mitigation system in buildings determined to have indoor radon levels above the EPA-recommended action level of 4pCi/L to reduce action levels below the EPA-recommended level of 4pCi/L. They shall schedule mitigation steps conforming to the following priority scheme:

Cat.	Radon Levels (pCi/L)	Action
1	0 to 4	No action required
2	4 to 20	Mitigation within 2 yr.
3	20 to 200	Mitigation within 6 mo.
4	> 200	Mitigation within 3 wk.

c. **Prevention.** Activities shall incorporate appropriate radon reduction techniques into the design and construction phases of new structures or significant modifications to existing buildings" (where necessary due to applicable regulatory requirements, historical data, and geological conditions at the location) to prevent indoor radon levels from exceeding the action levels of 4pCi/L.

30-5.4 Program Funding Requirements

a. CNO will centrally fund the cost of managing NAVRAMP as part of the NEPSS centrally-managed funds.

b. The cost of providing technical support (e.g., testing, diagnostics, mitigation, and prevention) specifically related to an activity, is reimbursable to COMNAVFACENGCOM by the activity or its chain of command.

c. Projects for mitigation and prevention beyond the funding capability of the activity may be eligible for centrally-managed funds in the O&M,N and MILCON appropriations. Conditions covered in OPNAVINST 11010.20F, Facilities Projects Manual, further restrict the availability of centrally managed funds in O&MN appropriations.

30-6 Responsibilities

30-6.1 CNO (N45) shall:

(a) Assess the impact of proposed radon legislation and regulations on the Navy.

(b) Issue radon policy and guidance as needed.

30-6.2 BSOs shall:

(a) Identify and submit environmental compliance projects required to bring activities into compliance with applicable federal, state, and local regulations and Navy policy requirements.

(b) Budget sufficient resources to maintain and demonstrate compliance with Navy policy and Federal, state, and local radon monitoring, mitigation, and prevention requirements.

30-6.3 COMNAVFACENGCOM shall:

(a) Manage NAVRAMP.

(b) Designate within its organization a Radon Center of Expertise.

(c) Develop and manage a Navy-wide radon testing data system.

(d) Revise technical documents and manuals to reflect designs required to reduce indoor radon levels in buildings.

(e) Provide technical assistance regarding:

- Monitoring of radon levels within buildings.
- Diagnostics for selection of mitigation practices.
- Design of mitigation and prevention practices.
- Construction of mitigation and prevention practices.
- Operation and maintenance plans for mitigation equipment.

(f) Implement as requested the requirements of NAVRAMP at Navy activities and include training on radon risks and management, as requested.

(g) Ensure that testing data meets the requirements of NAVRAMP (i.e., QA/QC).

(h) Maintain an integrated Navy-wide database and management information on radon testing data and mitigation projects planned and performed.

(i) Produce an annual Navy-wide radon testing and mitigation summary report.

30-6.4 BUMED shall:

(a) Assist COMNAVFACENGCOM in areas of radon public health assessment and communication.

(b) Evaluate the appropriateness of radon action levels and mitigation schedules for Navy installations.

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