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Brief of Revisions/Changes

The following are major changes in policy and/or procedures that have been incorporated in the latest revision of this OPNAV Manual. A revised Foreword and Table of Contents will be issued with each new revision.

1. Chapter _____, Page _____, Paragraph ____:

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FOREWORD

This manual implements the policy set forth in Chief of Naval Operations Instruction (OPNAVINST) 5090.1D, Environmental Readiness Program. It is issued under the authority of Secretary of the Navy Instruction (SECNAVINST) 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs, 30 January 2006.

This manual contains the Navy’s policy guidance for environmental readiness. It discusses requirements, delineates responsibilities, and issues policy guidance for the management of the environmental, natural, and cultural resources for all Navy ships and shore activities.

Effective immediately, it is mandatory and applicable to all afloat and ashore Navy commands.

This manual may be accessed through the DON Issuances website: http://doni.daps.dla.mil/.

P. H. CULLOM
Vice Admiral, U.S. Navy
Deputy Chief of Naval Operations
(Fleet Readiness and Logistics)
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ORGANIZATION AND COORDINATION

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1-1 Scope

a. Environmental readiness encompasses all aspects of
environmental compliance, planning, conservation, cultural
resources, and restoration. The mission of Navy's environmental
readiness program is to ensure the ability of United States Navy
forces to effectively operate worldwide in an environmentally
responsible manner, both ashore and at sea. The environmental
readiness program provides Navy commanders; operators; design
agents and life-cycle managers; installation managers; Navy
Military and civilian employees; and government contractors with
comprehensive and effective policy guidance, tools, and training
to support operational readiness and sustainability, in
compliance with environmental laws, regulations, and executive
orders (E.O.s), across the Navy enterprise.
b. This manual identifies and is consistent with applicable Federal, State, and local environmental laws, statutes, regulations; E.O.s; Department of the Navy (DON) regulations, requirements, and instructions; and Department of Defense (DoD) directives, instructions, and other issuances. It directs commands, when and where appropriate, to consult the applicable DoD final governing standards (FGS) for host nation-specific criteria, or the Overseas Environmental Baseline Guidance Document (OEBGD) when host nation-specific FGS have not been developed (see chapter 34 (Overseas Environmental Compliance Ashore)). It also establishes and provides Navy implementing policy guidance for managing and complying with these requirements and assigns responsibility for their planning and execution. Directives set forth in this manual should be read in a manner consistent with higher guidance. All subsequent Navy environmental readiness program related instructions, manuals, guidance, and directives derived from this manual shall be aligned with the direction set forth herein.

1-1.1. **Related Chapters.** Each chapter in this manual covers a specific environmental readiness program area. The Related Chapters section in each chapter lists where program areas overlap one or more other chapters. Related chapters and their associated references should be referred to as appropriate.

1-1.2. **References**


(b) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management


(e) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance

(f) Department of Defense Strategic Sustainability Performance Plan FY 2012, 20 September 2012 (revised annually)

(g) Public Law 101-508, Pollution Prevention Act of 1990
(h) OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual

(i) OPNAVINST 11010.36C, Air Installations Compatible Use Zones (AICUZ) Program

(j) OPNAVINST 3550.1A, Range Air Installations Compatible Use Zones (RAICUZ) Program

(k) OPNAVINST 5440.77A, Missions, Functions, and Tasks of Commander, U.S. Fleet Forces Command

(l) OPNAVINST 5450.337A, Missions, Functions, and Tasks of Commander, United States Pacific Fleet

(m) CNO Message 261950Z Sep 2003

(n) DoD Instruction 4715.02 of 28 August 2009

(o) USD Memorandum of 15 Apr 2008, Department of Defense Supplemental Guidance for Implementing and Operating a Joint Base


(q) DoD Instruction 4715.17 of 15 April 2009

(r) SECNAVINST 5510.30B, Department of the Navy Personnel Security Program

(s) SECNAV Manual 5510.36 - 2, Controlled Unclassified Information (CUI)

(t) SECNAVINST 5000.37, Provision of Department of the Navy Documentary Material

(u) SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs

(v) SECNAVINST 5090.6A, Environmental Planning for Department of the Navy Actions

(w) E.O. 12114, Environmental Effects Abroad of Major Federal Actions
1-1.3. Applicability. The policies and procedures in this manual apply to all Navy commands, organizations, installations, personnel (civilian and Military), Navy contractors, and non-Navy supported components under joint basing within the Chief of Naval Operations (CNO) chain of command. In addition, some requirements of this manual apply to organizations, personnel, and commands outside of the CNO chain of command through DON policy statements and instructions. This manual describes the internal management of Navy's environmental program and is not intended to create any right or benefit, substantive or procedural, enforceable by law by any party against DON, its officers, employees, or any person. This manual does not apply to Marine Corps or other Military Service activities, except when they are tenant commands located on Navy installations as described in section 1-3.2.f.

1-1.4. Related Programs. All environmental program areas covered within this manual are under the cognizance of the Office of Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), except as specifically noted. However, other related references and instructions relevant to specific programs under OPNAV (N45) cognizance are also identified, including:

a. Energy

   (1) CNO established a Navy Energy Coordination Office in December 2008 via reference (a) to oversee development and execution of an integrated Navy energy strategy. This office is responsible for coordinating with resource sponsors, systems commands, the fleet, and other stakeholders to identify, promote, and track policy initiatives and metrics that:

   (a) Reduce energy consumption and increase energy efficiency as a means to increase operational capability and effectiveness;

   (b) Increase the use of alternative fuels and alternative energy sources;
(c) Measure return on investment from energy initiatives;

(d) Assist in incorporating energy efficiency in the acquisition process; and

(e) Incentivize members of the armed forces and civilian personnel to contribute to energy management.

(2) These efforts will position the Navy to achieve Secretary of the Navy and CNO energy afloat and ashore goals. Other drivers include Federal mandates for energy management issued under references (b), (c), (d), and (e).

(3) Finally, reductions in Navy's energy consumption associated with burning fossil fuels, principally petroleum, will result in significant reductions of carbon dioxide emissions and will align Navy with DoD's energy conservation goals. Greenhouse gases (GHGs) are discussed in detail in chapter 22 (Clean Air Ashore). Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) addresses how GHGs will be analyzed in environmental planning documentation.

b. Strategic Sustainability

(1) Sustainability is not an individual departmental program but an organizing paradigm that applies to all DoD mission and program areas as a means of improving mission accomplishment while enabling environmental stewardship. Reference (e) provides a coherent approach both for complying with multiple Federal requirements for strategic sustainability and for assuring DoD's mission. DoD's vision of strategic sustainability is to maintain the ability to operate into the future without decline, either in the mission or in the natural and manufactured systems that support DoD. Reference (f) identifies four key linkages between strategic sustainability and the DoD mission that form priorities for DoD. Although reference (f) is updated annually, it is expected key linkages will remain similar to the ones listed below:

(a) Energy and reliance on fossil fuels;

(b) Chemicals of environmental concern;

(c) Water resources management; and
(d) Maintaining readiness in the face of climate change.

(2) Reference (f) lays out strategic sustainability goals and performance expectations for the next decade. Navy commands shall support annual sustainability reporting requirements as discussed in chapter 4 (Environmental Performance Reporting).

(3) Additional Strategic Sustainability Performance Plan environmental requirements are addressed in individual chapters of this manual including chapter 4 (Environmental Performance Reporting) and chapter 17 (Environmental Management Systems).

c. Pollution Prevention. Reference (g) requires all Federal agencies to prevent or reduce pollution at the source where feasible, recycle waste, and handle and dispose of waste in an environmentally safe manner. P2 covers multiple programs and is addressed specifically in chapter 11 (Environmental Readiness in the Acquisition Process), chapter 17 (Environmental Management Systems), chapter 23 (Hazardous Materials Management Ashore), and chapter 27 (Hazardous Waste Management Ashore).

d. Noise

(1) Noise impacts primarily related to occupational safety and health are not included in this manual as a standalone chapter. These impacts are covered in reference (h). However, the requirements for assessing the noise impacts of proposed Navy actions should be considered during the environmental planning process discussed in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).

(2) Chapter 11 (Environmental Readiness in the Acquisition Process) discusses noise considerations in the acquisition design process. Chapter 35 (Environmental Compliance Afloat) addresses shipboard noise.

(3) Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) is Navy's technical expert for noise impacts related to land use planning for air installations compatible use zones (reference (i)) and range air installations compatible use zones (reference (j)).

1-2 Legislation. Major legislation applicable to each chapter's subject matter and Navy responsibilities is listed in
1-3 Requirements

1-3.1. Organization

a. Budget Submitting Offices (BSO). For the purposes of this manual, BSOs plan, program, budget, and allocate resources to fund environmental readiness requirements for their subordinate commands. BSOs provide oversight of their subordinate commands to ensure they adhere to the policies in this manual and comply with applicable environmental readiness requirements.

b. Commander, United States Fleet Forces Command and Commander, United States Pacific Fleet. Commander, United States Fleet Forces Command (COMUSFLTFORCOM) and Commander, United States Pacific Fleet (COMUSPACFLT) are echelon 2 commands under the administrative control of CNO. Per CNO delegated authority (references (k) and (l)), COMUSFLTFORCOM and COMUSPACFLT organize, man, train, equip, and maintain assigned Navy forces and shore activities to generate required levels of current and future fleet readiness. COMUSFLTFORCOM and COMUSPACFLT are BSOs with financial management authority and responsibility for assigned forces, shore activities, Military and civilian personnel, infrastructure, and budget. COMUSFLTFORCOM generates and communicates Navy global force management solutions concerning general purpose forces and ad hoc forces retained by the Secretary of the Navy. To support their missions, COMUSFLTFORCOM and COMUSPACFLT develop and execute environmental programs to support fleet warfighting, basing, and training in support of operational readiness.

c. Commander, Navy Installations Command (CNIC). CNIC is an echelon 2 command. It has overall shore installation management responsibility, authority as the BSO for installation support, and is the Navy point of contact for installation policy and program execution oversight. CNIC is the supporting commander to the warfighter for shore services. Support is provided through region and installation commands. CNIC encompasses the region commands of Commander, Naval District Washington; Commander, Navy Region Mid-Atlantic (COMNAVREG MIDLANT); Commander, Navy Region Midwest (COMNAVREG MIDWEST); Commander, Navy Region Northwest (COMNAVREG NW); Commander, Navy Region Southeast (COMNAVREG SE); Commander, Navy Region Southwest (COMNAVREG SW); Commander, Navy Region Europe Africa
Southwest Asia; Commander, Navy Region Hawaii (COMNAVREG PEARL HARBOR HI); Commander, Navy Region Japan; Commander, Navy Region Korea; Commander, Joint Region Marianas (COMJTREG MARIANAS GU); Area Coordinator, Singapore; and the corresponding installations within each region. Per reference (m), CNIC is responsible for Navy shore environmental program execution and oversight, as well as planning, programming, and budgeting for regional and shore installation environmental program management requirements. Exceptions may exist when environmental memorandums of agreement (MOA) are negotiated with tenant commands or their BSOs, as described in section 1-3.2.f.

1) Commanders of Navy Region Commands. Commanders of region commands are assigned a specific shore-based geographic area of responsibility (AOR). As an echelon 3 command reporting to the fleets or the cognizant outside the continental United States (OCONUS) naval forces commander for operational control, and CNIC for administrative control for installation support, the commanders of Navy regions are the focal point for all shore services, fleet support, and delegated mission environmental programs in the region. Region commanders have the responsibility to oversee and coordinate matters of wide-ranging service interest. Region commanders may direct the actions of all tenant and visiting commands, including those commands not otherwise aligned to an installation, on matters concerning the safeguarding or preservation of Navy owned or controlled property and the security, safety, and welfare of all individuals and families onboard Navy owned or controlled property. Region commanders are responsible for compliance with all Federal and State environmental laws, regulations, E.O.s, and DoD and DON policy throughout the region.

2) Commanding Officers (CO) of Navy Installations. As echelon 4 commands reporting to the region commander, the COs of Navy installations are responsible for all shore services and support for fleet operations. Installation COs oversee and coordinate matters of common interest to ensure the effective and efficient operation of the installation. COs of an installation are responsible for environmental program management aboard their installation including coordinating the actions of all tenant and visiting commands and individuals on matters concerning the safeguarding or preservation of Navy owned or controlled property. They also oversee the security, safety, and welfare of all individuals and families onboard the installation.
d. COMNAVFACENGCOM. COMNAVFACENGCOM is the lead naval systems command (SYSCOM) for facilities and is responsible and accountable for executing CNIC's environmental requirements. COMNAVFACENGCOM delivers engineering services, develops and maintains shore facilities, acquires and manages capabilities for Navy's expeditionary combat forces, provides contingency engineering responses, and enables energy security and environmental stewardship. COMNAVFACENGCOM serves as Navy's primary technical authority and primary execution agent in support of Navy installation COs for environmental planning, compliance, restoration, and natural and cultural resources management for Navy shore facilities. COMNAVFACENGCOM also serves as the primary execution agency for COMUSFLTFORCOM and COMSPACFLT at sea and range environmental planning and compliance documentation. Most region and installation environmental program directors are COMNAVFACENGCOM employees acting in a double-hatted capacity and reporting to the regional engineer or installation public works officer. There may be exceptions in regions where the Navy region commander retains some environmental staff for Navy or DoD regional environmental coordinator (REC) duties, Navy on-scene coordinator (NOSC) duties, and fleet support roles as authorized by CNIC.

e. SYSCOMs. SYSCOMs include COMNAVFACENGCOM, Office of Naval Research; Commander, Naval Sea Systems Command (COMNAVSEASYSCOM); Commander, Naval Air Systems Command (COMNAVAIRSYSCOM); Commander, Naval Supply Systems Command; and Space and Naval Warfare Systems Command (SPAWARSYSCOM). SYSCOMs have been established to provide Navy wide support in specific areas of technical expertise and are the BSOs for these areas. SYSCOMs and their affiliated program executive offices (PEO) are charged with programming, budgeting, procuring, and maintaining Navy facilities, platforms, and weapon and sensor systems. They are responsible for providing systems engineering with due consideration to sustainability and environmental readiness, including compliance, natural and cultural resources conservation, and environmental planning, as applicable. This includes the responsibility to ensure environmental requirements are appropriately considered in their assigned mission.

(1) SYSCOMs and Tenant Environmental Staffs. SYSCOMs, as BSOs, have chosen to fund their own environmental staffs at tenant commands when required services or specific technical expertise is not available through CNIC or COMNAVFACENGCOM, or does not meet specific needs. However, to avoid duplication, responsibilities shall be de-conflicted using environmental MOAs as described in section 1-3.2.f.
(2) **PEOs.** PEOs are in charge of major acquisition programs. PEOs report directly to the Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN(RD&A)) and are affiliated with an individual SYSCOM. Each PEO shall assign or delegate a person to review all specifications for systems compliance with all environmental laws, regulations, E.O.s, and DoD and DON policy. Refer to chapter 11 (Environmental Readiness in the Acquisition Process) for more information.

f. Environmental Specialty Offices. Environmental specialty offices have been established under COMNAVSEASYSCOM, COMNAVAIRSYSCOM, and COMNAVFACENGCOM to provide Navy wide support in unique areas of technical expertise.

1) **Naval Ordnance Safety and Security Activity (NOSSA).** The NOSSA, Ordnance Environmental Support Office (OESO), located in Indian Head, MD, serves as the Navy's technical authority and provides core expertise and leadership to the Navy on issues related to environmental support in the area of Military munitions and ordnance related processes. OESO serves as the delegated authority for ordnance range sustainment, Munitions Rule implementation, munitions response aspects of environmental remediation, and materials potentially presenting an explosive hazard. This includes program management, oversight of program execution, program assessment and verification, and development of guidance and training for ordnance related environmental programs.

2) **Laboratory Quality and Accreditation Office.** Laboratory Quality and Accreditation Office, located at Naval Weapons Station Charleston, SC, provides core expertise and leadership to Navy on issues related to environmental sampling, laboratory testing, and data quality. This includes environmental sampling and testing policy development, technical assistance, legislative review, and development of guidance and training.

3) **Aircraft Environmental Support Office (AESO).** The AESO, located in North Island, CA, provides Navy wide support relative to aircraft and aircraft facility environmental protection. AESO serves as 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.
(4) Naval Facilities Engineering and Expeditionary Warfare Center (NAVFAC EXWC). The NAVFAC EXWC is located in Port Hueneme, CA, and provides Navy wide support relative to specialized environmental engineering, technology, and information management expertise. NAVFAC EXWC conducts environmental protection systems and technology development, testing, evaluation, adaption, technology transfer, and implementation. Products and services support environmental aspects of installation operations including facilities management; utility systems; port and air operations; and strategic sustainable practices that maintain the ability to operate without decline.

g. Naval History and Heritage Command (NAVHISTHERITAGECOM). NAVHISTHERITAGECOM is an echelon 2 command with Field Support Activity as its BSO. NAVHISTHERITAGECOM has the responsibility to collect, preserve, protect, and make available the artifacts, documents, and art that best embody naval history and heritage for present and future generations. NAVHISTHERITAGECOM advances the knowledge of naval history and heritage through professional research, analysis, interpretation, products, and services and is under the administrative control of CNO. Refer to chapter 13 (Cultural Resources Compliance and Management) for more information.

h. Navy Judge Advocate General and Office of the General Counsel (OGC). The Navy Judge Advocate General and OGC attorneys within the chain of command are a command's primary legal resource. Attorneys specializing in environmental law are available for assistance and are assigned to BSOs, Navy RECs, region legal service offices, and COMNAVFACENGCOM subordinate commands. They are also available to provide additional environmental legal support upon request. The Naval Litigation Office of the OGC provides environmental litigation support. Environmental legal advice is also available from the Office of the Assistant General Counsel (Energy, Installations, and Environment). Legal questions, including interpretations of laws, regulations, E.O.s, permits, compliance agreements, and similar legal documents, shall be referred to and coordinated with the appropriate environmental counsel.

1-3.2. Coordination

a. DoD RECs

(1) Reference (n) establishes a framework for DoD RECs and component RECs within the United States. Oversight of this
program is provided by Deputy Under Secretary of Defense, Installations and Environment (DUSD(I&E)).

(2) Under the DoD REC construct, the secretaries of the Military Departments serve as the DoD REC for their assigned Federal regions. The DoD REC for each Federal region is responsible for coordinating Federal, regional, State, and local environmental matters among the DoD components in the region. DoD RECs also engage appropriate regional, State, and local officials on proposed legislation, regulation, policies, and other environmental matters of interest to DoD to articulate a single coordinated DoD position. The DoD REC for each region has a Military Department representative (DoD REC representative), located in the region, to coordinate the DoD REC Program with the other DoD components as indicated in table 1-1. In Environmental Protection Agency (EPA) Regions 1 and 3, COMNAVREG MIDLANT is the DoD REC representative. In EPA Region 9, COMNAVREG SW is the DoD REC representative.

Table 1-1. EPA Regions and DoD RECs

<table>
<thead>
<tr>
<th>EPA Region</th>
<th>DoD REC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3, and 9</td>
<td>Secretary of the Navy</td>
</tr>
<tr>
<td>4, 5, 7, and 8</td>
<td>Secretary of the Army</td>
</tr>
<tr>
<td>2, 6, and 10</td>
<td>Secretary of the Air Force</td>
</tr>
</tbody>
</table>

b. Component RECs

(1) In support of the DoD RECs, Army, Navy, and Air Force also designate component RECs in each Federal region to coordinate environmental issues for their respective Services. The DoD REC representative in a region can also serve as the component REC in the same region. Component RECs coordinate with the DoD REC representative regarding their service's activities in the region and communications with Federal, regional, State, and local agencies and officials. Component RECs elevate issues requiring DoD-wide attention to the DoD REC via the DoD REC representative and appropriate chain of command. One Navy region commander shall be assigned as the Navy REC for each Federal EPA region, with the exception of EPA Region 9 where there are three. Navy RECs are identified by Federal EPA region in table 1-2.

Table 1-2. EPA Regions and Navy RECs

<table>
<thead>
<tr>
<th>EPA Region</th>
<th>Navy REC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Region 1 (ME, VT, NH, CT, MA, RI)</td>
<td>COMNAVREG MIDLANT (Also Military department representative for EPA Region 1 and EPA Region 3)</td>
</tr>
<tr>
<td>EPA Region 2 (NY, NJ, PR, VI)</td>
<td>COMNAVREG MIDLANT</td>
</tr>
<tr>
<td>EPA Region 3 (DE, DC, MD, PA, VA, WV)</td>
<td>COMNAVREG SE</td>
</tr>
<tr>
<td>EPA Region 4 (AL, FL, GA, KY, MS, NC,</td>
<td>COMNAVREG MIDLANT (Also Military department representative for EPA Region 1 and EPA Region 3)</td>
</tr>
<tr>
<td>EPA Region</td>
<td>Navy REC</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SC, TN</td>
<td></td>
</tr>
<tr>
<td>EPA Region 6 (TX, LA, OK, NM, AR)</td>
<td></td>
</tr>
<tr>
<td>EPA Region 5 (IL, IN, MI, MN, OH, WI)</td>
<td>COMNAVREG MIDWEST</td>
</tr>
<tr>
<td>EPA Region 7 (IA, KS, MO, NE)</td>
<td></td>
</tr>
<tr>
<td>EPA Region 8 (CO, MT, ND, SD, UT, WY)</td>
<td>COMNAVREG NW</td>
</tr>
<tr>
<td>EPA Region 10 (AK, WA, OR, ID)</td>
<td></td>
</tr>
<tr>
<td>EPA Region 9 (AZ, CA, NV, the United States Flag Area of American Samoa, the Freely Associated States of the Republic of the Marshall Islands)</td>
<td>COMNAVREG SW (Also Military department representative for all of EPA Region 9)</td>
</tr>
<tr>
<td>EPA Region 9 (HI)</td>
<td>COMNAVREG PEARL HARBOR HI</td>
</tr>
<tr>
<td>EPA Region 9 (Commonwealth of Northern Mariana Islands, the Federated States of Micronesia, the Freely Associated States of the Republic of the Marshall Islands, Guam, the Republic of Palau, and the United States Flag Area of American Samoa)</td>
<td>COMJTREG MARIANAS GU</td>
</tr>
</tbody>
</table>

(2) There are no designated overseas RECs. Overseas coordination is discussed in section 1-3.2.g and in chapter 34 (Overseas Environmental Compliance Ashore).

(3) Reference (n) formalized coordination requirements when developing final DoD positions on environmental matters. Navy region commanders serving as the DoD REC representative or Navy REC shall implement these requirements as follows:

(a) DoD and component positions developed within a region shall conform to existing DoD and component policy. All communication among DUSD(I&E), DoD RECs, Military Department representatives, component RECs, and DoD components shall follow the chain of command. For operational environmental matters, including but not limited to, at sea compliance; range documentation and permitting; home-basing decisions; and afloat and shipboard environmental compliance, the chain of command for the Navy component REC or the Navy's Military department representative shall be via the appropriate fleet commander (COMUSFLTFORCOM or COMUSPACFLT) for matters within their respective AORs, and OPNAV (N45). For shore installation matters, the chain of command shall be via CNIC, the applicable BSO, and OPNAV (N45).

(b) Issues with the potential to affect afloat assets or forces, issues of potential national significance, and issues affecting the relationship between Federal and State regulation shall be coordinated with OPNAV (N45) via the chain of command.
(c) Navy RECs are assigned to correspond to specific EPA regions and do not necessarily align with Navy region commands. Where Navy region commanders are assigned as Navy RECs for areas or States in another Navy region command, the Navy REC shall keep the appropriate Navy region command informed of environmental issues that occur in the Navy region to which the area or State belongs. Navy regions responsible for State(s) in another REC's AOR shall immediately inform the designated REC of all regulatory issues related to shore installation compliance; enforcement actions; permit conditions; visits by State and Federal regulators; or any other issues that may impact other Navy or DoD installations within the REC's AOR.

To ensure consistent application of Navy policy throughout Federal EPA regions, Navy regions responsible for States in another REC's AOR shall coordinate all interactions with State or Federal regulators regarding shore installation compliance with the designated Navy REC.

(d) For issues requiring immediate attention from DUSD(I&E), the DoD REC, not the Military Department representative or Navy REC, will notify DUSD(I&E) and the Navy chain of command, including OPNAV (N45).

c. Area Environmental Coordinators. COMUSFLTFORCOM and COMUSPACFLT are designated as area environmental coordinators. As area environmental coordinators, COMUSFLTFORCOM and COMUSPACFLT shall ensure consistent application of environmental policy for Navy actions occurring on fleet training ranges and at sea operating areas (OPAREAs) from the high water mark seaward within their assigned AORs.

d. Joint Bases (including Joint Region Marianas)

(1) Navy as Supporting Component. Per reference (o), where Navy is the supporting component (lead Service), Navy will be responsible for all environmental compliance, environmental conservation, P2, and environmental restoration functions as defined in reference (p). Navy will also be responsible for budgeting to meet those requirements for the joint base upon transfer of real property to Navy. Responsibilities include:

(a) Maintaining and complying with all existing, previously negotiated, and executed permits, orders, and agreements;

(b) Overseeing environmental contracts; and
(c) Reporting all environmental requirements and metrics.

(2) **Navy as Supported Component.** Where a Navy activity is a tenant on a non-Navy installation, the activity shall participate in the host environmental compliance program per an inter-Service support agreement. Where the non-Navy host environmental compliance program is not consistent and less restrictive than Navy, BSO, and parent command policy, Navy activities shall follow Navy, BSO, and parent command instructions, directives, and policy guidance. In addition, Navy shall:

(a) Make its facility and environmental information accessible to the supporting component;

(b) Notify the supporting component and obtain prior approval for all new, modified, or decommissioned pollution sources or regulated activities on the installation used by Navy or its contractors; and

(c) Provide the supporting component all requirements identified or programmed to meet minimum environmental standards identified under common output levels of services.

(3) **Media and Program Specific Guidance.** Whether or not joint bases have one or multiple environmental programs or environmental reporting requirements depends on the specific media or environmental program area as detailed in reference (o) and on whether or not the parts of the joint base are geographically contiguous (or adjacent to each other) or are non-contiguous (or geographically separate). In all cases, where Navy is not the lead Service, Navy shall coordinate with and report through the joint base lead.

e. **Fleet and Shore Facility Relationship**

(1) 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 readiness program policies to ensure environmental compliance. To the maximum extent possible, shore commands and Navy RECs shall provide afloat units with assistance in meeting shore facility environmental requirements. When in a private shipyard, personnel shall follow shipyard policy.
(2) Operational environmental issues including at sea compliance; range documentation and permitting; home-basing and home-porting decisions; afloat and shipboard environmental compliance; fleet NOSC; and other similar issues that affect readiness or fleet operations such as coastal and marine spatial planning; ecosystem-based management; mission compatibility assessments; and offshore gas, oil, and renewable energy compatibility assessments shall also be coordinated with the appropriate COMUSFLTFORCOM or COMUSPACFLT fleet commander.

f. Host and Tenant Relationships

(1) COs of Navy installations in charge of host commands are responsible for all aspects of environmental readiness at their installation. Host commands may delegate authority to tenant commands per environmental MOAs.

(2) Environmental MOAs will be developed between host commands and tenant commands that have their own environmental functions and staffs to document roles and responsibilities with respect to environmental compliance and establish mechanisms for internal and external communication, dispute resolution, performance evaluation, and methods to hold each other accountable. The intent of the agreement is to ensure both parties have a common understanding of the environmental responsibilities that apply to their operations and the procedures both parties will coordinate and execute to ensure each is able to accomplish their respective mission in full compliance with all applicable laws, regulations, E.O.s, and DoD and DON policy relating to the protection of the environment.

(3) Commands shall establish environmental compliance boards consisting of host and tenant management personnel. At a minimum, commands should include both host and tenants on environmental management system (EMS) review boards (refer to chapter 17 (Environmental Management Systems)).

(4) Knowledge of compliance status and permit requirements is necessary for both host and tenant commands to perform varying operations and missions. Hosts and tenants will share information and ensure all applicable Navy RECs and BSOs, as well as CNIC have appropriate information to assess environmental readiness and compliance status, to include warning letters, notices of deficiency, and notices of violations.
5) Disputes between host and tenant commands regarding environmental program interaction should be elevated to the appropriate BSOs for resolution. Deputy Chief of Naval Operations for Fleet Readiness and Logistics (CNO (N4)) will adjudicate disputes among BSOs.

g. Overseas Coordination. DoD designated lead environmental components are responsible for identifying applicable host nation environmental standards, monitoring regulatory trends, and maintaining copies of applicable host nation environmental documents, standards, and regulations per DoD FGS for host nation-specific criteria and the OEBGD when host nation-specific FGS have not been developed. The lead environmental component (LEC) consults with host-nation authorities, the Chief of the United States Diplomatic Mission in the host nation, the affected Military Service through the chain of command, and the geographic unified combatant command on significant issues arising from DoD environmental policy in that country. The LEC also resolves requests for waivers of FGS, OEBGD, or other applicable requirements submitted by DoD components. Navy shore activities, facilities, and installations located outside the United States, its territories, and possessions shall coordinate environmental issues, including requests for waivers from any applicable requirements, with the LEC for the host nation via the appropriate chain of command. Chapter 34 (Overseas Environmental Compliance Ashore) contains additional information.

h. Contractor Compliance. Navy contracting officers shall ensure contractors performing work on Navy installations and on Navy systems, platforms, and other equipment comply fully with applicable Federal, State, and local statutes, laws, regulations; E.O.s; DoD and DON policies and requirements; and Navy installation-specific environmental readiness policies and requirements, including training requirements under the Navy installation’s EMS. Contracting officers shall ensure contractors monitor subcontractors for compliance.

i. Government-Owned, Contractor-Operated (GOCO) Facilities. Navy BSOs or activities sponsoring GOCO facilities shall exercise oversight through the facility's lease, use, or management contracts to ensure the operating contractor complies with applicable environmental laws, regulations, E.O.s, and DoD and DON policy. When a GOCO facility has no operating contractor or lessee, the BSO for the GOCO facility shall comply with the requirements of this manual.
j. Facilities Leased or Rented by Navy

(1) Facility use contracts, rental agreements, or leases shall require the lessee be responsible for ensuring the facilities comply with all applicable environmental requirements. The lessee 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.

(2) The lessor shall ensure lease contract terms and conditions place full responsibility for environmental compliance on the lessee. The lessor shall exercise appropriate oversight of the leased property to ensure lessee compliance with environmental laws, regulations, E.O.s, and DoD and DON policy, including scheduled and documented environmental compliance reviews and, if applicable, resource management plans.

k. Real Estate Purchase. The purchasing command shall conduct a pre-purchase environmental survey and a property transaction audit that includes a preliminary assessment (PA) for potential hazardous material (HM) contaminated sites. If the seller completed 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, refer to chapter 42 (Environmental Restoration) for additional guidance.

1-3.3. Disputes. Unresolved issues between two organizations under the cognizance of different BSOs should be elevated through both chains of command for resolution. If the two cognizant BSOs cannot reach agreement, the issue shall be elevated to CNO (N4) for resolution.

1-3.4. Environmental Management Systems. EMS is Navy's primary system for maintaining environmental compliance at Navy shore activities, reducing the number of notices of violation (NOVs), improving environmental quality, and achieving P2 goals. Per reference (q), EMS shall be integrated into missions, activities, functions, contracts, and installation support agreements as a business practice for improving overall performance. EMS is not just an environmental function, but requires active participation from all functions and organizations. Additional EMS requirements can be found in chapter 17 (Environmental Management Systems).
1-3.5. **Environmental Regulatory Agency Interface**

a. Routine interactions with regulatory agencies should be conducted at the local or regional level as appropriate. Exceptions, which must be approved by CNO (N4), include issues of a national or regional scope requiring interactions with the National Marine Fisheries Service headquarters, EPA headquarters, United States Fish and Wildlife Service headquarters, and Advisory Council on Historic Preservation state and tribal historic preservation officers.

b. Navy must establish consistent responses throughout the United States to similar questions presented by different regulatory agency regions. This avoids establishing an adverse precedent in one Navy region that regulatory agencies apply to other regions. Commands shall send all interpretations or agreements likely to set Navy wide precedents to CNO (N4) immediately, via the chain of command, with copies to the Navy REC.

c. Environmental, natural, and cultural resources permits, conditions, demands for payment of Navy funds, compliance agreements, settlements, negotiations, responses to written NOVs, and other related interactions with regulatory agencies for land-based and coastal zone issues must be fully coordinated with the Navy REC and all other affected Navy commands.

d. Interaction with regulatory agencies for actions occurring from the high water mark seaward and other environmental issues that affect readiness or fleet operations shall also be coordinated with the appropriate area environmental coordinator.

(1) **Facility Inspections.** Navy shore installation commanders and tenant commanders shall allow entry during reasonable hours of operation per permit requirements to Federal, State, and local environmental regulators or their representatives, upon presentation of proper credentials, to examine or copy records, inspect monitoring equipment, inspect work being performed in regard to environmental and regulatory compliance, or sample any wastes or substances which they have the authority to regulate. Such inspections shall comply with information and facility security requirements set forth in reference (r) and section 1-3.6. Installations shall notify the BSO and the Navy REC of scheduled regulatory inspections and may request cognizant COMNAVFACENGCOM commands or Navy REC assistance at such inspections. Chapter 34 (Overseas
Environmental Compliance Afloat) provides guidance on access by host nations. Chapter 35 (Environmental Compliance Afloat) provides requirements for inspections aboard ships.

(2) Notices of Violation. Chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) contains instructions for the processing of notices of noncompliance and associated chain of command responsibilities.

1-3.6. Information Security. Representatives of Federal, State, and local agencies, exercising their regulatory authorities under environmental laws and regulations, periodically visit Navy shore commands. Activities shall properly enforce Federal statutes and Navy regulations governing the control and protection of classified and controlled unclassified information. Should regulators demand access to classified information, they shall comply with Federal laws and regulations regarding access to that information. Commands shall adhere to the following guidelines and ensure they are reflected in instructions which they issue covering this area. Chapter 35 (Environmental Compliance Afloat) discusses information security regarding ships.

a. Classified Information. 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 (limited to classified information required to resolve the matter at hand) exists to fulfill a legitimate regulatory purpose. When permitting access, activities shall negotiate arrangements under reference (r) to assure continued protection of the information by the regulatory personnel.

b. Controlled Unclassified Information. While security clearances or access authorizations are not generally required for access to controlled unclassified information, a need-to-know determination shall be made as described above. Per reference (s), the holder of the information shall comply with applicable security and dissemination regulations and shall ensure the recipient understands and complies with applicable information controls before permitting access.

c. Naval Nuclear Propulsion Information. 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, Naval Nuclear Propulsion Program (CNO (N00N)).
d. Publicly Releasable Information. Because access to classified and sensitive unclassified information by regulatory personnel creates administrative burdens for both Navy and the regulator, as described above, Navy commands are encouraged to satisfy the needs of regulatory personnel using information which is publicly releasable.

1-3.7. Environmental and Natural Resources Regulatory Permits

a. Navy commands shall apply for and obtain all required Federal, State, and local permits including those for the construction and operation of facilities and ranges, and for actions related to at sea and ashore training and research, development, test, and evaluation (RDT&E) activities, and shall comply with all permit terms and conditions.

b. Host commands shall coordinate permit conditions with all affected tenant commands. In jurisdictions that allow tenant commands to hold environmental permits, and where appropriate, COs of host commands should delegate authority to negotiate, sign, and hold environmental permits to COs of tenant commands where operations under the permit fall completely under that tenant and such permits directly impact the ability of the tenant command to perform its mission. Installation COs shall review ownership of all permits and determine if permit ownership has been delegated from the CO of the installation to the tenant CO. Where appropriate and warranted, the installation CO will ensure a delegation letter is issued and a copy is included in the command EMS documentation. In addition, the environmental MOAs will address permit coordination and communication. COs of tenant commands must coordinate all such permits with the host command, Navy REC, and the tenant command BSO prior to signing the permit. In some instances, region commanders may choose to sign regional permits covering multiple commands. These permits should be coordinated with all affected host and tenant commands.

c. Each Navy organization sponsoring a GOCO facility shall sign, as owner, for all environmental permits the operating contractor or lessee of the GOCO facility is required to have. Contractors shall obtain all necessary permits and sign the permits as operators unless otherwise directed by contract. Contractors shall advise Navy of any permit, its conditions, and provide periodic compliance status reports as required by the managing Navy office.
d. Regardless of the permit holder, permits for environmental and natural resources actions at Navy shore installations must be coordinated with the appropriate Navy REC. Additionally, permits for any actions from the high water mark seaward must be coordinated with the area environmental coordinators in whose AOR(s) the action will occur.

1-3.8. National Defense or Military Activities Waivers. When, in the interest of national defense 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 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, regulations, and E.O.s. Commands shall seek waivers from applicable environmental requirements only as a last resort, and CNO (N4) will not authorize pursuit of such waivers where compliance is deemed practical. Commands seeking waivers must comply with environmental requirements while the request is pending.

1-3.9. Sovereign Immunity. Where environmental statutes contain waivers of sovereign immunity, Federal agencies must comply with applicable Federal, State, and local statutes, regulations, and other requirements. As the application of sovereign immunity waivers varies with specific situations, personnel should seek the advice of Navy legal counsel. Requirements for the payment of fees, fines, or taxes are discussed in chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations).

1-3.10. Record Retention and Recordkeeping. All documentary material requests, including administrative and litigation holds, shall be conducted per reference (t). Environmental media and program specific requirements are in their respective chapters and may be more stringent.

1-4 Responsibilities

1-4.1. Per references (u) and (v), CNO (N4), through OPNAV (N45), shall:

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

b. Establish and regularly update implementing policy guidance and direct and monitor progress of the Navy environmental and natural resources programs;

c. Coordinate environmental policy guidance and program matters with ASN(EI&E), DUSD(I&E), other services, EPA, and other Federal agencies;

  d. Coordinate review and issuance of National Environmental Policy Act documents and documents prepared under reference (w);

  e. Serve as CNO's assessment and resource sponsor for fleet and shore environmental programs and requirements as well as radiological controls;

  f. Coordinate with resource sponsors, Deputy Chief of Naval Operations for Integration of Capabilities and Resources (CNO (N8)), Assistant Secretary of the Navy (Financial Management and Comptroller), Fiscal Management Bureau, and the Office of Management and Budget in the reconciliation of environmental compliance requirements versus budgeted resources;

  g. Serve as the CNO environmental readiness advocate to ASN(RD&A) in all matters dealing with life-cycle, environmental logistics during initial and iterative systems development throughout a weapon, and information technology (IT) system's life-cycle, per reference (x);

  h. Provide oversight of EMS to ensure compliance with all applicable environmental laws, regulations, E.O.s, and DoD and DON environmental policies;

  i. Inform Navy personnel and the public about exceptional achievements in environmental resources protection; and

  j. Establish and maintain the Navy Energy Coordination Office within OPNAV (N45) and identify, promote, and track policy, doctrine, investment initiatives, and metrics while providing oversight for all Navy energy programs.

1-4.2. CNO (N4), through the OPNAV (N46), Shore Readiness Division, shall serve as CNO's assessment and resource sponsor for the cultural resources program and shore cultural resources requirements.
1-4.3. CNO (N00N) shall fulfill all responsibilities prescribed in reference (y) 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.

1-4.4. Navy Office of Information shall:

   a. Provide guidelines for the release of information involving energy and environmental matters;

   b. Provide guidance on energy and environmental matters of public concern or interest; and

   c. Implement an outreach program to gather and publicize Navy environmental program accomplishments.

1-4.5. In addition to the command-specific BSO responsibilities assigned throughout this chapter, echelon 2 commands and their BSOs shall:

   a. Provide appropriate oversight of their subordinate commands to ensure they adhere to the policies in this manual and comply with applicable environmental readiness requirements;

   b. Plan, program, budget, and allocate sufficient resources to fund environmental readiness requirements for their activities;

   c. Issue guidance to activities regarding planning, programming, and budgeting of environmental readiness requirements and execution of associated programs and projects;

   d. Ensure all subordinate organizations maximize the use and reuse of geospatial information and Navy enterprise geographic information systems to enhance decision making while reducing cost;

   e. Ensure all subordinate organizations, including GOCOs, submit all environmental readiness requirements to BSOs as soon as such requirements are foreseen;
f. Support CNO (N4) as program assessment and resource sponsor by providing detailed information in support of program baseline assessments as requested;

g. Provide input on requirements for OPNAV (N45) sponsored RDT&E programs through the individual processes defined for each program, and direct the implementation of innovative solutions to environmental compliance, cost, and liability issues;

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

i. Ensure consistent application of environmental policy within AORs and coordinate all environmental planning and compliance for actions taking place at sea (from the high water mark seaward) with the appropriate area environmental coordinator;

j. Fully cooperate with CNIC and COMNAVFACENGCOM in systematically identifying, assessing, and reporting other accrued environmental liability (OEL) costs that COMNAVFACENGCOM estimates and CNIC reports on behalf of Navy; and

k. Provide Navy environmental readiness advocacy and support to Navy acquisition programs during design, development, procurement, and sustainment of Navy weapons systems.

1-4.6. CNIC shall:

a. Serve as the BSO and program manager and execute environmental planning, programming, budgeting, and execution functions for the environmental planning, compliance, P2, and natural and cultural resources programs for Navy shore installations;

b. Provide oversight for regional environmental coordination regarding shore installation management matters;

c. Appoint a senior naval officer in each region under their cognizance to serve as the shoreside NOSC;

d. Ensure consistent application of environmental policy for Navy installations;
e. Provide oversight of installation execution through a compliance evaluation program and coordinate with naval SYSCOM oversight programs, if applicable; and

f. Coordinate with COMUSFLTFORCOM and COMUSPACFLT, as appropriate, on all operational environmental issues including at sea compliance; range documentation and permitting; home-basing and home-porting decisions; afloat and shipboard environmental compliance; fleet NOSC; coastal and marine spatial planning; ecosystem based management; mission compatibility assessments; and offshore gas, oil, and renewable energy compatibility assessments.

1-4.7. COMNAVFACENGCOM shall:

a. Serve as the Navy's primary technical authority and primary execution agent in support of Navy installation COs for environmental planning, compliance, restoration, and natural and cultural resources management for Navy shore facilities;

b. Fulfill the responsibilities of technical authority by establishing and assuring adherence to technical standards and policy, and providing a range of technically acceptable alternatives with risk and value assessments;

c. Establish, monitor, and approve technical standards, tools, and processes in conformance with higher authority policy, requirements, architectures, and standards;

d. Ensure the safety, environmental compliance, and competency of work delivered to Navy;

e. Serve as the BSO, program manager, and execution agent for COMNAVFACENGCOM mission funds; Naval Environmental Protection Support Service Program; Environmental Restoration, Navy Program; and Tier 1 Oil Spill Response Equipment Program;

f. Serve as program manager and execution agent for agricultural outleases and forestry, and OEL programs;

g. Manage the Living Marine Resources (LMR) RDT&E Program and Navy Environmental Sustainability Development to Integration RDT&E Program;

h. Serve as the execution agent for environmental projects for Navy on a reimbursable basis;
i. Serve as the acquisition authority to deliver environmental products and services through various contract mechanisms as delegated by ASN(RD&A);

j. Serve as the acquisition authority to enter into Defense Environmental Restoration Program, base realignment and closure functions, natural and cultural resources, and technology cooperative agreements as delegated by ASN(RD&A);

k. Prepare analyses of relevant operational, legal, and technical issues raised by proposed Federal, State, and local environmental legislation as requested;

l. Provide environmental, technical, legal, data management, and information exchange support to Navy organizations;

m. Execute the CNIC shore installation environmental management, assessment, and oversight functions on a reimbursable basis, as assigned;

n. Support and fully cooperate with CNIC in execution of the responsibility for shore installation requirements generation, through development of installation environmental project requirements;

o. Develop, manage, and disseminate environmental program data as requested by CNO or CNIC;

p. Ensure consistent application of environmental policy and coordinate all environmental planning and compliance within the appropriate Navy REC and area environmental coordinator;

q. Assist OPNAV (N45) in managing P2 technology transfer efforts; and

r. Provide technical assistance to shore commands to implement P2 practices and incorporate P2 technology into command processes.

1-4.8. COMUSFLTFORCOM and COMUSPACFLT shall develop and execute environmental programs to support fleet warfighting, basing, and training in their respective AORs in support of operational readiness. Actions include:

a. Complete and maintain necessary environmental compliance for training range complexes and OPAREAs;
b. Complete all necessary environmental compliance
documentation for proposed home-basing and home-porting actions
within assigned areas of the continental United States (CONUS)
and the western Pacific;

c. Manage range sustainability programs to ensure continued
access to fleet training ranges from an environmental
compliance, encroachment, and human health and safety
perspective. Work includes operational range clearance; range
and water range sustainability environmental program
assessments; mission compatibility assessments; and offshore
gas, oil, and renewable energy compatibility assessments;

d. Prepare and maintain range complex management plans and
conduct data collection and environmental document reviews to
inform stakeholders of COMUSFLTFORCOM and COMUSPACFLT efforts to
protect access and to sustain, upgrade, modernize, and transform
their training and testing areas as well as ensure appropriate
articulation of operational requirements for subsequent
environmental analysis;

e. Assist fleet training area managers and scheduling
authorities with subject matter expertise and manpower to
accomplish their range complex sustainment responsibilities and
provide headquarters-level policy development and coordination
to implement an effective Navy wide program;

f. Ensure afloat and shipboard environmental compliance
initiatives and practices for fleet assets include shipboard P2
and solid waste equipment and management, HM management, oil
spill prevention, and fleet NOSC response to oil spills;

g. Provide all necessary products, tools, reporting
mechanisms, and environmental professional services to fleet
operators and the numbered fleets to assist in complying with
environmental laws, regulations, E.O.s, and permits during the
conduct of live training;

h. Develop policy guidance and coordinate with CNO (N4) on
broad environmental compliance and planning issues, including
sonar, acoustics, sound energy in the water, and the National
Ocean Policy;

i. Engage with OPNAV (N45) and Naval SYSCOM environmental
staffs on environmental readiness in acquisition integration
during major defense acquisition programs;
j. Support preparation and review of annual marine mammal and endangered marine species environmental compliance reports and provide recommendations and tools to more efficiently meet requirements and to minimize the impact to United States Navy at sea readiness activities;

k. Assess current and potential marine mammal and endangered marine species environmental mitigations and coordinate with OPNAV (N45) to propose modifications to mitigation measures that reflect scientific efficacy while meeting fleet Military readiness objectives;

l. Evaluate and provide recommendations on DON research related to the potential effects of anthropogenic sound from naval activities on LMR and serve as advocate for integrated fleet research requirements and priorities in various forums within the United States Navy;

m. Coordinate operational environmental issues as the area environmental coordinators for assigned CONUS areas, AORs and sea ranges, and OPAREAS that support CONUS-based units or deployed units; ensure consistent application of environmental policy within AORs. Monitor all mission and operational matters including, but not limited to, at sea compliance; range documentation and permitting; home-basing and home-porting decisions; afloat and shipboard environmental compliance; coastal and marine spatial planning; ecosystem-based management; mission compatibility assessments; and offshore gas, oil, and renewable energy compatibility assessments;

n. Execute environmental planning, programming, budgeting, and execution functions to support environmental compliance for fleet actions, to include requirements management for environmental compliance, conservation, natural resources, cultural resources, and range sustainment funding;

o. Ensure program objective memorandum (POM) and project review environmental funding requirements development and submittal is coordinated between the fleets; and

p. Develop, manage, implement or use information management tools in cooperation with NAVFACENGCOM, CNIC, and SPAWAR that support operational and environmental planning and compliance, compatibility assessments, natural resources and range management for Fleet training and operating areas.
1-4.9. COMNAVSEASYSCOM shall:

   a. Manage the Shipboard, Ordnance, and Munitions Environmental Protection RDT&E Program;

   b. Manage the Radiation Detection, Indication, and Computation Development RDT&E Program;

   c. Maintain Tier II and III oil and hazardous substance (OHS) pollution response equipment and expertise for Navy offshore and salvage-related OHS spills or releases through the Supervisor of Salvage and Diving;

   d. Plan, program, and budget to implement management of historic ships afloat and historic ships in the inactive fleet under COMNAVSEASYSCOM control, in coordination with NAVHISTHERITAGECOM;

   e. Plan, program, and budget to provide Navy wide support on ordnance environmental issues through OESO;

   f. Complete and maintain necessary environmental compliance for testing range complexes; and

   g. Provide environmental program oversight and policy guidance to directorates, affiliated PEOs, and field activities.

1-4.10. COMNAVAIRSYSCOM shall:

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

   b. Provide environmental program oversight and policy guidance to Naval Air Warfare Center, Aircraft Division; Naval Air Warfare Center, Weapons Division; and fleet readiness center facilities; and

   c. Provide environmental readiness advocacy and support to Navy acquisitions programs throughout the life-cycle of Navy weapons systems.

1-4.11. SPAWARSYSCOM shall provide environmental program oversight and policy guidance to SPAWARSYSCOM Systems Center Pacific and SPAWARSYSCOM Systems Center Atlantic facilities.

1-4.12. Chief, Bureau of Medicine and Surgery shall:
a. Serve as environmental program manager and BSO for environmental program requirements to medical treatment facilities;

b. Determine, validate, and establish health-related criteria and standards not available through Federal, State, or local laws and regulations;

c. Provide assistance to activities, offices, and commands concerning the health aspects of pollution sources or pollution control equipment, including development of medical monitoring programs; human health risk assessment; and health and safety, toxicological, and risk communication;

d. Provide industrial hygiene and medical expertise to activities during spill events and other environmental emergencies via Navy hospitals and clinics, and the Navy and Marine Corps Public Health Center and its subordinate activities: Navy environmental and preventive medicine units, and Navy Entomology Center of Excellence;

e. Coordinate with the Agency for Toxic Substances and Disease Registry (ATSDR) for the timely completion of public health assessments for national priorities list sites, toxicological profiles on any specific contaminants, health education, health consultations, and other activities provided in the DoD or ATSDR annual plan of work;

f. Promulgate policy guidance for the disposition of dental, veterinary, medical, and pharmaceutical waste;

g. Provide a broad range of expertise and services in environmental health, occupational health, and preventive medicine to evaluate the health aspects of the Navy's environmental program;

h. Provide leadership and services to anticipate, identify, assess, and counter environmental health threats, as requested by echelon 2 commands; and

i. Provide health and environmental risk communication support to Navy environmental programs to include training and consultation.

1-4.13. Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) shall:
a. Support the Navy HM distribution and the Consolidated HM Reutilization and Inventory Management Program per chapter 23 (Hazardous Materials Management Ashore); and

b. Provide technical support for bulk fuel related environmental compliance through the COMNAVSUPSYSCOM energy office.

1-4.14. Naval Education and Training Command (NETC) shall:

a. Ensure effective training programs on environmental readiness exist throughout Navy; and

b. Through the Naval Civil Engineer Corps Officers School, execute approved environmental training courses and provide programming and budgeting information to CNO (N4).

1-4.15. Commander, Military Sealift Command shall:

a. Ensure Military Sealift Command (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; and

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

1-4.16. Office of the Judge Advocate General Environmental and OGC shall:

a. Review the Navy Environmental Readiness Training Program courses for currency; and

b. Develop, conduct, and budget for environmental law training courses for their respective personnel sufficient to meet recommended training levels for Navy Military and civilian attorneys providing legal advice on environmental law issues.

1-4.17. Navy Judge Advocate General's Corps and OGC attorneys shall provide advice and counsel on:
a. Interpretation of environmental laws, regulations, and E.O.s and their effect on the Navy;

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

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

1-4.18. Navy region commanders, as Navy component RECs, shall:

a. Execute responsibilities of DoD Military Department representative if assigned;

b. 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;

c. Ensure consistent Navy positions, agreements, permit conditions, and responses to regulatory agencies within the region, coordinating closely with affected shore installations and commands, BSOs, and COMNAVFACENGCOM organizations;

d. Assist in reconciling the positions and developing a single Navy position within the region in instances where activities are taking inconsistent positions on similar environmental issues;

e. Elevate issues to OPNAV (N45) via the chain of command for resolution as discussed in section 1-3.3 if differences remain unresolved among affected shore activities, BSOs, or other Military Service component RECs;

f. Serve as the primary Navy interface with their region's Federal, State, and local regulatory agencies;

g. If required, designate activities within their region to serve as the primary interface with individual State and or local regulatory agencies for specific actions;

h. Coordinate exchange of environmental information among Navy shore activities in the region, including the distribution of State, regional, and local laws, rules, and regulations;
i. Hold meetings and conferences, as necessary, for commands within their region on environmental compliance issues and support stewardship when possible;

j. Monitor environmental compliance at commands within their region;

k. Develop regional plans of action for specific environmental initiatives in coordination with COs of Navy shore commands in the region and BSOs;

l. Coordinate regional training initiatives among Navy commands and with other Federal, State, and local agencies to promote efficient use of training resources;

m. Provide assistance to installations and tenant commands in dealing with regulatory agencies as requested;

n. Act as the liaison between visiting foreign warships, environmental regulatory personnel, and port services on environmental requirements during ship visits and refer to chapter 35 (Environmental Compliance Afloat) for Navy policy guidance on regulatory agency inspections on board ships;

o. Ensure agreed upon Navy positions and concerns are articulated to Federal, State, and local regulatory officials and State lawmakers within their region by appropriate Navy officials;

p. Review and evaluate proposed State environmental legislation and regulations for potential impact on Navy installations and operations, and keep the chain of command and appropriate BSOs and shore commands informed on the status of State legislative and regulatory proposals;

q. Refrain from entering into any compliance commitment or agreement, for which the Navy REC is not the permit holder, or signing any memorandum of understanding (MOU) or similar document, if unresolved differences remain with any affected shore activities or commands;

r. Review proposed MOUs and MOAs that are to be agreed upon within their respective AOR to ensure consistency with DoD and DON policy and legal requirements; and

s. Coordinate with COMUSFLTFORCOM or COMUSPACFLT as appropriate on all operational environmental issues including at
sea compliance; range documentation and permitting; home-basing and home-porting decisions; afloat and shipboard environmental compliance; fleet NOSC; coastal and marine spatial planning; ecosystem-based management; mission compatibility assessments; and offshore gas, oil, and renewable energy compatibility assessments.

1-4.19. COs of Navy installations and COs of other shore activities shall:

a. Comply with applicable Federal, State, and local environmental laws, regulations, E.O.s, and DoD and DON policy, and continuously strive for improvements in all areas of P2;

b. Cooperate with Federal, State, and local environmental, land management and cultural resources regulatory officials;

c. Ensure consistent application of environmental policy within area environmental coordinator’s AORs and coordinate all environmental planning and compliance for actions taking place at sea (from the high water mark seaward) with the appropriate area environmental coordinator;

d. Coordinate environmental, natural, and cultural resources matters (e.g., enforcement actions, agreements, consultations, permit conditions) with Navy RECs, cognizant BSOs, and the area environmental coordinator for any actions from the high water mark seaward;

e. Integrate environmental readiness requirements into all levels of management through EMS and the application of program management procedures, including oversight, inspection, and identification;

f. Request sufficient resources from the cognizant BSO to fully support all environmental readiness program requirements;

g. Budget for and execute all environmental, natural, and cultural resources program requirements;

h. Fully cooperate with CNIC and COMNAVFACENGCOM in systematically identifying, assessing, and reporting OEL costs that CNIC reports on Navy’s behalf; and

i. Comply with the provisions provided in chapter 34 (Overseas Environmental Compliance Ashore) for OCONUS commands.
1-4.20. COs and masters of naval vessels shall:

   a. Comply with applicable Federal, State, local, and overseas environmental laws, regulations, E.O.s, and DoD and DON policy, and continuously strive for improvements in all areas of P2;

   b. Comply with written environmental directives of host shore facilities and cooperate with hosts' designated environmental management staff to ensure compliance with applicable Federal, State, and local requirements;

   c. Comply with the provisions in chapter 35 (Environmental Compliance Afloat).

1-5  Definitions. There are no definitions.
CHAPTER 2
FUNDING

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2-1  Scope. This chapter provides implementing policy guidance for identifying and programming resources for environmental shore compliance; afloat compliance; radiological controls; environmental restoration; information technology (IT) systems; other research, development, testing, and evaluation (RDT&E); environmental planning; and conservation, and cultural resources.

2-1.1.  Related Chapters. This chapter relates to all other chapters which require funding.

2-1.2.  References

(a) DoD Instruction 4715.08 of 01 November 2013

(b) UNDERSECNAV Memorandum of 28 Dec 2000, Compliance with Environmental Requirements in the Conduct of Naval Exercises or Training at Sea (At Sea Policy)

(c) DoD 4715.20-M, Defense Environmental Restoration Program Management, March 2012

(d) DoD 7000.14-R, Department of Defense Financial
Management Regulations (FMRs), Volume 2A, January 2011

(e) 16 U.S.C. §670

2-2 Legislation. There is no specific legislation for this chapter.

2-3 Requirements

a. Navy environmental readiness programs shall achieve, maintain, and monitor compliance with all applicable executive orders (E.O.) and Federal, State, interstate, regional, and local statutory and regulatory environmental protection requirements worldwide. This includes compliance with requirements in statutorily mandated or authorized documents such as permits, judicial decrees, or consent or compliance agreements that seek to preserve, protect, or enhance human health and the environment. In addition, Navy shore installations outside the United States shall achieve compliance with applicable final governing standards (FGS). Where FGS have not been issued, they shall achieve compliance with the Overseas Environmental Baseline Guidance Document (OEBGD) and other applicable requirements outlined in chapter 34 (Overseas Environmental Compliance Ashore).

b. OPNAV (N45) is responsible for initiating program objective memorandum (POM) guidance to environmental stakeholders. OPNAV (N45) POM guidance will define Navy's vision and the required process, timelines, and deliverables needed to develop future requirements.

2-3.1 Environmental Program Priorities

a. Environmental Priorities. Environmental priorities are to, at a minimum, comply with all legal requirements on a just-in-time basis. The Navy is also committed to complying with Department of Defense (DoD) policy and investing in future compliance to the extent that is affordable. Requirements shall be defined using environmental readiness levels (ERL) (refer to section 2.3.2 for definitions of ERLs).

b. Emergent Requirements. The cost of emergent environmental requirements that must be addressed immediately to meet a legal requirement or to address an issue that poses an immediate risk to human health must be funded by the appropriate budget submitting office (BSO) during the budget execution years.
Note that cleanup projects undertaken per reference (a) are considered emergent requirements.

2-3.2. Environmental Readiness Levels. ERLS, as defined below, are listed in order of funding priority, where ERL 4 is the absolute minimum requirement to achieve compliance and has the highest funding priority.

a. ERL 4. ERL 4 is for legal requirements derived from existing laws, regulations, E.O.s, FGS, or the OEBGD, as applicable; and applies to Navy activities, platforms, and operations.

b. ERL 3. ERL 3 is for requirements derived from DoD policy and DON policy, or proactive initiatives that could enable future compliance or result in a positive return on Navy investments. They could also support critical readiness activities by decreasing encumbrances of statutory compliance requirements. These efforts are not mandated by law or other Federal, State, or local requirements but would minimize current or future impacts (including costs) to the Navy mission.

c. ERL 2. ERL 2 is for requirements derived from pending Federal, State, or local legal requirements, laws, regulations, or E.O.s that could enable future compliance but result in less certain returns on investments and uncertain benefits to the Navy mission. These project efforts are not mandated by existing law or other Federal, State, or local requirements. Funding requirements should be based on best available scientific or commercial data; or on pending Federal, State, or local regulations under development (where publication is scheduled) using model State regulations or permit standards, if available.

d. ERL 1. ERL 1 is for investments in environmental leadership and general proactive environmental stewardship.

2-3.3. Environmental Readiness Program Funding Guidelines. Navy environmental staff should apply the following guidelines to determine applicability of environmental readiness program funding.

a. Shore Environmental Compliance

(1) OPNAV (N45) is the resource sponsor (RS) for compliance oversight associated with all applicable Federal, State, and local environmental laws and implementing regulations; and E.O.s for Navy shore installations in the United States. For
installations outside the United States, OPNAV (N45) is the RS for compliance oversight associated with the FGS or, where no FGS have been issued, the OEBGD and other applicable requirements as outlined in chapter 34 (Overseas Environmental Compliance Ashore). Refer to the discussion on the OPNAV (N45) Environmental Readiness Program Requirements Web (EPRWeb) Guidebook in section 2-3.6.c for funding requirements.

(2) Shore environmental compliance funding does not encompass:

(a) Construction of, capital improvements to, installation of, or operation and maintenance of real property, such as drinking water treatment plants, wastewater treatment plants, air pollution control equipment, process controls, and continuous monitoring equipment;

(b) Purchase, modification, alteration, or maintenance and repair of plant equipment to meet new or existing environmental standards; and

(c) Operation of municipal solid waste disposal and recycling programs, bird/animal aircraft strike hazard (BASH) programs, cultural resources programs, or historical preservation programs.

(3) Environmental aspects and permitting requirements applicable to environmental construction projects (e.g., new construction, repairs, improvement projects) shall be resourced through the project programming process. For example, any environmental aspect of a construction project that meets the applicable funding threshold for Military construction (MILCON) will be resourced through the MILCON programming process rather than the environmental program. Construction projects (whether they meet MILCON threshold or not) required by new and existing permitting requirements are also not considered valid environmental requirements (e.g., construction of stormwater retrofits, best management practices). National Environmental Policy Act (NEPA) requirements are considered planning and should be funded with operations and maintenance (O&M) dollars.

b. Fleet Environmental Compliance. OPNAV (N45) is the RS for actions associated with at sea environmental compliance which includes environmental planning and shipboard environmental compliance.
(1) Environmental planning includes homeporting and homebasing, and permits and mitigation efforts required to protect and conserve natural resources in the marine environment. This includes environmental documentation and associated records of decision; letters of authorization issues under the Marine Mammal Protection Act (MMPA); biological opinions issued under the Endangered Species Act (ESA) that analyze training, testing, and maintenance on Navy ranges in open ocean areas; and compliance monitoring per reference (b).

(2) Compliance with ship and dry dock includes compliance with various environmental media applicable to shipboard operations and the interface with shoreside operations.

(a) OPNAV (N45) is the RS for:

1. Procurement, storage, and readiness of the oil spill response equipment for the timely response to a Navy or national major oil spill per the Oil Pollution Act regulations; and

2. Life-cycle maintenance, in-service engineering agent support, and RDT&E for ship environmental systems and platforms.

(b) OPNAV (N45) is the assessment sponsor for United States Navy ships, submarines, floating dry docks and environmental issues. The appropriate ship or submarine RS (i.e., OPNAV, Strategic Mobility and Combat Logistics (OPNAV (N42)); OPNAV, Expeditionary Warfare Division (OPNAV (N95)); OPNAV, Surface Warfare Division (OPNAV (N96)); OPNAV, Submarine Warfare Division (OPNAV (N97)); or OPNAV, Air Warfare Division (OPNAV (N98))) are the respective RSs for new environmental systems and modernization of existing ship environmental systems (i.e., procurement, installation, and initial technical or logistics support).

c. Radiological Controls. OPNAV (N45) is the RS and the assessment sponsor for the Radiological Affairs Support Program (RASP) and the Radiation Detection, Indication, and Computation (RADIAC) Program.

d. Environmental Restoration. Environmental Restoration, Navy (ER,N) is a separate appropriation that funds active installations for both the Installation Restoration Program (IRP) and Munitions Response Programs (MRP). Other types of funding are not authorized as substitutes or supplements for
ER,N funds except where the work is within the scope of the MILCON or operations and maintenance, Navy-funded construction projects. Navy shall use the DoD or State memorandum of agreement (DSMOA) or the Navy cost reimbursement cooperative agreement (NCR CA) to provide funds to State regulatory agencies for oversight. ER,N only funds restoration activities on installations located within the United States and its territories. ER,N funds can be used for Resource Conservation and Recovery Act corrective action for past releases of hazardous waste at permitted facilities, or facilities seeking permits, if these are the same types of releases covered by the ER,N Program. For sites on an approved base closure list, base realignment and closure (BRAC) funds are used exclusively for response actions, which are not resourced by OPNAV (N45).

2-3.4. Appropriations. OPNAV (N45) resources its programs using three main appropriations. Operations and maintenance, Navy (O&M,N) appropriations are used to finance those things whose benefits are derived for a limited period of time and are not related to Military personnel (i.e., expenses rather than investments). For longer term investments, OPNAV (N45) uses other procurement, Navy (OPN) appropriations and RDT&E appropriations.

a. O&M,N appropriations fund expenses such as Navy civilian salaries; training and education; supplies and materials; travel; and recurring and non-recurring projects. The EPRWeb Guidebook (refer to section 2-3.6) provides guidance for use by Navy installations, regions, and headquarters staff in preparing environmental program requirements submissions for consideration during the POM process.

b. OPN appropriations fund those acquisition programs that have been approved for production (to include low-rate initial production (LRIP) or acquisition objective quantities) and all costs integral and necessary to deliver a useful end item intended for operational use or inventory upon delivery. OPN is Navy procurement funding and can be obligated for 3 years, per the Financial Management Regulations guidance, assuming it meets the other criteria for procurement dollars.

(1) Radiological Control. OPN appropriations are to be used for acquiring and deploying RADIAC equipment and RADIAC equipment upgrades with a cost of $250,000 or more.

(2) Afloat Environmental Equipment. OPN appropriations are used to purchase and install environmental equipment aboard
United States Navy ships. Types of equipment include ozone-depleting substance conversion kits for chlorofluorocarbon (CFC)-114 air conditioning systems, improved educator valves, oil pollution abatement system improvements, upgraded solid waste handling equipment, and improved sewage pump pressurized cartridge mechanical seals.

(3) Oil Spill Equipment. The Navy Oil Spill Response Program is a centralized procurement program that supports Navy shore installations. This equipment is utilized on a frequent (daily or weekly) basis. OPN funds are also used to procure oil spill response and containment equipment that is stored as Navy emergency ship salvage material and ready for immediate worldwide deployment in case of an oil spill. Equipment includes skimmers, platform and utility boats, and containment booms. The oil spill equipment enables the Navy to meet the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) which requires rapid and effective response to oil spills.

c. RDT&E appropriations accounts finance RDT&E efforts performed by contractors and government installations to develop equipment, material, or computer application software; and perform its development, test, and evaluation (DT&E) and initial operational test and evaluation (IOT&E). RDT&E also funds the operation of dedicated research and development (R&D) installation activities for the conduct of R&D programs. RDT&E funding may be used for any of the following purposes.

(1) Shore Environmental RDT&E. OPNAV (N45) is the resource and assessment sponsor of the shore environmental RDTE appropriation through the Navy’s Environmental Sustainability Development to Integration (NESDI) program. NESDI invests in innovative and cost-effective technologies, processes, materials, and knowledge that support fleet readiness and weapons system acquisition programs by minimizing operational risk, constraints, and costs while ensuring shore-based environmental stewardship and regulatory compliance. NESDI sponsors research in the following focus areas:

(a) Testing and Training Range Sustainment. Innovations that address environmental impacts and restrictions at Navy ranges to ensure that naval training ranges and munitions testing and manufacturing ranges are fully available and efficiently utilized;

(b) Ship-to-Shore Interface. Innovative techniques to manage ship HM and waste offload to shore facilities;
(c) **Weapon System Sustainment.** Solutions for the organizational- and intermediate-level fleet maintainer to minimize regulated emissions, discharges and HM usage during the repair and maintenance of ships, submarines, aircraft, and support equipment;

(d) **Air and Port Operations.** Knowledge and innovative processes and technologies that minimize infrastructure and operational costs, regulated emissions, while minimizing discharges and HM usage from ship (waterfront) and aviation operations; and

(e) **Regulatory and Base Operations.** Cost-effective methods for identifying, analyzing and managing environmental constraints related to current and projected regulatory impacts.

2) **Afloat Environmental R&D.** OPNAV (N45) is the resource and assessment sponsor for the afloat environmental R&D program. The afloat environmental R&D program demonstrates and assesses data and technology solutions to afloat environmental compliance issues on ships, submarines, and floating drydocks.

3) **Marine Resources R&D.** OPNAV (N45) is the resource and assessment sponsor for the Living Marine Resources (LMR) R&D Program. The LMR Program develops, demonstrates, and assesses data and technology solutions to protect biological marine resources by minimizing the environmental risks of Navy at sea training and testing activities while preserving core Navy readiness capabilities. LMR investments:

   (a) Provide science-based information to support Navy environmental effects assessments for at sea training and testing;

   (b) Improve knowledge of the ecology and population dynamics of marine species of concern;

   (c) Develop the scientific basis for the criteria and thresholds to measure the biological effects of Navy generated sound;

   (d) Improve understanding of underwater sound and sound field characterization that are unique to assessing the biological consequences of underwater sound (as opposed to tactical applications of underwater sound or propagation loss
modeling for Military communications or tactical applications); and

(e) Develop technologies and methods to mitigate and monitor environmental consequences to living marine resources resulting from naval activities on at sea training and testing ranges.

(4) Radiological Control RDT&E. RDT&E appropriations are to be used to develop, test, and evaluate RADIAC requirements, including designing prototypes and processes.

2-3.5. Additional Funding Guidelines. Navy environmental staff shall apply the following overarching guidelines when working with matters related to funding worldwide, including requirements derived from FGS, OEBGD, and other applicable sources per chapter 34 (Overseas Environmental Compliance Ashore).

a. Defense Working Capital Fund (WCF). The defense WCF allows the Federal government purchase and repair activities to account for costs and revenues on a revolving basis as if it were a commercial business. The cost of environmental, natural, and cultural resources compliance shall be part of each WCF installations' operating budget. WCF installations shall build any costs associated with environmental readiness program requirements into their operating budgets and rates.

b. Replacements, Retrofitting, or Modification of Existing Vehicles, Vessels, and Equipment. Replacements, retrofitting, or modification of existing vehicles, vessels, and equipment required for complying with both existing and new environmental requirements will be resourced through the respective vehicles, vessels, and equipment programming process rather than the environmental program.

c. Aircraft and Weapon Systems

(1) Aircraft. Commander, Naval Air Systems Command, with fleet input, submits budget requests for aircraft environmental systems to OPNAV (N98), usually as part of airframe modernization or engine upgrade programs.

(2) Weapons Systems. The appropriate hardware systems command submits budget requests for environmental compliance requirements of their weapon systems to the appropriate weapon system RS.
d. Cultural Resources Program. The Chief of Naval Operations, Shore Readiness Division, OPNAV (N46) is the RS for all elements of the Cultural Resources Program on land and water areas under direct control of the Navy, and real property assets and historic properties owned, leased, or otherwise controlled or managed by Navy. Program elements are discussed and expanded upon in chapter 13 (Cultural Resources Compliance and Management).

e. IT Systems. OPNAV (N45) can fund authorized IT systems and applications that support the environmental mission. IT and automated information systems that are not embedded in weapons systems for major end item procurements are budgeted according to the investment and expense criteria and the appropriation of fund's purpose per reference (d).

(1) O&M appropriations are to be used for expenses incurred in IT systems' continuing operations and current services. Modernization costs under $250,000 are considered such expenses, as are one-time projects such as developing planning documents and studies.

(2) OPN procurement appropriations are to be used for acquiring and deploying a complete IT system with a cost of $250,000 or more.

(3) RDT&E appropriations are to be used to develop, test, and evaluate requirements, including designing prototypes and processes, and conducting developmental testing or initial operational testing and evaluation prior to IT system acceptance. In general, all developmental activities involved in bringing a program to its objective system are to be budgeted in RDT&E.

(4) WCF IT systems developed and acquired through the WCF shall be reflected in the capital budget if the IT system is $100,000 or more. IT systems costing less than $100,000 are funded through the installation's operating budget.

f. Environmental Permit Applications, Studies, and Plans. Environmental permit applications, studies, and plans are valid environmental requirements unless exclusively required for Military operations or training, construction of new facilities, or maintenance or repair of existing facilities or equipment.

g. Fees and Taxes
(1) Under many statutes, Federal facilities are subject to reasonable fees related to the administration of environmental programs imposed by Federal, State, and local agencies. Service charges related to the discharge of effluent into bodies of water; discharge of air emissions into the atmosphere; monitoring of underground storage tanks; and storage, treatment, transportation, and disposal of hazardous waste are among the types of service charges that may be paid using environmental funding. Additional information on payment of reasonable service charges related to stormwater management is found in chapter 20 (Clean Water Ashore).

(2) Congress has generally not provided for the payment of taxes by Federal installations and activities. Fees and taxes, therefore, must be differentiated before activities begin making payments. Disbursing authorities shall consult with the command counsel or Navy regional environmental counsel (who should also coordinate with the DoD regional environmental coordinator) when an agency first presents a fee or service charge. Where appropriate or necessary, final determinations regarding the legality of new fees shall be formulated in consultation with Department of Justice at the headquarters level.

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

(a) The charge in question is imposed on all regulated entities without discriminating against Federal agencies;

(b) The charge fairly approximates the cost to the State or local authority in making the services available; or

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

(4) Negative answers to any of the above inquiries suggest the charge is a tax rather than a fee, thus obliging the Navy to determine whether to contest it. Commands should refer questions about these charges to command counsel or regional environmental counsel, and 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 to evaluate legal issues prior to payment. If a regulatory agency refuses to issue an environmental permit to a command because the command has not paid an assessment pending legal review, the
command shall immediately notify OPNAV (N45) via the chain of command and their REC.

h. Fines and Penalties. Notices of violation (NOVs) shall be processed per chapter 19 (Processing Notices of Violation under Environmental Laws and Regulations) prior to payment of any associated fines or penalties. In general, any payment of fines or penalties shall be from operating funds of the command responsible for the NOV.

i. Land Management Fees and Proceeds. Fees and proceeds collected from hunting, fishing, aquaculture, mariculture, and trapping shall be used only for funding or supplementing wildlife management programs, including funding of partnerships and cooperative or research agreements with appropriate agencies. User fees collected for the privilege of hunting, fishing, or trapping shall be collected, deposited, and used per references (d) and (e). Further collections shall be used exclusively for fish and wildlife conservation and management on the installation where collected.

2-3.6. Environmental Readiness Program Requirements Web. EPRWeb is the official online database used for collecting programming and budgeting requirements and defining environmental readiness requirements for all programs except ER,N.

   a. Accessing EPRWeb. Users can access EPRWeb through the United States Navy Environmental Portal (refer to appendix E (Web Sites) for Web site address).

   b. Entering Budget Information into EPRWeb. BSOs are responsible for ensuring all environmental requirements are entered into the financial module of EPRWeb and are available for review by OPNAV (N45) specified timeframes. The financial module of EPRWeb records data on project expenditures and provides immediate, Web-based access to requirements entered by the command, region, and BSO locations, as well as from OPNAV (N45).

   c. EPRWeb Guidebook. The EPRWeb Guidebook, available on EPRWeb, provides guidance on the funding requirements for each program. It is updated and maintained by OPNAV (N45) subject matter experts (SMEs). The EPRWeb Guidebook is a tool to assist staff to estimate environmental requirements for resource planning. Site-specific, detailed requirements and cost estimates should be developed and submitted where practical.
2-4 Responsibilities. To ensure all legal requirements are properly funded, it is critical that all proposed requirements continue via the chain of command until a decision is made.

2-4.1. OPNAV (N45) shall:

   a. Respond to all inquiries from BSOs for ownership of requirements where there is a discrepancy on who should fund the project;

   b. Maintain and update the list of funding and appropriate RSs listed within this chapter;

   c. Issue environmental POM planning guidance to BSOs identifying requirements to comply with Deputy Chief of Naval Operations for Fleet Readiness and Logistics (CNO (N4)) program development;

   d. Review all project submissions to render a final decision on approval for inclusion into the POM cycle;

   e. Conduct annual execution reviews;

   f. Ensure the programming objectives of the Planning, Programming, Budgeting, and Execution (PPBE) process are met; and

   g. Act as the assessment sponsor for afloat environmental areas and radiological control programs.

2-4.2. BSOs shall:

   a. Ensure subordinate commands prepare, submit, and promote EPRWeb budget submissions with sufficient detail to support informed decision-making throughout the chain of command;

   b. Review and validate all environmental readiness program requirements submitted by subordinate commands;

   c. Ensure all environmental readiness program requirements are validated and vetted through the appropriate CNO (N4) RS;

   d. Identify any potential opportunities for efficiencies within the environmental readiness program;
e. Ensure all environmental requirements are entered into EPRWeb and are available for review and approval by the chain of command by the dates specified by OPNAV (N45);

f. Conduct sufficient analysis to ensure sustained environmental compliance at the lowest total ownership cost;

g. WCF organizations shall build any costs associated with environmental readiness program (i.e., environmental compliance, natural resources, and cultural resources) requirements into their operating budgets and rates; and

h. Provide oversight to WCF activities to ensure environmental activities are executed as part of their operational functions.

2-5 Definitions

2-5.1. Assessment Sponsor. The assessment sponsor is an OPNAV subject matter expert (SME) who evaluates a program submitted by one or more echelon 2 commands, and assigns funding requirements across multiple RSs, based on the program needs and legal drivers. The assessment sponsor is typically one of the RSs and serves as the OPNAV advocate to the other OPNAV RSs during the POM and budgeting process. If serious disagreement between the assessment sponsor and one or more of the RSs exists, the assessment sponsor uses the cross sponsor issue board, CNO (N8) arbitration, or other means available to gain resolution between assessment sponsors and RSs.

2-5.2. Budget Submitting Office. The BSOs budget and allocate resources to fund environmental readiness requirements for their subordinate commands. The BSOs effectively manage and execute the appropriated funds to accomplish the budgeted workload.

2-5.3. Resource Sponsor. The RS is an OPNAV SME who is responsible for ensuring the programming objectives of the PPBE process are met. OPNAV (N45) is the primary organization responsible for identifying, validating, and allocating funds required to execute the capabilities needed to maintain environmental compliance, environmental restoration, natural resources, and radiological compliance.
CHAPTER 3
ENVIRONMENTAL READINESS TRAINING

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3-1 Scope. This chapter establishes Navy implementing policy guidance regarding environmental training, defines the organizational structure and responsibilities of the Navy Environmental Readiness Training Program (NERTP), identifies required training for specific billets, lists NERTP formal training courses, and assigns responsibilities for executing NERTP.

3-1.1. Related Chapters. This chapter is applicable to all other chapters in this manual with regards to courses or other vehicles to provide training for the identified requirements.

3-1.2. References

(a) Navy Environmental Readiness Training Program Navy Training System Plan, 14 Sep 2010
3-2 Legislation. Environmental readiness training is required by legislation and subsequent regulation. The Clean Air Act; Clean Water Act; Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; and Hazardous Materials Transportation Act are only a few of the laws with provisions that impact environmental readiness training. A summary of this legislation is included in appendix A (Laws and Regulations).

3-3 Requirements

a. Navy's environmental training requirement is to implement efficient and effective training that provides the right training to the right people at the right time as required in support of Navy's mission. Navy developed NERTP to support the ability of the U.S. naval forces to effectively operate worldwide in an environmentally responsible manner, both ashore and afloat. NERTP identifies Navy environmental training needs, authorizes courses, and provides resources to develop environmental training courses.

b. NERTP requirements are documented in the NERTP Navy Training System Plan (NTSP), reference (a). NTSP describes the roles and responsibilities in the development, execution, and management of NERTP and lists formal courses, electronic learning (eLearning), and other training vehicles authorized within NERTP. Between revisions of NTSP, the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), in consultation with the NERTP Steering Committee, may modify the program by authorizing new, modifying existing, or deactivating existing training.

3-3.1 Navy Environmental Readiness Training Program Steering Committee. The NERTP Steering Committee manages a process to identify unmet environmental training needs, validate the need, and recommend whether NERTP training should be developed. In addition, the committee shall define the environmental training requirements, recommend priorities for dedicated environmental training courses, assess the effectiveness and efficiency of the environmental training, and identify and recommend actions to resolve training issues. This committee is chaired by OPNAV (N45) and is comprised of representatives from budget submitting
offices (BSO), the Naval Civil Engineer Corps Officers School (CECOS), the Naval Safety and Environmental Training Center (NAVSAFENVTRACEN), and others as invited by the chair. At its discretion, the NERTP Steering Committee shall appoint working groups to address specific issues.

3-3.2. Unauthorized Training. It is Navy’s intent to prevent duplicative or redundant training efforts in order to best use Navy resources. To the greatest extent possible, Navy personnel are required to attend NERTP formal training courses listed in table 3-1. Training courses offered outside of NERTP should be evaluated closely by questioning the requirement and cost. The use of non-NERTP formal training courses is not allowed unless:

a. A specific course is unavailable through Navy sources (e.g., courses required to meet State certification requirements);

b. An Inter-Service Environmental Education Review Board (ISEERB) approved course for Navy personnel does not exist (refer to section 3-5.3 for ISEERB information);

c. An enforcement action makes training time-sensitive and a commercially available course equivalent to a NERTP course is available; or

d. NERTP formal training 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.

3-3.3. Environmental Awareness Training. All personnel (i.e., Military, civilian, active-duty, and reserve) shall receive initial environmental awareness training and periodic refresher training. The training shall be both command-specific and general and stress the roles and environmental responsibilities of the individual as well as the command. Officer and enlisted personnel shall receive environmental awareness training during initial accession. Civilian environmental awareness training shall be accomplished shortly after the initial hire at their duty station.

3-3.4. Specific Environmental Training. All personnel (i.e., Military, civilian, active-duty, and reserve) shall receive training as applicable to their specific job assignments and levels of responsibility. Refer to individual chapters of this manual for specific environmental training requirements. Course descriptions, target audiences, and schedules are available on
the CECOS Web site and NAVSAFENVTRACEN Web site (refer to appendix E (Web Sites) for Web site addresses).

3-3.5. Specialty Environmental Training

a. Surface Warfare Officers. Surface warfare officers shall receive environmental 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 NAVSAFENVTRACEN as part of an appropriate curriculum.

c. Naval Aviators. Naval aviators shall receive environmental compliance 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 Aircraft Strike Hazard (BASH) Awareness (A-4A-0028) online training.

d. Submarine Officers. Submarine officers shall receive environmental compliance training at the earliest opportunity as part of prospective commanding officer (CO) or prospective executive officer (XO), 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 through the Naval Justice School SJA course.

3-3.6. Billet-Specific Training. Listed below are select billets and personnel categories required to attend specific NERTP course(s). These requirements are not discussed in the individual chapters of this manual. Personnel shall attend the courses applicable to their specific job assignments and level of responsibility. Additional personnel beyond those identified below may require environmental training to ensure compliance and conformance with laws, regulations, E.O.s, and DoD and DON policies. As such, commands or supervisors shall identify those personnel and any environmental training required.

a. COs and XOs of Navy Installations

   (1) National Environmental Policy Act (NEPA) Navy Executive Overview (A-4A-0076);
(2) Air Installations Compatible Use Zones (AICUZ) Seminar (A-4A-0035) (air installations only);

(3) Environmental management system awareness (completion of the CECOS Environmental Management Systems for COs and XOs (CSFE-COXO-1) eLearning module will satisfy this requirement); and

(4) Incident response (refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response)).

b. Regional Environmental Coordinators

(1) Advanced Environmental Management (A-4A-0063);

(2) Basic Environmental Law (A-4A-0058);

(3) Advanced Environmental Law (A-4A-0068);

(4) Incident Command System 300 (ICS 300) (A-493-2300);

and


c. Civil Engineer Corps Officers

(1) Basic Environmental Law (A-4A-0058); and

(2) National Environmental Policy Act (NEPA) Application (A-4A-0077).

d. Public Works Officers. Civil engineer corps officers assigned as public works officers will receive the following training:

(1) Environmental Protection (A-4A-0036);

(2) Basic Environmental Law (A-4A-0058);

(3) National Environmental Policy Act (NEPA) Application (A-4A-0077); and

(4) Incident Command System 300 (ICS 300) (A-493-2300).

e. Installation Environmental Program Managers
(1) Basic Environmental Law (A-4A-0058); and

(2) Management of multiple environmental media (completion of CECOS Advanced Environmental Management (A-4A-0063) will satisfy this requirement).

f. Contracting Officers with Environmental Contracting Responsibilities

(1) Acquisitions Involving Environmental Sampling or Testing Services eLearning module;

(2) Green Procurement (Defense Acquisition University continuous learning course 046); and

(3) Buying Green: A Multifunctional Approach to Pollution Prevention (Defense Logistics Agency (DLA) course DCPS000R750).

g. Facility Planners

(1) Air Installations Compatible Use Zones (AICUZ) Seminar (A-4A-0035) (facility planners with air installation responsibility);

(2) Buying Green: A Multifunctional Approach to Pollution Prevention (DLA course DCPS000R750);

(3) National Environmental Policy Act (NEPA) Application (A-4A-0077); and

(4) Basic Environmental Law (A-4A-0058).

h. Public Works Facilities Engineering and Acquisition Division Personnel and Resident Officers in Charge of Construction

(1) Initial 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training (if working on a hazardous waste (HW) site);

(2) HAZWOPER for Uncontrolled Hazardous Waste Site Workers-Refresher (A-4A-0074) (if working on a HW site); and

(3) Buying Green: A Multifunctional Approach to Pollution Prevention (DLA course DCPS000R750).
i. Personnel with Co-Lateral Environmental Duties. Navy environmental program orientation training (completion of CECOS Environmental Protection (A-4A-0036) will satisfy this requirement).

3-3.7. Reserve Component Environmental Training. Commanders and COs of Naval Reservists will ensure environmental training appropriate for mobilization duties to the greatest extent possible is obtained for their reserve personnel.

3-3.8. Formal Environmental Training Courses. A formal environmental training course is a course issued a Navy course identification number. Table 3-1 lists the currently authorized NERTP courses (both formal Navy courses and non-Navy, ISEERB-approved courses). In addition to the courses listed in table 3-1, other Internet and computer-based training is available. Refer to the Web sites for course descriptions, target audience, and schedules. CECOS and NAVSAFENVTRACEN courses are offered tuition-free to all Navy Military and civilian personnel. Since non-standard courses do not promote implementation of standardized Navy environmental training, Navy personnel shall take the NERTP courses identified in table 3-1 unless justified by an exception listed in section 3-3.2.

Table 3-1. NERTP Formal Training Courses

<table>
<thead>
<tr>
<th>Training Course Title and Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CECOS Courses</strong></td>
</tr>
<tr>
<td>Specific course descriptions can be found on the CECOS Web site (refer to</td>
</tr>
<tr>
<td>appendix E (Web Sites) for Web site address).</td>
</tr>
<tr>
<td><strong>Advanced Environmental Law (A-4A-0068)</strong></td>
</tr>
<tr>
<td>Experienced environmental planners, managers, engineers, scientists,</td>
</tr>
<tr>
<td>attorneys, and specialists who require an in-depth understanding of law,</td>
</tr>
<tr>
<td>policy, and management within their area of environmental expertise.</td>
</tr>
<tr>
<td>**Advancing an Effective Environmental Management System (EMS)</td>
</tr>
<tr>
<td>(Currently offered in Webinar format)**</td>
</tr>
<tr>
<td>Personnel involved in the ongoing implementation of an installation EMS.</td>
</tr>
<tr>
<td>This course is not limited to environmental professionals; rather it is for</td>
</tr>
<tr>
<td>all individuals who are actively engaged in the EMS process.</td>
</tr>
<tr>
<td><strong>Advanced Environmental Management (A-4A-0063)</strong></td>
</tr>
<tr>
<td>Personnel responsible for managing environmental programs at shore</td>
</tr>
<tr>
<td>activities. Enrollment is limited to those occupying full time environmental</td>
</tr>
<tr>
<td>billets.</td>
</tr>
<tr>
<td><strong>Air Installations Compatible Use Zones (AICUZ) Seminar (A-4A-0035)</strong></td>
</tr>
<tr>
<td>Personnel involved in naval air station AICUZ programs. Eligible personnel</td>
</tr>
<tr>
<td>include COs, XOs, air operations officers, public works officers, public</td>
</tr>
<tr>
<td>affairs officers, designated AICUZ personnel, planners, natural resources</td>
</tr>
<tr>
<td>personnel, and safety personnel.</td>
</tr>
<tr>
<td><strong>Basic Environmental Law (A-4A-0058)</strong></td>
</tr>
<tr>
<td>Environmental planners, engineers, scientists, specialists, judge</td>
</tr>
<tr>
<td>Training Course Title and Target Audience</td>
</tr>
<tr>
<td>------------------------------------------</td>
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<tr>
<td>advocates, and attorneys who need a survey of environmental law.</td>
</tr>
<tr>
<td>Ecological Risk Assessment (A-4A-0081)</td>
</tr>
<tr>
<td>Environmental Restoration Program personnel who plan, scope, or review ecological risk assessments or use findings or conclusions from ecological risks assessments in decision-making. This includes remedial project managers (RPM), remedial technical managers (RTM), base realignment and closure (BRAC) environmental coordinators, and engineers-in-charge (EIC). The course curriculum is designed primarily for personnel who have at least 6 months of environmental restoration experience or have attended an introductory environmental restoration course.</td>
</tr>
<tr>
<td>Emergency Planning and Community Right-To-Know Act (EPCRA) and Toxic Release Inventory (TRI) Reporting (A-4A-0082)</td>
</tr>
<tr>
<td>Personnel who have EPCRA compliance tracking or TRI reporting responsibilities.</td>
</tr>
<tr>
<td>Environmental Background Analysis (A-4A-0092)</td>
</tr>
<tr>
<td>Environmental Restoration Program RPMs, BRAC environmental coordinators, and underground storage tank (UST) EICs.</td>
</tr>
<tr>
<td>Environmental Geographic Information Systems (GIS)/Geostatistics (A-4A-0084)</td>
</tr>
<tr>
<td>Environmental Restoration Program personnel who collect or oversee the collection and analysis of environmental samples from uncontrolled HW sites.</td>
</tr>
<tr>
<td>Environmental Negotiation Workshop (A-4A-0067)</td>
</tr>
<tr>
<td>Personnel responsible for communicating and negotiating with environmental regulators and their commands or with the public regarding environmental matters.</td>
</tr>
<tr>
<td>Environmental Protection (A-4A-0036)</td>
</tr>
<tr>
<td>Personnel who have primary or co-lateral environmental responsibilities as part of their job duties.</td>
</tr>
<tr>
<td>Environmental Quality Sampling (A-4A-0026)</td>
</tr>
<tr>
<td>Personnel who collect or oversee the collection of environmental samples.</td>
</tr>
<tr>
<td>Hazardous Waste Facility Operators (A-493-0076)</td>
</tr>
<tr>
<td>Personnel who work at permitted treatment, storage, and disposal facilities (TSDFs), less than 90-day HW accumulation facilities, or onboard HW trainers.</td>
</tr>
<tr>
<td>HAZWOPER for Uncontrolled Hazardous Waste Site Workers-Refresher (A-4A-0074)</td>
</tr>
<tr>
<td>Personnel assigned to work at, or oversee work at uncontrolled HW sites who have received initial 40-hour HAZWOPER training and require annual refresher training.</td>
</tr>
<tr>
<td>Health and Environmental Risk Communication Workshop (A-4A-0072)</td>
</tr>
<tr>
<td>Personnel responsible for communicating environmental risk management issues to the public, regulators, or media stakeholders including RPMs, BRAC environmental coordinators, base closure team members, installation environmental program managers (IEPM), technical experts, engineers, scientists, health and safety personnel, natural resource personnel, environmental planners, public affairs officers, COs and their staff, executive staff, and attorneys.</td>
</tr>
<tr>
<td>Human Health Risk Assessment (A-4A-0078)</td>
</tr>
<tr>
<td>Environmental Restoration Program personnel who plan, scope, or review human health risk assessments, or are responsible for managing risks associated with environmental contamination including RPMs, BRAC environmental coordinators, and UST EICs.</td>
</tr>
<tr>
<td>Integrated Environmental Management System and Compliance Auditing (A-4A-</td>
</tr>
</tbody>
</table>
### Training Course Title and Target Audience

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal or external EMS or environmental compliance audit team members,</strong></td>
<td><strong>Includes personnel</strong> from Navy shore installations, BSOs, regional environmental coordinators' offices, and Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) organizations.</td>
</tr>
<tr>
<td><strong>IEPMs, media managers, and EMS process owners.</strong></td>
<td><strong>Personnel from Navy shore installations, BSOs, regional environmental coordinators' offices, and Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) organizations.</strong></td>
</tr>
<tr>
<td><strong>Introduction to Hazardous Waste Generation and Handling (A-493-0080)</strong></td>
<td><strong>Personnel who generate, package, handle, store, transport, or manage HW in the performance of their duties.</strong></td>
</tr>
<tr>
<td><strong>Munitions Response Site Management (A-4A-0093)</strong></td>
<td><strong>Environmental Restoration Program personnel who plan, scope, or oversee response actions at sites containing munitions and explosives of concern. This includes RPMs, RTMs, BRAC environmental coordinators, and EICs. The course curriculum is designed for personnel who have at least 6 months of experience and have attended an introductory environmental restoration course.</strong></td>
</tr>
<tr>
<td><strong>National Environmental Policy Act (NEPA) Application (A-4A-0077)</strong></td>
<td><strong>Personnel who work with environmental planning issues in facilities and installations; range management; fleet and operational exercises; research, development, test, and evaluation (RDT&amp;E) programs; base closures; major weapon systems acquisition programs; or natural resources management.</strong></td>
</tr>
<tr>
<td><strong>National Environmental Policy Act (NEPA) Navy Executive Overview (A-4A-0076)</strong></td>
<td><strong>Senior personnel including flag officers; base commanders; program managers; and those in executive positions of authority and are responsible for and manage fleet training and operational exercises, major acquisitions programs, BRAC actions, construction projects and real estate actions, RDT&amp;E, or shore facility operations.</strong></td>
</tr>
<tr>
<td><strong>Natural Resources Compliance (A-4A-0087)</strong></td>
<td><strong>Primary duty natural resource managers and specialists; environmental lawyers; natural resources law enforcement personnel; environmental staff personnel; collateral duty personnel who are non-natural resources specialists and are responsible for natural resources management and compliance with Federal laws and Department of Defense (DoD) policy; and personnel having a direct or indirect impact on natural resources during the performance of their duties.</strong></td>
</tr>
<tr>
<td><strong>Navy Environmental Restoration Program (A-4A-0069)</strong></td>
<td><strong>Environmental Restoration Program RPMs, RTMs, BRAC environmental coordinators, and other Navy personnel responsible for managing Navy Environmental Restoration Program sites.</strong></td>
</tr>
<tr>
<td><strong>Optimizing Remedy Selection and the Site Closeout Process (A-4A-0089)</strong></td>
<td><strong>Environmental Restoration Program RPMs, RTMs, BRAC environmental coordinators, UST EICs, and other Navy personnel responsible for Navy Environmental Restoration Program sites.</strong></td>
</tr>
<tr>
<td><strong>Overseas Hazardous Waste Facility Operations (A-493-0093)</strong></td>
<td><strong>Personnel working at an overseas installation's HW accumulation facility.</strong></td>
</tr>
<tr>
<td><strong>Overseas Hazardous Waste Generator (A-493-0094)</strong></td>
<td><strong>Personnel who generate, handle, store, or dispose of HW overseas.</strong></td>
</tr>
<tr>
<td><strong>RCRA Hazardous Waste Review (A-493-0081)</strong></td>
<td><strong>Personnel who have completed Hazardous Waste Facility Operators (A-493-0076) or Introduction to Hazardous Waste Generation and Handling (A-493-0080) and require an annual update.</strong></td>
</tr>
<tr>
<td><strong>Uniform Federal Policy for Quality Assurance Project Plans (UFP QAPP) (A-4A-0095)</strong></td>
<td><strong>Personnel who have completed Hazardous Waste Facility Operators (A-493-0076) or Introduction to Hazardous Waste Generation and Handling (A-493-0080) and require an annual update.</strong></td>
</tr>
</tbody>
</table>
Personnel who develop, review, implement or use QAPPs, or personnel who have to communicate QAPPs, including RPMs, Navy on-scene coordinators (NOSCs), site assessment managers, RCRA facility managers, enforcement personnel, quality assurance personnel, and laboratory personnel.

Specific course descriptions can be found on the NAVSAFENVTRACEN Web site (refer to appendix E (Web Sites) for Web site address).

Senior enlisted and officer personnel assigned as afloat environmental protection coordinators or environmental compliance officers and afloat staff aboard ships and submarines.

Personnel who are, or may be designated as leaders or members, on the FRT or facility spill management team.

Personnel who are, or may be designated as leaders or members, on the FRT or facility spill management team.

Personnel ashore who may serve as activity emergency response personnel, as well as the following: fire or police department personnel; environmental engineers, specialists, and technicians; environmental managers and supervisors; occupational safety and health personnel; waste handlers and TSDF personnel; HM minimization center personnel; and warehousemen or laboratory personnel. Shipboard personnel will be granted quotas, space available, upon verification of membership on shipboard spill response team. All personnel must have at least 12 months from course date remaining in job assignment.

Personnel who have met the training requirements of HAZWOPER regulations delineated in paragraphs (p)(7)(l) and (g) of reference (b), and are required to receive refresher training to maintain competencies.

Personnel who work at or support an OPA 90 facility. Additionally, these personnel should be assigned to the NOSC oil and hazardous substance (OHS) contingency plan or facility response plan (FRP) spill management team or be designated to provide specific support, expertise, or equipment to the NOSC spill management team or facility spill management team. This may include upper management; spill response team leaders; public affairs personnel; safety and health personnel; natural resources personnel; environmental personnel; finance and contract personnel; logistics and support personnel; and security, force protection, and emergency management personnel.

Personnel who work at or support an OPA 90 facility. Additionally, these personnel should be assigned to the NOSC OHS contingency plan or FRP spill management team or be designated to provide specific support, expertise, or equipment to the NOSC spill management team or facility spill management team. This may include upper management; spill response team leaders; public affairs personnel; safety and health personnel; natural resources personnel; environmental personnel; finance and contract personnel; logistics and support personnel; and security, force protection, and emergency management personnel.
### Training Course Title and Target Audience

<table>
<thead>
<tr>
<th>Course Title and Course Identification Number</th>
<th>Target Audience</th>
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<tbody>
<tr>
<td>493-2501)</td>
<td>Personnel who work at or support an OPA 90 facility. Additionally, these personnel should be assigned to the NOSC OHS contingency plan or FRP spill management team or be designated to provide specific support, expertise, or equipment to the NOSC spill management team or facility spill management team. This may include upper management; spill response team leaders; public affairs personnel; safety and health personnel; natural resources personnel; environmental personnel; finance and contract personnel; logistics and support personnel; and security, force protection, and emergency management personnel.</td>
</tr>
</tbody>
</table>

#### Non-Navy Lead ISEERB Courses (No course identification number)

Air Force Institute of Technology (AFIT) and DLA course descriptions can be found on the AFIT Web site and DLA Web site (refer to appendix E (Web Sites) for Web site addresses).

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Target Audience</th>
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<tbody>
<tr>
<td>Air Quality Management (AFIT) (WENV 531)</td>
<td>Personnel who work in air compliance, whether at the regional or facility level.</td>
</tr>
<tr>
<td>Buying Green: A Multifunctional Approach to Pollution Prevention (DLA) (DCPS000R750)</td>
<td>Personnel in the planning and buying communities (i.e., credit card holders, purchasing supervisors, quality technicians, and planning officials). This includes employees responsible for purchasing or writing specifications to purchase items that can be made with recovered materials, hazardous or toxic materials, ozone-depleting substances, energy efficient components, or items that use alternative fuels.</td>
</tr>
<tr>
<td>Environmental Sampling Design and Data Quality Assurance (AFIT) (WENV 441)</td>
<td>Environmental Restoration Program personnel who collect or oversee the collection and analysis of environmental samples from uncontrolled HW sites. Others who are encouraged to take the course include quality assurance personnel, environmental scientists, environmental coordinators, NOSCs, site assessment managers, RCRA facility managers, QAPP preparers and reviewers, environmental project team members, and other personnel who plan, scope, review, implement, and assess site cleanup projects.</td>
</tr>
<tr>
<td>Water Quality Management (AFIT) (WENV 541)</td>
<td>Personnel who work in water compliance, whether at the regional or facility level.</td>
</tr>
<tr>
<td>AFIT Qualified Recycling Program Management course (WENV 160)</td>
<td>Installation qualified recycling PMs, installation pollution prevention PMs, IEPMs, and other recycling program personnel. Note: Cultural resources training requirements are addressed in chapter 13 (Cultural Resources Compliance and Management).</td>
</tr>
</tbody>
</table>

3-3.9. **Embedded Environmental Training.** In addition to NERTP, many Navy training courses have environmental content embedded into their curricula. Though the environmental content may constitute a small portion of these training courses, the accuracy and completeness of the environmental content must be maintained. It is Navy’s intent to continually update these courses to ensure the inclusion of current environmental laws, regulations, E.O.s, and DoD and DON policies. Curriculum control authorities (CCA) are responsible for course content and
shall ensure environmental content in non-environmental training courses are appropriate, accurate, and complete. When curricula are under development or revision, CCAs may request participation by a NERTP PM or their representative as a quality assurance check on the accuracy and completeness of the environmental content.

3-3.10. Environmental Compliance Assessment Training and Tracking System

a. Environmental Compliance Assessment Training and Tracking System (ECATTS) is a Web-based environmental training and assessment tool for Navy installations to use to provide environmental compliance awareness training to Military, civilian, and contractor personnel.

b. Federal, State, and local environmental laws, regulations, E.O.s, DoD environmental directives; DON specific environmental instructions; and base environmental policies are integrated into ECATTS. Installations may use ECATTS as an integral part of their EMS to meet training requirements specified in reference (c). Refer to chapter 17 (Environmental Management Systems) for more specific EMS training requirements.

c. ECATTS may not be available at all installations. For installations where ECATTS is not available, the local environmental office may provide guidance regarding meeting installation-specific environmental management and awareness training. Refer to appendix E (Web Sites) for ECATTS Web site address.

3-4 Responsibilities

3-4.1. OPNAV (N45) shall:

a. Provide overall program management for NERTP;

b. Act as the primary resource sponsor for NERTP training courses. As such, provide billets and funding for NERTP execution through the planning, budgeting, and execution process;

c. Chair the NERTP Steering Committee;

d. Maintain the list of dedicated environmental training courses and annually issue an updated list of NERTP courses and other training vehicles;
e. Update NERTP NTSP as required; and

f. Serve as the voting member representing Navy on inter-Service training efforts such as the ISEERB.

3-4.2. BSOs shall:

a. Provide representation on the NERTP Steering Committee;

b. Ensure funding is provided to their commands to accomplish necessary environmental training;

c. Ensure officer, enlisted personnel, and civilian environmental awareness training is accomplished during initial accession or employment; and

d. Provide subject matter experts (SME) to assist in training execution and course review.

3-4.3. Naval Education and Training Command (NETC) shall:

a. Develop and maintain training course curricula to ensure accuracy with regulatory, policy, and technical information;

b. Periodically accomplish review of approved courses to ensure curricula technical accuracy and completeness. The review shall include SMEs not affiliated with the school and ensure the course meets the needs of the target audience and accomplishes learning objectives;

c. Provide representation on the NERTP Steering Committee; and

d. Through the Center for Seabees and Facilities Engineering, and CECOS, accomplish the following:

(1) Execute approved environmental training courses;

(2) Provide programming and budgeting information to OPNAV (N45); and

(3) Provide representation on the NERTP Steering Committee.

3-4.4. NAVSAFENVTRACEN shall:
3-14

a. Execute approved environmental training courses;

b. Develop and maintain training course curricula to ensure accuracy with regulatory, policy, and technical information;

c. Periodically accomplish review of approved courses to ensure curricula technical accuracy and completeness. The review shall include SMEs not affiliated with the school and ensure the course meets the needs of the target audience and accomplishes learning objectives;

d. Provide programming and budgeting information to OPNAV (N45); and

e. Provide representation on the NERTP Steering Committee.

3-4.5. COs of Navy installations shall:

a. Ensure officers and enlisted personnel receive environmental awareness training during initial accession. Navy's EMS Program training would satisfy this requirement. Refer to chapter 17 (Environmental Management Systems) for more specific EMS training requirements;

b. Budget for environmental training as required; and

c. Ensure all personnel receive job specific environmental training so compliance with environmental laws, regulations, E.O.s, and DoD and DON policies is maintained.

3-5 Definitions

3-5.1. Curriculum Control Authority (CCA). The CCA is the activity that approves instructional methods and provides assistance to subordinate activities in the systematic development of curricula materials. CCA ensures training activities continuously review and update all courses for quality and standardization, and ensures they meet the needs of the students.

3-5.2. Electronic Learning. eLearning is a generic term which encompasses all forms of electronically supported learning. eLearning applications and processes include Web-based learning and stand-alone, computer-based learning using CD-ROMs.

3-5.3. Inter-Service Environmental Education Review Board (ISEERB). ISEERB is a standing board of the Inter-Service
Training Review Organization. The board's goal is to ensure environmental education and training in the Services is accomplished with as little redundancy as possible. An ISEERB-approved course is one suitable for use by more than one Service.

3-5.4. Inter-Service Training Review Organization. The Inter-Service Training Review Organization is an organization established by the joint chiefs with a goal to eliminate duplication and redundancy within the Services.
CHAPTER 4
ENVIRONMENTAL PERFORMANCE REPORTING

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4-1  Scope. Accurate and timely data are of the utmost
      importance as they are used to develop guidance and shape
      policy; determine upcoming regulatory impacts; and respond to
      Department of Defense (DoD) environmental management reviews
      (EMR), Congressional inquiries, and annual reports. This
      chapter provides policy guidance on environmental performance
      reporting for Navy shore installations and identifies
      requirements and responsibilities for United States Navy
      Environmental Portal data collection.

4-1.1. Related Chapters. Chapter 2 (Funding) addresses the
       Portal financial modules in Environmental Readiness Program
       Requirements Web (EPRWeb). Chapter 12 (Natural Resources
       Conservation) discusses the Natural and Cultural Resources Data
       Call Station used to track integrated natural resources
       management plan status and implementation measures for regulatory
       review. Environmental management system (EMS) reporting
       requirements are discussed in chapter 17 (Environmental
       Management Systems) and notice of violation (NOV) reporting
requirements are discussed in chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations). Reporting requirements pertaining to the Toxics Release Inventory are located in chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act). Chapter 41 (Natural Resource Damage) discusses the cleanup management review.

4-1.2. References

(a) ODUSD (I&E) Memorandum of 11 Oct 2013, Environment, Safety and Occupational Health (ESOH) Management Information for Fiscal Year 2013 (Revised Annually)

(b) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance

(c) Public Law 101-576, Chief Financial Officer Act of 1990

(d) Public Law 103-356, Government Management and Reform Act of 1994

(e) Public Law 104-208, Omnibus Consolidated Appropriations Act, 1997

(f) DoD Instruction 8910.01 of 6 March 2007

(g) 44 U.S.C. §35

(h) SECNAVINST 5000.36A, Department of the Navy Information Technology Applications and Data Management

(i) 10 U.S.C. §2222

4-1.3. Applicability. This chapter applies to all Navy commands, as required.

4-2 Legislation.
There is no specific legislation for this chapter.

4-3 Requirements

4-3.1. Reports to Congress and Department of Defense Environmental Management Reviews. Reports to Congress describe environmental accomplishments in DoD programs including conservation, compliance, pollution prevention, and restoration each fiscal year. The environment, safety, and occupational
health (ESOH) management information data call, reference (a), is issued by the Deputy Under Secretary of Defense (Installations and Environment) (DUSD(I&E)). The DUSD(I&E) data call may request additional data for DoD EMRs which are conducted periodically to ensure DoD is meeting its environmental goals and objectives. Following receipt of the DUSD(I&E) data call, the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45) develops and distributes its own data call memo which directs actions and responsibilities required of Navy components (e.g., echelon 2 commands). The OPNAV (N45) memo references particular data requests from the DUSD(I&E) data call and provides suspense dates (usually early fall). Requested data must be submitted per stated deadlines by all affected echelons.

4-3.2. Department of Defense Strategic Sustainability Performance Plan. The DoD Strategic Sustainability Performance Plan (SSPP), required by reference (b), is DoD's department-wide sustainability plan, which DoD is required to submit to the Office of Management and Budget (OMB) annually in early June. The plan contains qualitative and quantitative objectives, goals, and subgoals for meeting DoD's sustainability requirements. In addition, DoD requires an annual Navy component SSPP to describe Navy-specific SSPP implementation strategies. OPNAV (N45) will issue data calls to support the SSPP at the beginning of each calendar year for information not available in previously submitted data calls. Reporting responsibilities fall under multiple OPNAV resource sponsors (e.g., environmental, facilities, human resources). Requested data must be submitted per stated OPNAV (N45) deadlines by all affected echelons in order for DoD to meet the Federal deadline.

4-3.3. Environmental Liabilities Reporting. Environmental liabilities (EL) are required to be recognized, measured, and valued per references (c), (d), and (e) and to be reported on the DoD financial statement quarterly per the DoD Financial Management Regulation. ELs occur in three broad areas: real property, facilities and equipment, and weapon systems. Weapons systems include nuclear environmental disposal; chemical agents and munitions destruction; and other weapon systems disposal. The purpose of the reporting process is to provide an unqualified audit opinion for the EL line (Note 14) of the DoD-wide financial statement. Note 14 has three applicable categories: Active Installation Defense Environmental Restoration Program (DERP) EL, Base Realignment and Closure (BRAC) EL, and Non-DERP and Non-BRAC (Other Accrued Environmental Liability (OEL)).
a. **Active Installation DERP EL and BRAC EL**

(1) Active Installation DERP EL and BRAC EL reporting is executed by Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) for the Department of the Navy (DON). It includes the Installation Restoration Program (IRP) and the Munitions Response Program (MRP), including the identification, investigation, research and development, and cleanup of contamination from hazardous substances, pollutants, and contaminants; and the correction of other environmental damage, such as detection and disposal of unexploded ordnance, which creates an imminent and substantial endangerment to the public health or welfare or to the environment.

(2) Cost-to-complete (CTC) estimates are prepared for DERP liability reporting purposes and include, on a current cost basis, all anticipated costs required to affect the restoration of the site, as well as the costs of complying with applicable legal and regulatory requirements. DON also identifies and reports the subset of liabilities covered by un-liquidated obligations.

b. **Other Accrued Environmental Liabilities (OELs)**

(1) OELs are the future environmental costs associated with the closure or cleanup (i.e., remediation, decommissioning, decontamination, and disposal) of operating shore assets not under the purview of Active Installation DERP, BRAC, or environmental disposal for weapon systems. The Navy's OEL Program addresses ELs for a broad range of Navy and Marine Corps assets including facilities, structures, utilities, land, relocatables, and non-Military equipment.

(2) Annually, OEL is re-evaluated through the OEL sustainment process to address changes in asset inventories, regulations, and policies. Although the Navy's OEL Program was established to improve financial management, promote fiscal accountability, and produce reliable financial information for the DoD financial statement, information retained in support of the OEL Program is also a valuable resource to all other environmental programs. Commanders of shore installations shall ensure support for the OEL Program during execution of the OEL sustainment process by OEL teams.

(3) DON's OEL Program is executed by COMNAVFACENGCOM; Commander, Navy Installations Command (CNIC); Headquarters, Marine Corps, Land Use and Military Construction Branch (HQMC
4-3.4. Information Collection. Per reference (f), prior to collecting information, users (e.g., budget submitting offices (BSOs), other requesting entities) requiring the information shall ensure it is not duplicative of information already available. When information is not already available, users shall ensure other methods (e.g., statistical sampling) that will minimize the information collection burden cannot be used; and the information collection request is valid, accurate, and essential to the mission of the user's organization.

a. Information Collection Requirements. Information collection requirements shall be designed to meet only essential needs, be as infrequent and as feasible as possible, and have reasonable due dates. The number of copies to be prepared shall be kept to a minimum. One-time information collection requirements may not be imposed when the need for a recurring information collection requirement is indicated. When the information collection requirement has been approved and the information is collected, it shall be made visible, available, and usable to any potential authorized user. Information collection requirements that have not been properly approved shall not be honored.

b. Public Information. Information collected from the public, as defined in reference (g), by DoD components and other Federal agencies shall be minimized, accounted for, and controlled. Collection of information that contains personal information on individuals requires special handling as outlined in reference (f).

c. Geographic Information System (GIS). Where feasible, commands should strive to keep data, including GIS data, up-to-date and accurate. Activities should work together and with COMNAVFACENGCOM to locate and populate GISs with the most up-to-date GIS data available.

4-3.5. United States Navy Environmental Portal. The Portal is a means to improve and standardize the data collection process; manage environmental compliance data for the installations, regions, BSOs, and OPNAV (N45); and assist OPNAV (N45) in responding to Congressional requests, senior level briefings, government agency reporting requirements, and overall Navy environmental program management.
a. **Modules.** The Portal consists of data and metrics called environmental data and metrics web and financial modules called EPRWeb. The financial modules of EPRWeb are discussed in more detail in chapter 2 (Funding). Portal data and metrics are required to support development of reports to Congress and EMRs, as well as other environmental program requirements.

b. **Accessing the Portal.** Users can access the Portal to enter or obtain environmental data (refer to appendix E (Web Sites) for Web site address).

c. **Updating Information.** Navy installations and tenant commands are required to continually update the Portal data fields as changes occur. Examples include permit updates and NOVs (new and closed). BSOs are required to review the Portal to ensure accuracy of their information for these events per the schedule below:

1. NOV module – Consistently;
2. Water quality module – 1 November;
3. Air quality module – 31 January;
4. Hazardous waste module – 15 March;
5. Solid waste module – 1 November; and
6. EMS metrics – 1 November.

4-3.6. **Information Technology Systems and Applications, Registration, and Annual Reviews**

a. Per reference (h), all information technology (IT) applications must be registered in the DON Applications and Database Management System (DADMS) and must obtain either "approved" or "allowed with restrictions" designation by the applicable functional area managers prior to being connected to a DON network. System owners and producers shall register their systems and applications into DADMS (refer to appendix E (Web Sites) for Web site address).

b. Defense business systems, to include mission critical, mission essential, and mission support IT systems and national security systems, will be registered in the Department of Defense Information Technology Portfolio Repository (DITPR)-DON, the system module within DADMS. The data fields for all DITPR-
DON system entries must be reviewed and updated quarterly. Additionally, reference (i) requires all entities registered under the business mission area and the enterprise information environment mission area in DITPR-DON be reviewed at least once annually. Annual review applies to all business systems, regardless of investment tier, including systems for which there is no planned development or modernization spending. Complete annual review guidelines are available under the policy and guidance section of the DON Chief of Information Web site (refer to appendix E (Web Sites) for Web site address).

4-4 Responsibilities. For the Web-based data collection process to be effective, quality assurance and quality control are required at every level in the chain of command.

4-4.1. OPNAV (N45) shall:

a. Respond to Congressional requests;

b. Issue environmental management information data call memos to echelon 2 commands; request, collate, review, and conduct quality control of data and write-ups for reports to Congress, EMRs, and SSPP; review all Navy submissions for quality prior to submitting to the Office of the Secretary of Defense (OSD); and prepare the final report and presentation package for OSD, OMB, and Congress, as required; and

c. Periodically access the Portal and obtain information to support reports to Congress, senior level briefings, government agency reporting requirements, and Navy environmental program management.

4-4.2. BSOs shall:

a. Respond to all inquiries related to performance reporting;

b. Compile and review echelon 2 command comments and responses;

c. Consolidate and verify data prior to forwarding it to OPNAV (N45);

d. Coordinate with the field to ensure data is inputted into the Portal; and
e. Review the Portal data to ensure consistency and accuracy of information.

4-4.3. CNIC shall input OEL data into the Defense Departmental Reporting System - Data Collection Module.

4-4.4. COMNAVFACEENGCOM shall prepare OEL data and deliver OEL financial reports to CNIC.

4-4.5. NAVFAC EXWC shall manage the Portal modules.

4-4.6. COs of Navy installations shall:

a. Ensure completed data and metrics are compiled and submitted in a timely manner;

b. Ensure the Portal data fields are continually updated as changes (e.g., permit updates, NOVs status) occur;

c. Ensure update of the Portal data includes EPA's notification of significant non-compliance (SNC); and

d. Ensure support for the OEL Program during execution of the OEL sustainment process by OEL teams.

4-4.7. COs of tenant commands shall:

a. Ensure completed data and metrics are compiled and submitted in a timely manner in support of BSO and host command requirements;

b. Ensure the Portal data fields are continually updated as changes (e.g., permit updates, NOVs status) occur;

c. Ensure update of the Portal data includes EPA's notification of SNC; and

d. Ensure support for the OEL Program during execution of the OEL sustainment process by OEL teams.

4-5 Definitions. There are no definitions for this chapter.
5-1 Scope

This chapter discusses Navy wide (ashore and afloat) policies and procedures for environmental outreach and communications. Almost all aspects of the Navy's environmental and natural resources policies and programs covered within this manual are of potential interest by other government agencies, commercial and private sector organizations, the media, and the general public, particularly in cases where the Navy's activities have the potential to affect human health or the environment.

5-1.1 Related Chapters

a. Public affairs personnel and other Navy personnel who perform outreach and communication functions with environmental components as part of their job responsibilities should be familiar with the chapters of this manual and be prepared to communicate accurately about those topics in a manner consistent with Navy policy.

b. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) provides guidance on National Environmental Policy Act (NEPA) regulations.
regarding public involvement. Information regarding marine mammal incidents can be found in chapter 12 (Natural Resources Conservation) and chapter 35 (Environmental Compliance Afloat). Chapter 17 (Environmental Management Systems) provides the Navy's policy guidance for environmental management systems (EMS) at naval installations, including the role of internal and external communications.

5-1.2. References

(a) OPNAVINST 5726.8, Outreach: America's Navy

(b) OPNAVINST F3100.6J, OPNAV Special Incident Reporting (OPREP-3 Pinnacle, OPREP-3 Navy Blue, and OPREP-3 Navy Unit SITREP) Procedures

(c) SECNAVINST 5720.44CB, Public Affairs Policy and Regulations

(d) SECNAVINST 5730.5J, Mission, Function, and Responsibilities of the Office of Legislative Affairs and Procedures for Handling Legislative Affairs and Congressional Relations

(e) CNO ltr 5090 Ser N45P/8U158233 of 17 Jul 2008

5-2 Legislation. There is no legislation applicable to this chapter.

5-3 Requirements

5-3.1. Key Stakeholder Engagement. Per reference (a), educating the American public about the capability, importance, and value of today's Navy is essential. As resources allow, commands should proactively engage key stakeholders (including media, government agencies, non-government agencies, and Federally recognized Indian tribes) and the American public to increase awareness of Navy's national security mission requirements and energy and environmental stewardship activities.

a. Marine Mammal Incidents. Per reference (b), the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) shall be informed of all marine mammal incidents (e.g., strikes, strandings) worldwide. Fleets and regions, as well as commands conducting systems testing or maintenance at sea, shall be prepared to respond or have
appropriate subordinate command(s) respond effectively and according to guidance in the event a marine mammal incident occurs near (within 100 nautical miles of) a Navy vessel or within a Navy training range or transit lane. OPNAV (N45) shall coordinate with the Chief of Navy Information (CHINFO) and issue marine mammal incident public affairs guidance to the echelon 2 commands on an as needed basis. This guidance outlines Navy wide strategies and actions necessary to successfully manage communications in response to a marine mammal incident by compliance with reference (b).

b. Media Engagement. Many energy and environmental issues are of local, national, and international interest. Per reference (c), all energy and environmental information provided to national or international news media shall be coordinated with the chain of command and approved in advance by CHINFO and OPNAV (N45). Local media inquiries require less coordination. If a command learns that a news report will receive national or international attention, the command shall inform CHINFO and OPNAV (N45) via the chain of command. Controversial issues such as chemical releases, oil spills, radiological contamination, or other emerging events with potentially significant impacts to human health or the environment may require increased coordination and planning among CHINFO, OPNAV (N45), relevant echelon 2 commands, and the fleets to ensure an effective public affairs and communications response.

c. Congressional Inquiries and Requests. Responses to congressional inquiries on Navy energy or environmental programs and policy and requests to respond to the concerns of a constituent shall be coordinated with OPNAV (N45) and the Office of Legislative Affairs (OLA) (reference (d)).

d. Publicly Accessible Web Sites. Per reference (e), Navy public affairs personnel and others responsible for posting information on publicly accessible Navy Web sites should ensure the information posted is accurate and reflects Navy policy.

e. Stakeholder Involvement in Natural and Cultural Resources. Installation planning activities which may have an impact on certain natural resources such as endangered species or on historically and culturally significant resources may be required to conduct consultations with other Federal, State, or local agencies, and Federally recognized Indian tribes (refer to chapter 12 (Natural Resources Conservation) and chapter 13 (Cultural Resources Compliance and Management) for more information).
f. Public Involvement Under the NEPA. Public involvement is essential when pursuing certain environmental planning efforts under NEPA. NEPA mandates that Federal agencies provide documents in clear language and perform public outreach to involve the public in preparing and implementing their NEPA procedures. Refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) for guidance. In some cases, effective public involvement shall require support by public affairs personnel and OLA.

g. Public Involvement Under the Comprehensive Environmental Response, Compensation, and Liability Act. Public involvement, especially through restoration advisory board activities, is a cornerstone of the Navy's Environmental Restoration Program. Refer to chapter 42 (Environmental Restoration) for guidance on requirements for official notification, public comment periods, and public meetings throughout the process.

h. Public Involvement Under the Resource Conservation and Recovery Act (RCRA). The RCRA requires permits for hazardous waste treatment, storage, and disposal facilities. RCRA public involvement activities are associated with obtaining and renewing permits to operate facilities. RCRA also allows States to require certain corrective action or cleanup as a condition of a facility's permit. The Environmental Protection Agency (EPA) has developed a specific RCRA public participation manual which is available on their Web site (refer to appendix E (Web Sites) for Web site address). Also refer to chapter 27 (Hazardous Waste Management Ashore) for additional information.

i. Public Involvement Under the Safe Drinking Water Act (SDWA). The SDWA includes requirements for notification to customers on the quality of drinking water being provided and distributed which include both routine consumer confidence reports and reports of failure to comply with applicable SDWA standards. Additional information is available on EPA's Web site (refer to appendix E (Web Sites) for Web site address) and chapter 21 (Safe Drinking Water Act Compliance Ashore).

j. Public Involvement Under the Clean Air Act. Most Navy and Marine Corps installations discharging regulated air pollutants must obtain a permit from EPA or their State. The application process for new or modified permits usually involves public notice or public meetings. Additional information is available on EPA's Web site (refer to appendix E (Web Sites) for Web site address) and chapter 22 (Clean Air Ashore).
k. Public Involvement Under the Clean Water Act. Opportunities for public hearings must be provided before certain Clean Water Act permits can be issued, renewed, or modified. Additional information is available on EPA's Web site (refer to appendix E (Web Sites) for Web site address) and chapter 20 (Clean Water Ashore).

l. Environmental Management Systems. Chapter 17 (Environmental Management Systems) provides the Navy's policy guidance for EMSs at naval installations, including providing for internal and external communications.

5-3.2. Energy and Environmental Exhibits at Outreach Events. Per reference (a), OPNAV (N45) should support approximately five high visibility outreach events annually (e.g., conferences, air shows, fleet weeks, Earth Day events) with energy and environmental exhibits. Exhibits shall include relevant information materials and staff to communicate Navy's priority energy and environmental key messages. Commands hosting or participating in outreach events may contact OPNAV (N45) to request energy and environmental information such as fact sheets, posters, and brochures. Large-scale Navy outreach events are included in CHINFO's "Calendar for America." Additional information is included on the Navy Office of Community Outreach Web site (refer to appendix E (Web Sites) for Web site address).

5-3.3. Ship Embarks. Per reference (a), Commander, United States Fleet Forces Command (COMUSFLTFORCOM) and Commander, United States Pacific Fleet (COMUSPACFLT) are responsible for executing the "Leaders to Sea" embark program, to include at least four environmentally oriented embarks annually for Office of the Deputy Assistant Secretary of the Navy (Environment) (DASN(E)) and Deputy Chief of Naval Operations for Fleet Readiness and Logistics (CNO (N4)). OPNAV (N45) shall work with COMUSFLTFORCOM and COMUSPACFLT to prepare the crew of the aircraft carrier and other fleet assets in advance of energy and environmentally focused ship embarks. These embarks must be included in CHINFO's "Calendar for America."

5-3.4. Celebrations and Events. Event organizers shall consider energy conservation and environmental stewardship when planning ceremonies, homecoming celebrations, and outreach events. Event organizers should implement measures to conserve energy, reduce solid waste generation, promote adequate wastewater collection and treatment, and avoid generating
plastic waste (e.g., water bottles) to the extent feasible. "Greening Your Meetings and Conferences: A Guide for Federal Purchasers," found on EPA’s Web site, provides information on environmental aspects of event planning. In addition, because helium-filled balloons travel significant distances from point of release and can harm terrestrial and aquatic life, Navy commands shall not release helium-filled balloons during ceremonies, celebrations, or outreach events.

5-3.5. Navy Currents Magazine. Currents is the United States Navy's official energy and environmental magazine. Commands should consider submitting articles featuring Navy energy and environmental stewardship to Currents for consideration. Commands shall conduct a thorough security and policy review of all articles before submitting them to Currents. At a minimum, articles must be vetted through command public affairs officers who shall engage command legal or technical representatives, as appropriate, before submitting to Currents for consideration. Currents is also available online via the Navy's energy, environment, and climate change Web site (refer to appendix E (Web Sites) for Web site address) and via social media sites (e.g., Facebook, Twitter, Flickr) or in print (free of charge) through OPNAV (N45).

5-3.6. Training Requirements

a. Public affairs personnel and other Navy employees involved in regular communication with key stakeholders should receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. Personnel with environmental communication responsibilities should consider the following training:

(1) Environmental laws and regulations (completion of the Naval Civil Engineer Corps Officers School (CECOS) Basic Environmental Law (A-4A-0058) will cover this training);

(2) NEPA public participation requirements (completion of CECOS National Environmental Policy Act (NEPA) Application (A-4A-0077) will cover this training);

(3) A firm understanding of risk communication practices is essential for effectively communicating key messages and ensuring transparency for Navy environmental programs (completion of CECOS Health and Environmental Risk Communication Workshop (A-4A-0072) will cover this training); and
(4) Environmental restoration (completion of CECOS Navy Environmental Restoration Program (A-4A-0069) will cover this training).

b. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources to assist individuals and commands in effectively engaging key stakeholders and the public.

5-4 Responsibilities

5-4.1. COMUSFLTFORCOM and COMUSPACFLT shall:

a. Engage key stakeholders and the American public to increase awareness of Navy's national security mission requirements and energy and environmental stewardship activities;

b. Be prepared to respond or have appropriate subordinate command respond effectively and according to guidance provided by CHINFO and OPNAV (N45) in the event a marine mammal incident occurs near a Navy vessel or an area of frequent Navy usage;

c. As requested, support at least four environmentally oriented embarks annually for DASN(E) and CNO (N4); and

d. Consider energy conservation and environmental stewardship when planning ceremonies, homecoming celebrations, and outreach events.

5-4.2. Commander, Navy Installations Command (CNIC); system commands; region and installation commands; and tenant commands shall:

a. Engage key stakeholders and the American public to increase awareness of Navy's national security mission requirements and energy and environmental stewardship activities;

b. Consider energy conservation and environmental stewardship when planning ceremonies, homecoming celebrations, and outreach events; and

c. In the case of region commands, should be prepared to respond effectively and according to guidance provided by CHINFO and OPNAV (N45) in the event a marine mammal incident occurs within or near their area of responsibility AOR.
5-5 **Definitions.** There are no definitions for this chapter.
CHAPTER 6

CHIEF OF NAVAL OPERATIONS ENVIRONMENTAL AWARDS PROGRAM

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6-1 Scope. The Chief of Naval Operations (CNO) Environmental Awards Program rewards outstanding performance in promoting environmental stewardship. Awards are presented for accomplishments in natural resources conservation, cultural resources management, environmental quality, sustainability, environmental restoration, environmental excellence in weapon system acquisition, and environmental planning. Ships, installations, individuals, and teams may compete for various awards. By presenting awards, Navy recognizes organizations and people who have made significant contributions in those areas.

6-1.1. Related Chapters. Information regarding environmental outreach and communications may be found in chapter 5 (Outreach and Communications). Chapter 35 (Environmental Compliance Afloat) includes specific information related to the CNO Afloat Environmental Awards Program.

6-1.2. References

(a) SECDEF Secretary of Defense Environmental Awards Guidance of 26 Sep 2012 (Revised annually)

(b) OPNAVINST 5350.6C, Navy Community Service Program
6-2  Legislation. There is no legislative requirement applicable to this chapter.

6-3  Requirements

6-3.1. Award Categories Issued by Secretary of Defense (SECDEF). The CNO Environmental Awards Program is guided by the SECDEF Environmental Awards Program, criteria for which are provided in reference (a). As shown in table 6-1, nine SECDEF award categories are competed during each year, though the emphasis of these awards differ between odd and even fiscal years (FY).

Table 6-1. Award Categories Issued by SECDEF

<table>
<thead>
<tr>
<th>Even FYs</th>
<th>Odd FYs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Installation</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Natural Resources Conservation, Large</td>
<td>(1) Natural Resources Conservation, Small</td>
</tr>
<tr>
<td>(2) Cultural Resources Management</td>
<td>(2) Cultural Resources Management</td>
</tr>
<tr>
<td>(3) Environmental Quality, Industrial</td>
<td>(3) Environmental Quality, Non-industrial</td>
</tr>
<tr>
<td>(4) Environmental Quality, Overseas</td>
<td>(4) Sustainability, Industrial</td>
</tr>
<tr>
<td>(5) Sustainability, Non-industrial</td>
<td>(5) Environmental Restoration</td>
</tr>
<tr>
<td>(6) Environmental Restoration</td>
<td></td>
</tr>
<tr>
<td><strong>Individual/Team</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Cultural Resources Management</td>
<td>(1) Natural Resources Conservation</td>
</tr>
<tr>
<td>(2) Sustainability</td>
<td>(2) Environmental Quality</td>
</tr>
<tr>
<td>(3) Environmental Excellence in Weapon System Acquisition, Small Program</td>
<td>(3) Environmental Excellence in Weapon System Acquisition, Large Program</td>
</tr>
<tr>
<td></td>
<td>(4) Environmental Restoration</td>
</tr>
</tbody>
</table>

6-3.2. Award Categories Unique to Navy. Because of Navy's unique operating environment, the CNO Environmental Awards Program provides additional award categories not included in reference (a). These award categories are shown in table 6-2.

Table 6-2. Award Categories Unique to Navy

<table>
<thead>
<tr>
<th>Even FYs</th>
<th>Odd FYs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Team</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Environmental Planning</td>
<td></td>
</tr>
<tr>
<td><strong>Afloat</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Littoral/Amphibious Warfare</td>
<td>(1) Littoral/Amphibious Warfare</td>
</tr>
<tr>
<td>(2) Surface Combatant</td>
<td>(2) Surface Combatant</td>
</tr>
<tr>
<td>(3) Large Deck Combatant</td>
<td>(3) Large Deck Combatant</td>
</tr>
<tr>
<td>(4) Submarine</td>
<td>(4) Submarine</td>
</tr>
<tr>
<td>(5) Military Sealift Command</td>
<td>(5) Military Sealift Command</td>
</tr>
</tbody>
</table>

*For specific information related to the CNO Afloat Environmental Awards Program, refer to section 35-3.24.
a. Environmental Planning Team Award. The environmental planning team award category recognizes outstanding environmental planning for the Navy. Environmental planning benefits the Navy, the environment, and the public at large. This award is intended to raise awareness of those benefits at all levels within the Navy. The award is a team award because CNO recognizes an interdisciplinary approach is essential to successful environmental planning. The team includes all team members, from action proponents to contractors who have direct involvement in this project.

b. CNO Afloat Environmental Awards. The CNO afloat environmental award categories recognize environmental programs on naval vessels and are unique to CNO and Secretary of the Navy (SECNAV). For specific information related to the CNO Afloat Environmental Awards Program, refer to section 35-3.24.

6-3.3. Competition Guidance. Assuming SECDEF Environmental Awards Guidance has been issued by 30 August, the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45) will issue a call for nominations and competition guidance, including criteria and formatting requirements, to echelon 2 commands annually by 15 September. Note: Afloat award guidance will not be issued as it is contained in chapter 35 (Environmental Compliance Afloat).

6-3.4. Echelon 2 Command Nomination Submissions. Echelon 2 commands may submit up to five nominations for each of the individual and team award categories. There is no restriction on the number of installation nominations that will be accepted for the installation award categories. Refer to chapter 35 (Environmental Compliance Afloat) for information on nomination submissions for the afloat award categories. The achievement period for the awards competition is the previous 2 FYs, inclusive of the award year. Echelon 2 commands submit nominations electronically to OPNAV (N45) via a Web-based application which will be included in the annual call for nominations. Nomination packages must be posted by 23:59 eastern standard time on 10 January each year.

6-3.5. Judging of Nominations. OPNAV (N45) will choose up to three winners for each of the installation, individual, and team award categories, and one winner for each of the afloat award categories at the CNO level of competition. Beginning in FY 11, all CNO winners advance to the SECNAV level of competition. With the exception of the winners of the environmental planning
team and afloat award categories, which are unique to CNO and SECNAV, winners at the SECNAV level of competition advance to the SECDEF competition.

6-3.6. Other Awards Programs

a. Secretary of the Navy (SECNAV) Energy and Water Management Awards. Responsible use of energy is an important element of environmental stewardship. The SECNAV Energy and Water Management Awards honor men and women of the Navy and Marine Corps for exemplary achievement in energy and water efficiency, and use of renewable energy sources. Echelon 2 commands interested in competing under the SECNAV Energy and Water Management Awards should contact the Deputy Assistant Secretary of the Navy (Energy) (DASN(Energy)).

b. Naval Sea Systems Command Incentivized Energy Conservation Program Quarterly Awards. Increased fuel efficiency helps stretch fuel budget dollars as far as possible and also makes our ships more environmentally friendly. The Naval Sea Systems Command Incentivized Energy Conservation Program Quarterly Awards were established to reward ships with the most fuel efficient operations. For more information about these awards, refer to the Incentivized Shipboard Energy Conservation Web site (refer to appendix E (Web Sites) for Web site address).

c. Navy Community Service Program. Reference (b) establishes the Navy Community Service Program, which includes five flagships to recognize Navy volunteer service to strengthen youth and communities. The Environmental Stewardship Flagship Award encourages Navy and Marine Corps commands to join efforts with local communities to provide education on domestic and international environmental and energy initiatives and to encourage the preservation, protection, restoration, and enhancement of the environment. For more information about this program, refer to the Navy Community Service Program Web site (refer to appendix E (Web Sites) for Web site address).

6-4 Responsibilities

6-4.1. OPNAV (N45) shall:

a. Issue the calls for nominations and competition guidance (criteria and formatting requirements) to echelon 2 commands annually;
b. Identify subject matter experts to judge nomination packets provided by echelon 2 commands; and

c. Identify up to three winners for the installation, individual, and team award categories, and one winner for the afloat award categories at the CNO level of competition by 1 March of each year.

6-4.2. Echelon 2 commands shall submit nomination submissions electronically to OPNAV (N45) by 10 January each year. For individual and team category submissions, echelon 2 commands shall inform unsuccessful candidates of their status.

6-4.3. Regions, installations, commands, and other activities shall submit awards per procedures and timelines established by their echelon 2 commands.

6-5 Definitions. There are no definitions for this chapter.
CHAPTER 7

SAMPLING AND LABORATORY TESTING

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7-1 Scope. This chapter identifies requirements, policy, and
responsibilities for establishing environmental quality systems
for Navy activities and programs involving the collection,
management, and use of environmental data.

7-1.1. Related Chapters. This chapter is applicable to all
other chapters in this manual involving the collection or
dissemination of environmental data.

7-1.2. References

(a) DoDI 4715.15 CH-1 of 10 May 2011

(b) Deputy Secretary of Defense Memorandum of 10 Feb 2003,
    Ensuring Quality of Information Disseminated to the Public by the
    Department of Defense

(c) DoD Directive 4715.1E of 19 March 2005

(d) ANSI/ASQ E4-2004, Quality Systems for Environmental Data
and Technology Programs – Requirements with Guidance for Use
[[Copyrighted]]

(e) ISO/IEC 17025:2005, General Requirements for the Competence of Testing and Calibration Laboratories
[[Copyrighted]]

(f) DTIC ADA 395303, Uniform Federal Policy for Implementing Environmental Quality Systems Evaluating, Assessing, and Documenting Environmental Data Collection/Use and Technology Programs

(g) DTIC ADA 427785, Uniform Federal Policy for Quality Assurance Project Plans - Evaluating, Assessing, and Documenting Environmental Data Collection/Use and Technology Programs

(h) USD Memorandum of 4 Dec 2007, Acquisitions Involving Environmental Sampling or Testing Services

(i) DTIC ADA 396793, DoD Quality Systems Manual for Environmental Laboratories (Version 4.2)

(j) ISO/IEC 17011:2004, Conformity Assessment – General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies [[Copyrighted]]

(k) Office of Management and Budget, Circular A-76, 29 May 2003

7-1.3. **Applicability.** This chapter applies to activities and programs involving the collection, management, and use of environmental data supporting all applicable laws, E.O.s, and regulations at Navy operations, commands, and installations worldwide, including formerly used defense sites and government-owned, contractor-operated facilities. It does not apply to contractor-owned and contractor-operated facilities that are not on real property controlled by Department of Defense (DoD) nor does it apply to radiological data collected under the Naval Nuclear Propulsion Program.

7-2 **Legislation**

a. The following legislation contains provisions that pertain to the collection, management, and use of environmental data:

(1) Clean Air Act;
(2) Clean Water Act;

(3) Comprehensive Environmental Response, Compensation, and Liability Act;

(4) Data Quality Act;

(5) Occupational Health and Safety Act;

(6) Resource Conservation and Recovery Act;

(7) Safe Drinking Water Act; and

(8) Toxic Substances Control Act.

b. A summary of this legislation is included in appendix A (Laws and Regulations).

7-3 Requirements. Reference (a) defines and implements policy for establishing environmental quality systems for DoD activities involving the collection, management, and use of environmental data, per references (b) and (c). Reference (a) also establishes the DoD Environmental Laboratory Accreditation Program.

7-3.1. Conformance with National and International Standards. Navy commands shall implement environmental data quality systems for the collection and use of environmental data consistent with references (d) and (e). In all cases where environmental sampling and testing services are performed, periodic quality assurance surveillance must be performed by a Navy quality assurance manager (QAM), however named.

7-3.2. Uniform Standards for Sampling. Navy commands, including contractors and subcontractors, shall perform environmental sampling activities according to a documented quality system meeting the requirements of reference (d). 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 reference (b). Quality systems documentation shall include the following:

a. Documentation of the sampling organization's quality system (usually called a quality management plan) per reference (f);
b. Documentation of project specific sampling, testing, quality assurance, and quality control activities (usually called a quality assurance project plan) per reference (g);

c. Descriptions of all quality assurance surveillance activities to be conducted by Navy; and

d. Specific procedures that will be used by Navy to review and substantiate the quality of environmental information before it is disseminated to the public.

7-3.3. Uniform Standards for Laboratory Testing. As required by reference (h), environmental laboratories providing services to Navy must possess any required State or host nation certification and have an established and documented laboratory quality system that conforms to reference (e) as implemented by the latest version of reference (i). In addition:

a. Laboratories must demonstrate the ability to generate acceptable results from analysis of proficiency testing (PT) samples, subject to availability, using each applicable method in the specified matrix;

b. Upon request, laboratories must make available to Navy results of all PT samples analyzed by the laboratory during the period of performance;

c. Laboratories are subject to project specific reviews by authorized Navy representatives;

d. Laboratories providing environmental testing services in support of the Defense Environmental Restoration Program (DERP) (refer to chapter 42 (Environmental Restoration)) must be accredited for each applicable test method per reference (a); and

e. Laboratories providing environmental testing services to Navy for all programs other than DERP must be accredited for each applicable test method per reference (a) or by a nationally recognized laboratory accreditation body (e.g., National Environmental Laboratory Accreditation Program) compliant with reference (j). If the laboratory is not accredited per reference (a), it must declare conformance to reference (i) per reference (h).

7-3.4. Prohibited Practices. Organizations performing sampling and testing on behalf of Navy shall adhere to professional
standards of ethical conduct defined in quality systems documentation and must not engage in any prohibited practices defined in reference (h). Examples of prohibited practices include:

a. Fabrication, falsification, or misrepresentation of data;

b. Improper date or time recording;

c. Unwarranted manipulation of samples, software, or analytical conditions;

d. Misrepresenting or misreporting quality control samples;

e. Improper calibrations;

f. Concealing a known analytical or sample problem;

g. Concealing a known improper or unethical behavior or action; and

h. 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.

7-3.5. Contract Improvement. As required by reference (h), 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 Department of the Navy (DON). This requirement also applies to orders placed by non-DoD agencies (e.g., General Services Administration) on behalf of DON. Contracting officer's representatives shall consult technically qualified personnel when providing contract support services for solicitations and contracts involving environmental sampling or testing. DON shall document nonconformance with contract specifications, including quality systems specifications, and shall execute contract remedies, where appropriate.

7-3.6. Personnel Qualifications. As required by references (f), (g), and (i), personnel involved in sampling or testing shall have the appropriate education and experience to perform their assigned tasks.
a. Personnel performing the duties of the QAM shall have a bachelor's degree with at least 4 years of combined experience in the laboratory or as part of a consultant project management team. If not a degreed chemist, the QAM must have knowledge and experience in the sampling and analysis of environmental media and associated quality assurance.

b. Personnel performing the duties of the government chemist shall have at least 30 semester hours in chemistry, supplemented by course work in mathematics through differential and integral calculus, and at least 6 semester hours of physics. As applicable to the specific project, the government chemist should have knowledge of environmental analytical chemistry methodologies, general knowledge of the chemistry of remedial treatment technology and chemical fate transport, and experience in the sampling and analysis of toxic and hazardous chemicals in environmental matrices.

7-3.7. Training Requirements. Sampling and testing organizations shall document training and keep records current, per their quality systems documentation.

a. Personnel performing the duties of environmental program managers, who routinely request sampling and testing 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:

(1) Environmental laws, E.O.s, and regulations relevant to the specific environmental program for which sampling and testing are being conducted;

(2) Systematic planning process or development of data quality objectives (completion of the Uniform Federal Policy for Quality Assurance Project Plan training course (A-4A-0095) sponsored by the Naval Civil Engineer Corps Officers School (CECOS) will satisfy this requirement); and

(3) Training applicable to the specific area(s) of program management relative to sampling plan development (e.g., sampling and testing for National Pollutant Discharge Elimination System (NPDES) program compliance).

b. Documented training for sampling personnel must include, at a minimum (completion of Environmental Quality Sampling (A-4A-0026) sponsored by CECOS will satisfy these requirements):
(1) Basic sampling techniques (e.g., grab sampling, composite sampling, how to avoid contamination, use of preservatives);

(2) Specific sampling techniques as required (e.g., NPDES sampling, bacteriological sampling, potable water sampling);

(3) Completion of sampling documentation (e.g., sample container labels, field logs, chain-of-custody documentation);

(4) Health and safety training; and

(5) Ethics training.

c. Documented training for laboratory personnel must include, at a minimum:

(1) Demonstrations of analyst proficiency;

(2) Training in the laboratory quality system;

(3) Training in general laboratory operations;

(4) Specific training applicable to the tests to be performed;

(5) Health and safety training; and

(6) Ethics training.

d. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

7-4 Responsibilities

7-4.1. The Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) shall issue policy guidance, as appropriate, based on recommendations made by Navy Laboratory Quality and Accreditation Office (LQAO).

7-4.2. Budget submitting offices (BSO) shall:

a. Plan, program, and budget for the implementation of quality systems associated with environmental sampling and testing;
b. Ensure shore commands comply with the requirements of
this chapter;

c. Establish programs to monitor and achieve progress toward
the implementation of environmental quality systems; and

d. Include environmental data quality in periodic management
reviews.

7-4.3. Navy LQAO shall:

a. Provide overall guidance and advice to OPNAV (N45) for
environmental sampling operations and laboratory testing
improvement initiatives Navy wide;

b. Provide technical assistance and prepare appropriate
manuals or other forms of guidance for implementing proper
sampling and testing techniques at Navy activities;

c. Coordinate efforts across commands including continual
process improvement and cost efficiencies for Navy sampling and
laboratory testing services;

d. Coordinate BSO approval and implementation of Navy LQAO
recommendations; and

e. Approve any exceptions to the uniform standards for
laboratory testing contained in section 7-3.3.

7-4.4. Commanding officers of shore commands shall:

a. Implement environmental quality systems for activities
and operations involving the collection, management, and use of
environmental data;

b. Designate the Navy QAM;

c. Use environmental laboratories meeting the requirements
of section 7-3.3;

d. Conduct quality assurance surveillance;

e. Implement any necessary corrective action identified
during quality assurance surveillance activities and management
reviews; and

f. Ensure training programs meeting the requirements of this
chapter are established and maintained for sampling and testing personnel under their command.

7-5 **Definitions**

7-5.1. **Accreditation.** Per reference (j), accreditation is defined as third party attestation related to a laboratory conveying formal demonstration of its competence to carry out specific tests.

7-5.2. **Accreditation Body.** Per reference (j), the accreditation body is the authoritative body that performs accreditation.

7-5.3. **Data Quality Objectives.** Data quality objectives are qualitative and quantitative statements that clarify study objectives, define the appropriate type of data, and specify tolerable levels of potential decision errors that will be used as the basis for establishing the quality and quantity of data needed to support decisions.

7-5.4. **Environmental Data.** Per reference (d), environmental data are defined as any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology.

7-5.5. **Government Chemist.** The government chemist is that individual responsible for providing environmental chemistry expertise and developing contract and project-specific performance standards pertaining to environmental sampling and testing on behalf of the government.

7-5.6. **Proficiency Testing (PT).** PT is 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.

7-5.7. **Project Specific Reviews.** Project specific reviews are a process used by government or contractor project chemists to ensure DoD-Environmental Laboratory Accreditation Program accredited laboratories are capable of meeting project specific requirements.

7-5.8. **Quality Assurance.** Quality assurance involves an integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement
to ensure a product or service meets defined standards of quality with a stated level of confidence.

7-5.9. **Quality Assurance Manager (QAM).** The QAM is that individual responsible for reviewing and approving project-specific quality systems documentation and for monitoring compliance with contract and project-specific performance standards on behalf of the government. The QAM must be independent from units or commands performing sampling or testing and must have direct access to senior project management.

7-5.10. **Quality Assurance Surveillance.** Per reference (k), quality assurance surveillance is defined as the government's monitoring of a service provider's performance per the quality assurance surveillance plan and the performance requirements identified in the solicitation.

7-5.11. **Quality System.** Per reference (d), a quality system is defined as a structured and documented management system describing the policies, objectives, principles, organizational authority, responsibilities, accountability, and implementation plan of an organization for ensuring quality of its work processes, products, and services.

7-5.12. **Systematic Planning.** Systematic planning is a planning process based on the scientific method. It is a common-sense approach designed to ensure the level of detail in planning is commensurate with the importance and intended use of the data, as well as the available resources.
CHAPTER 10
ENIRONMENTAL PLANNING UNDER THE NATIONAL ENVIRONMENTAL POLICY
ACT AND EXECUTIVE ORDER 12114

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for Navy Actions ............................................ 10-78
10-1 Scope. This chapter implements Navy policy for conducting environmental planning in compliance with the National Environmental Policy Act of 1969 (NEPA); Executive Order (E.O.) 12114, Environmental Effects Abroad of Major Federal Actions; and references (a) through (y).

10-1.1. Related Chapters. Due to the interdisciplinary nature of environmental planning, personnel should also refer to other chapters in this manual, specifically chapter 2 (Funding) for funding policy guidance and requirements, chapter 11 (Environmental Readiness in the Acquisition Process) for defense systems acquisition environmental policy guidance, chapter 12 (Natural Resources Conservation) for management of natural resources and guidance on preparing NEPA documentation for integrated natural resources management plans (INRMP), chapter 13 (Cultural Resources Compliance and Management) for cultural resources, chapter 14 (Coastal Zone Management) for compliance with the federal consistency provisions of the Coastal Zone Management Act (CZMA), and chapter 34 (Overseas Environmental Compliance Ashore) for overseas environmental compliance ashore.

10-1.2. References

(a) 40 CFR 1500-1508

(b) SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and Joint Capabilities Integration and Development System

(c) UNDERSECNAV Memorandum of 28 Dec 2000, Compliance with Environmental Requirements in the Conduct of Naval Exercises or Training At Sea (At Sea Policy)

(d) 54 FR 777

(e) E.O. 12114, Environmental Effects Abroad of Major Federal Actions

(f) DoD Directive 6050.7 of 31 March 1979

(g) United Nations, Convention on the Law of the Sea, 10 December 1982


(j) SECNAVINST 5090.6A, Environmental Planning for Department of the Navy Actions

(k) SECNAV Memorandum of 6 May 2009, Supplemental Guidance to SECNAVINST 5090.6A for Consultations and Regulatory Coordination

(l) OPNAV ltr 5090 Ser N45B1/7U158202 of 17 Jul 2007

(m) E.O. 13526, Classified National Security Information

(n) SECNAV Memorandum of 6 Jan 2005, Reporting Cooperating Agencies in Implementing the National Environmental Policy Act

(o) E.O. 12344, Naval Nuclear Propulsion Program

(p) SECNAV Memorandum of 3 May 2007, Policy Guidance for Environmental Planning Mitigation Composition, Monitoring and Tracking

(q) SECNAV Memorandum of 9 May 2007, Policy Guidance for Developing and Implementing an Environmental Assessment Process Tracking and Management System

(r) DoD Instruction 5000.02 of 8 December 2008

(s) 42 U.S.C. §7506 et seq.

(t) E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations

(u) 76 FR 2681

(v) 50 U.S.C. §1543 et seq.

(w) 42 U.S.C. §2011 et seq.

(x) 5 U.S.C. §552 et seq.

(y) SECNAVINST 11011.47B, Acquisition, Management, and Disposal of Real Property and Real Property Interests by the Department of the Navy
10-1.3. **Applicability.** This chapter applies to all Navy environmental planning actions including those actions that fall within the realm of weapons systems acquisition (reference (b)), training and exercises at sea (reference (c)), training and operations on land, science and technology related programs, and shore installation management. In general, the environmental planning requirements of NEPA and E.O. 12114 apply to all major federal actions authorized, funded, or carried out by Navy that may affect or harm the environment.

   a. **NEPA Application.** As a matter of Navy policy, NEPA applies to Navy actions that affect the human environment in the United States, including the 12 nautical mile (NM) U.S. territorial sea. The Navy’s policy is based on reference (d) that extends the exercise of the U.S. sovereignty and jurisdiction under international law to 12 NM. However, reference (d) expressly provides that it does not extend or otherwise alter existing federal law or any associated jurisdiction, rights, legal interests, or obligations. Per judicial decision, NEPA also applies to actions that affect Antarctica.

   b. **E.O. 12114 Application**

      (1) Reference (e) applies to Navy actions occurring outside the United States and its territories and possessions. Reference (f) provides detailed guidance on the application of E.O. 12114.

      (2) Figure 10-1 illustrates the geographic scope of NEPA and E.O. 12114. Table 10-1 indicates the geographic applicability of several key environmental requirements, which are often interrelated with analyses conducted under NEPA and E.O. 12114. Table 10-2 provides guidance regarding geographic scope, applicable references, and document selection for environmental planning under NEPA and E.O. 12114.

10-2 **Legislation**

   a. The following legislation contains provisions that pertain to environmental planning, protection, management, and conservation:

      (1) CZMA;

      (2) Endangered Species Act (ESA);
(3) Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA);

(4) Marine Mammal Protection Act (MMPA);

(5) NEPA; and


b. A summary of this legislation is included in appendix A (Laws and Regulations).
Figure 10-1. Geographic Applicability

Notes:
1. Exclusive economic zones (EEZs) as measured from the baseline per reference (g).
2. See reference (h) for claimed EEZ boundaries of foreign nations.
3. For Puerto Rico, Texas, and the Gulf Coast of Florida, waters subject to commonwealth/state jurisdiction extend to 3 marine leagues (approximately 9 NM).
4. NEPA applies in the Antarctica land mass, not E.O. 12114.

NOT TO SCALE
<table>
<thead>
<tr>
<th>Statute/E.O.</th>
<th>Within 3 NM of U.S.</th>
<th>Within U.S. Territorial Sea$^2$ (12 NM off coast)</th>
<th>Within U.S. EEZ (12-200 NM off coast)</th>
<th>Global Commons (High Seas)</th>
<th>FEEZ (200-12 NM off coast)$^3$</th>
<th>Within Foreign Nation Territorial Sea (12-0 NM)</th>
<th>Landward of Foreign Nation$^4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPA$^1$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>E.O. 12114</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>ESA$^1$</td>
<td>X</td>
<td>X</td>
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<td>MMPA$^1$</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>CZMA$^2$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MSFCMA (Essential Fish Habitat)</td>
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<td></td>
</tr>
<tr>
<td>Act to Prevent Pollution from Ships</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ocean Dumping Act</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Marine Protection, Research, and Sanctuaries Act (MPRSA)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>E.O. 13089 (Coral Reefs)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Notes:
1. The environmental planning provisions of NEPA apply within the 50 states, territories, and possessions of the United States. As a matter of policy per reference (c), Navy applies NEPA to those Navy actions that affect the human environment within the 12 NM U.S. territorial sea (0-12 NM) (reference (d)). Most environmental statutes apply seaward to the pre-1988 limit of the U.S. territorial sea (0-3 NM). MMPA and ESA represent two of the most common statutes that apply to Navy activities outside the territorial sea (0-12 NM), but are not the only statutes applicable to Navy activities outside the territorial sea.
2. Generally, state seaward boundaries extend to 3 NM, with the exception of Texas, the Gulf Coast of Florida, and the Commonwealth of Puerto Rico, where their seaward boundaries are at 3 marine leagues, or approximately 9 NM.
3. Claimed EEZs of foreign nations are as set forth in reference (h).
4. For actions ashore, the requirements of chapter 34 (Overseas Environmental Compliance Ashore) and applicable final governing standards (FGS) for the affected host nation(s) apply. If FGS have not been issued for the affected host foreign nation(s), Navy shore activities will comply with the applicable status-of-forces agreement (SOFA) and reference (i).
5. Federal agency activities within or outside the state's coastal zone that affect any land or water use or natural resource of the coastal zone shall be carried out in a manner that is consistent to the maximum extent practicable with the enforceable policies of the approved state coastal management program.
Table 10-2. Guidance for Choosing the Environmental Planning Process for Complying with NEPA and E.O. 12114

<table>
<thead>
<tr>
<th>Locations of Effects</th>
<th>Environmental Planning Process</th>
<th>Applicable Instruction</th>
<th>Environmental Planning Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within U.S. territory and 3 NM of U.S. coast (state waters)</td>
<td>NEPA</td>
<td>• SECNAVINST 5090.6A, reference (j)</td>
<td>• Record of categorical exclusion (CATEX)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.12 through 10-3.17</td>
<td>• Environmental assessment (EA) and finding of no significant impact (FONSI)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Environmental impact statement (EIS) and record of decision (ROD)</td>
</tr>
<tr>
<td>Within U.S. territorial sea (0-12 NM)</td>
<td>NEPA</td>
<td>• SECNAVINST 5090.6A, reference (j)</td>
<td>• Record of CATEX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.12 through 10-3.17</td>
<td>• EA and FONSI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• EIS and ROD</td>
</tr>
<tr>
<td>Within U.S. territorial sea and U.S. EEZ (0-200 NM)</td>
<td>NEPA or E.O. 12114 or NEPA and E.O. 12114</td>
<td>• SECNAVINST 5090.6A, reference (j)</td>
<td>• Record of CATEX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DoD Directive 6050.7, reference (f)</td>
<td>• EA and FONSI, overseas environmental assessment (OEA) and finding of no significant harm (FONSH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.12 through 10-3.12</td>
<td>• EIS and ROD, overseas environmental impact statement (OEIS) and environmental decision document</td>
</tr>
<tr>
<td>Within U.S. EEZ (12-200 NM of United States)</td>
<td>E.O. 12114</td>
<td>• DoD Directive 6050.7, reference (f)</td>
<td>• OEA and FONSH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.18 through 10-3.27</td>
<td>• OEIS and environmental decision document</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Negative decision</td>
</tr>
<tr>
<td>Within the global commons (high seas) or 200 NM from any foreign coastline</td>
<td>E.O. 12114</td>
<td>• DoD Directive 6050.7, reference (f)</td>
<td>• OEA and FONSH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.18 through 10-3.27</td>
<td>• OEIS and environmental decision document</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Negative decision</td>
</tr>
<tr>
<td>Within a FEEZ (200-12 NM)</td>
<td>E.O. 12114</td>
<td>• DoD Directive 6050.7, reference (f)</td>
<td>• Environmental review (ER)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OPNAV M-5090.1, sections 10-3.18</td>
<td>• Environmental study (ES)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Negative decision</td>
</tr>
</tbody>
</table>
### Locations of Effects | Environmental Planning Process | Applicable Instruction | Environmental Planning Document
--- | --- | --- | ---
Within territorial sea of a foreign nation or landward of the coastline of a foreign nation (12-0 NM) | E.O. 12114 | • As required by SOFA or other international agreements or treaties or FGS • DoD Directive 6050.7, reference (f) • OPNAV M-5090.1, sections 10-3.18 through 10-3.27 and chapter 34 (Overseas Environmental Compliance Ashore) | • As required by SOFA or other international agreements or treaties or FGS • ES • ER • Negative decision

**Note:**

1. A memorandum for the record (MFR) is prepared for actions relying on previously approved Navy NEPA and E.O. 12114 environmental planning documentation and regulatory consultations and coordination (refer to section 10-3.4.1.2).

2. The following hybrid documents are acceptable: EA and OEA; EIS and OEIS. The following hybrids are unacceptable: OEA and ER or ES, OEIS and ER or ES, OEA and NEPA Record of CATEX.

### 10-3 Requirements

#### 10-3.1. General Guidance Applicable to Environmental Planning Conducted Under National Environmental Policy Act (NEPA) and Executive Order (E.O.) 12114

Sections 10-3.1 through 10-3.12 discuss the elements of environmental planning common to both NEPA and E.O. 12114 compliance. Sections 10-3.12 through 10-3.17 address the NEPA process and sections 10-3.18 through 10-3.27 address the E.O. 12114 process.

**a. Environmental Planning Process.** Navy environmental planning is the process of identifying and assessing the potential environmental effects of a proposed action to allow informed decision-making. In addition, preparation of an environmental planning document is often used as a vehicle to facilitate and demonstrate compliance with a number of other environmental requirements, including but not limited to the Clean Air Act (CAA); Clean Water Act (CWA); CZMA; National Historic Preservation Act (NHPA); MSFCMA; Fish and Wildlife Coordination Act; MPRSA; Migratory Bird Treaty Act (MBTA); Pollution Prevention Act; MMPA; ESA; E.O. 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations); E.O. 13045 (Protection of Children from
Environmental Health Risks and Safety Risks); and E.O. 13089 (Coral Reef Protection).

b. General Requirements. Navy is able to achieve its core mission at home, at sea, and abroad more efficiently when environmental planning is properly integrated and sequenced into Navy decision-making for those major Navy actions that may have significant environmental impacts. To effectively implement the NEPA and E.O. 12114 processes and prepare quality and consistent environmental planning documents, advanced planning and early coordination is required. To this end, Navy shall:

(1) Conduct environmental planning and decision-making using a systematic, interdisciplinary approach that integrates the natural and social sciences where there may be an impact on the human environment under NEPA and the physical environment under E.O. 12114;

(2) Consider and evaluate a reasonable range of alternatives to proposed actions that rigorously explores and sharply defines the issues, provides full disclosure of the potential environmental consequences, and provides a clear basis for choice among options by the decision-maker and the public;

(3) Strive to achieve a balance between resource use and Navy's mission and avoid environmental degradation, risk to health and safety, or other consequences that are undesirable and unintended; and

(4) Provide the opportunity for public involvement in the environmental planning process, where applicable.

10-3.2. Limitations on Actions. Until environmental planning has been completed per the provisions set forth in this chapter, no proposed Navy action may be undertaken that may have an adverse environmental impact in the area where NEPA applies, or significantly harms the environment in the area where E.O. 12114 applies, or that results in an irreversible or irretrievable commitment of resources that may prejudice the final selection of any reasonable alternatives.

10-3.3. NEPA and E.O. 12114 Signature Authority

a. Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN(RD&A)) and Assistant Secretary of the Navy for Energy, Installations, and Environment (ASN(EI&E)) have Signature Authority Under NEPA and E.O. 12114
(1) ASN(RD&A) is the signature authority for acquisition and science and technology related EISs under NEPA and OEISs under E.O. 12114 per reference (b).

(2) ASN(EI&E) is the signature authority for RODs under NEPA and other decision documents for OEISs and ESs under E.O. 12114 (Note: For the purposes of this manual, homebasing and homeporting actions are not considered to be acquisition actions).

(3) In addition, ASN(EI&E) has delegated FONSI and FONSH signature authority to the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) as identified in reference (j) with authority to subdelegate.

b. Sub-Delegation of FONSI and FONSH Signature Authority for Non-Weapons System Acquisition NEPA and E.O. 12114 Environmental Planning Documents by OPNAV (N45)

(1) Delegation Eligibility. OPNAV (N45) delegates FONSI and FONSH signature authority to eligible commands for non-weapons systems acquisition program environmental planning documents, in appropriate circumstances. Commands may request delegation by letter to OPNAV (N45), demonstrating the following requirements have been (and will continue to be) met:

(a) Qualified and dedicated environmental staff will be maintained at the command level;

(b) Dedicated legal advisor with environmental law expertise will be maintained at the command level; and

(c) Identification by the commander of one of the following as FONSI or FONSH signer for non-weapons systems acquisition program environmental planning documents: a designated flag officer; a designated officer in the grade of O-6 whose nomination for promotion to flag officer rank has been confirmed by the Senate and who is serving in a flag officer billet and in command of a Naval service unit or activity; or a Vice Commander at a Systems Command (SYSCOM) or a designated officer serving in the grade of O-6 who is serving as a Regional Commander in a billet designated for an O-6. Such designations may include the immediate temporary successor in command of such an officer, or his or her designated Deputy.
(2) **Delegations in Place.** As of the date of this manual, one individual meeting the eligibility criteria identified in section 10-3.3.b(1)(c), has been delegated FONSI and FONSH signature authority for non-weapons systems acquisition program environmental planning documents for:

(a) Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM);

(b) Commander, U.S. Pacific Fleet (COMPACFLT);

(c) Commander, Navy Installations Command (CNIC) including eligible CNIC region commanders;

(d) Commander, Naval Sea Systems Command (COMNAVSEASYSCOM); and

(e) Commander, Naval Air Systems Command (COMNAVAIRSYSCOM).

(3) **Further Delegation of FONSI and FONSH Signature Authority.** Commands that have been delegated FONSI and FONSH authority may request to further delegate signature authority by letter to OPNAV (N45).

(4) **Requirements for Maintaining Delegated FONSI and FONSH Signature Authority for Non-Weapons Systems Acquisition Environmental Planning Documents.** To retain delegated FONSI and FONSH signature authority for non-weapons systems acquisition program environmental planning documents, each designated command must comply with the following conditions and authorities which are listed in this manual and other Navy policy and memoranda:

(a) Maintain qualified and dedicated legal and environmental staff within designated command headquarters;

(b) Ensure OPNAV (N45) is notified in writing BEFORE the start of an EA or OEA (refer to sections 10-3.15.c and 10-3.25.b) (i.e., after conducting appropriate pre-planning but before beginning to draft an EA or OEA);

(c) Except as clarified in the guidance provided in section 10-3.4.c, ensure no FONSI or FONSH is signed before all consultation, coordination, and authorization processes have been completed (reference (k));
(d) Prepare a memorandum of legal sufficiency (refer to section 10-5.18) and complete OPNAV 5090/3, Statement of Technical Review (refer to section 10-5.32) for every EA or OEA on which action is taken, including review, approval, or endorsement. These memoranda must be retained in command files for a minimum of 5 years and must be made available to OPNAV (N45) upon request;

(e) Ensure all interactions with the headquarters staff of federal agencies, including National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service (USFWS), are pre-coordinated with OPNAV (N45);

(f) Coordinate with the area environmental coordinator and obtain the area environmental coordinator representative's signature on the statement of technical review prior to finalizing an EA or OEA or signing a FONSI or FONSH when the proposed action would affect resources under the cognizance of an area environmental coordinator (refer to chapter 1 (Organization and Coordination) for area environmental coordinator roles and responsibilities);

(g) Ensure all signed documents are uploaded to the OPNAV (N45) Environmental Planning Library Web site no later than 30 working days after FONSI and FONSH signature (refer to section 10-3.7.c); and

(h) Submit an annual certification letter accompanied by an annual program review summary to OPNAV (N45) (refer to section 10-3.7.f) no later than 45 working days following the end of the fiscal year.

c. Delegation of FONSI and FONSH Signature Authority for Acquisition Program NEPA and E.O. 12114 Environmental Planning Documents

(1) Reference (b) delegates FONSI and FONSH signature authority for acquisition program environmental planning documents to certain program executive officers (PEOs), systems command (SYSCOM) commanders, and direct reporting program managers (DRPMs). Such authority may not be redelegated. Prior to the signing of a FONSI or FONSH, the PEOs, SYSCOM commanders, and DRPMs must obtain OPNAV (N45) endorsement of the environmental planning document (or the endorsement of OPNAV (N45)’s designated endorser, as applicable). OPNAV (N45) endorsement will require proof the action proponent has
coordinated with the AEC or regional environmental coordinator (REC), as appropriate.

(2) Footnote 3 of tables E7T1 and E7T2 of reference (b) grants endorsement authority to OPNAV (N45) for environmental planning documents prepared by the PEOs, SYSCOM commanders, and DRPMs. Per reference (l), OPNAV (N45) has delegated its endorsement authority to COMNAVSEASYSCOM's Office of Environmental Protection, Occupational Safety and Health (Code 04R) with respect to EAs, FONSIs, OEAs, and FONSHs prepared by NAVSEASYSCOM-affiliated PEOs.

d. Delegated Authority Audits. OPNAV (N45) will annually review selected environmental documentation prepared and signed by commands exercising delegated authority to ensure conformance with statutory and regulatory guidance and this manual. Delegation will be revoked in cases of substantial nonconformance.

10-3.4. General Guidance for Conducting Environmental Planning

a. Regulatory and Statutory Conclusions in Environmental Planning Documents

(1) All regulatory and statutory conclusions must be supported by appropriate analyses, and such analyses must be specific to the statutory requirement. Related, non-regulatory analyses should be addressed in a separate subsection of an environmental planning document. For example, the assessment of essential fish habitat (EFH) should be specific to the discussion of potential adverse effects on defined EFH; other impacts to fish species or fish assemblages should be addressed separately. Similarly, analyses on federally-listed ESA species should be separate from discussions of state-listed species.

(2) Conclusions reached following the environmental analysis process should be phrased such that the legal threshold pertinent to each particular environmental statute is clearly identified. Example terminology for certain conclusions (not meant to be all-inclusive), if supported by the analysis, is provided in table 10-3.

Table 10-3. Example Conclusions Reflecting Regulatory and Statutory Language (not meant to be all inclusive)

<table>
<thead>
<tr>
<th>Document</th>
<th>Conclusion</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record of CATEX</td>
<td>&quot;The proposed action is within the scope of CATEX _______. None of</td>
<td>Case-by-case review of the facts of the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>proposed action is</td>
</tr>
</tbody>
</table>

10-15
<table>
<thead>
<tr>
<th>Document</th>
<th>Conclusion</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>the exclusions from reliance on a CATEX apply in this case. Therefore, the proposed action is excluded from the requirement for further NEPA analysis.&quot;</td>
<td>required to ensure the action is covered by a listed CATEX, and that none of the &quot;kickout&quot; criteria apply (refer to section 10-3.14.c.1).</td>
<td></td>
</tr>
<tr>
<td>FONSI</td>
<td>&quot;The proposed action will not significantly affect the quality of the human environment. Therefore, preparation of an EIS will not be prepared.&quot;</td>
<td>If the EA analysis shows there will be a significant effect, then an EIS must be prepared.</td>
</tr>
<tr>
<td>FONSH</td>
<td>&quot;The proposed action will not significantly harm the environment of the global commons (high seas).&quot;</td>
<td>If the OEA analysis shows there will be significant harm, then an OEIS must be prepared.</td>
</tr>
<tr>
<td>Negative decision</td>
<td>&quot;The proposed action does not have the potential to cause significant harm to the environment.&quot;</td>
<td>An action that does not have the potential to cause significant harm to the environment is not a major Navy action.</td>
</tr>
<tr>
<td>NEPA EAs</td>
<td>&quot;There would be no significant impact on X resource.&quot;</td>
<td>If there are significant impacts, then mitigation shall be identified or the proposed action shall be modified to incorporate mitigation that brings impacts to below significance.</td>
</tr>
<tr>
<td>E.O. 12114</td>
<td>&quot;There would be no significant harm on X resource.&quot;</td>
<td>If there would be significant harm to a resource, then mitigation shall be identified or the proposed action shall be modified to incorporate mitigation that brings impacts to below significance.</td>
</tr>
<tr>
<td>OEAs</td>
<td>&quot;The proposed action is not likely to result in takes of marine mammals.&quot;</td>
<td>If &quot;takes&quot; are likely, then an MMPA incidental take authorization will be necessary.</td>
</tr>
<tr>
<td>EA and OEA</td>
<td>&quot;The proposed action will not affect threatened or endangered species nor result in the destruction or adverse modification of federally-designated critical habitat.&quot;</td>
<td>If an effect on protected species or habitat may occur, then ESA consultation is necessary.</td>
</tr>
</tbody>
</table>

b. NEPA and E.O. 12114 Analysis Involving Protected Species Impacts and INRMPs. Action proponents should consult chapter 12 (Natural Resources Conservation) for:

(1) Notification requirements when a proposed action triggers the need for a NEPA and E.O. 12114 analysis and
compliance under one or more other statutes (e.g., ESA, MMPA, MBTA, MSFCMA (for impacts to EFH)), or other authority; and

(2) Specific NEPA compliance requirements prior to implementing INRMPs. This chapter provides general NEPA guidance for preparing EAs and EISs.

c. Completion of Required Consultation, Coordination, and Authorization Processes

(1) Consultation, Coordination, and Authorization. Consultation, coordination, and authorization processes under applicable environmental protection statutes (including but not limited to ESA, MMPA, CZMA, MSFCMA, and NHPA) shall be completed before a FONSI or FONSH may be signed or a final EIS (FEIS) or final OEIS may be published (reference (k)). The following guidance clarifies what constitutes completion of a compliance consultation, coordination, and authorization processes:

(a) This requirement does not mean that every permit associated with the execution of the proposed action is issued by the time a FONSI or FONSH is signed or an FEIS is published. While the CAA and CWA are identified on the list of statutes in reference (k) that may have consultation, coordination, or authorization processes, this manual recognizes that many of the specific permits issued under these two statutes are based on final designs that likely will not be completed until after the signing of a FONSI, FONSH, or ROD or publication of the FEIS. Similarly, when an MMPA authorization is sought, NMFS requires Navy to release its FEIS and complete the 30-day wait period before it can adopt the FEIS, sign its ROD, complete the ESA Section 7 consultation process, and issue an MMPA final rule.

(b) In the context of the MMPA and ESA, when a proposed action requires an MMPA authorization (incidental harassment authorization or letter of authorization) and or ESA Section 7 consultation (biological opinion), a FONSI or FONSH may be signed or an FEIS or final OEIS may be published no earlier than the date on which the draft MMPA authorization or draft biological opinion have been received from the regulator (i.e., before their final approval and signature), or after the Section 7 consultation is completed by receipt of a letter of concurrence. Publication of a notice of proposed incidental harassment authorization and request for comments by the National Marine Fisheries Service in the Federal Register is not a draft incidental harassment authorization for the purposes of this manual. All relevant requirements in the draft MMPA
authorization or the draft BO shall be fully incorporated into the environmental planning analysis before a decision document (FONSI or FONSH or ROD) may be signed or the FEIS or final OEIS may be released to the public.

(c) In the context of the CAA and CWA, what is expected is that initial coordination with the regulatory agency will have occurred and any design or operating requirements or parameters have been identified and assessed as part of the NEPA or E.O. 12114 process. For example, coordination with the U.S. Army Corps of Engineers regarding impacts to wetlands should be completed, but an application for a dredge and fill permit under CWA Section 404 may not be submitted until after a FONSI, or ROD has been signed.

(d) Regulatory agencies typically do not conduct consultations for all alternatives being analyzed for a proposed action. Therefore, consultations or coordination need not be completed for each alternative assessed in an environmental planning document. It is acceptable to complete consultation or coordination required by regulation only with respect to the preferred alternative. However, a sufficient level of impact analysis should be included in the environmental planning document relative to all alternatives to ensure regulatory agencies have information on the impacts and potential mitigation associated with each alternative and that agency input can be presented in the environmental planning document to allow a meaningful comparison of alternatives.

(e) As the timeline for completing consultation, coordination, and authorization processes can be lengthy, it is critical that an action proponent develop a schedule that initiates consultations and regulatory coordination early in the process and monitors progress to ensure these processes can be completed in a timely manner.

(2) Justifications for Not Completing Required Consultation, Coordination, or Authorization Processes for an FEIS or Final OEIS

(a) In situations where completion of the required consultation, coordination, or authorization processes cannot be completed in time to support the publication of an FEIS or final OEIS, a detailed justification for moving forward with release of the FEIS or final OEIS must be provided to OPNAV (N45) and ASN(EI&E) by the action proponent prior to seeking approval to proceed with publication of the FEIS or final OEIS. This
justification, provided preferably as part of the memorandum of legal sufficiency, should include:

1. A summary of the current status of outstanding consultation, coordination, or authorization processes;

2. Legal risk or impact to proposed action implementation timeline and budget if publication is delayed until consultation processes are complete;

3. Reasons for the delay in completion of regulatory coordination;

4. Discussion of how the pending results of the consultations may impact the determination of a preferred alternative;

5. Anticipated schedule for completing consultations; and

6. Anticipated outcomes of consultations, including mitigation requirements.

(b) Justification should be provided even when federal and state agencies require the completion of an EIS prior to finalizing consultation or authorization processes. Justification provides OPNAV (N45) and ASN(EI&E) the issues, risks, and implications of its decision to move forward with publication of the FEIS. FEIS publication will occur only if the consultation, coordination, or authorization processes are completed as documented above, or if the justification provided prior to publication of an FEIS is deemed acceptable by OPNAV (N45) and ASN(EI&E).

(3) Action Proponent Periodic Status Reports. For all EISs, the action proponent shall provide OPNAV (N45) with periodic status reports (or briefs) regarding consultations and other authorizations. These reports shall begin with the preliminary draft EIS (DEIS) version (V.2) forwarded to OPNAV (N45) for review (refer to section 10-3.4.d for discussion of document versions) and continue with the submission of a status report for each subsequent version of a DEIS or FEIS, unless otherwise directed by OPNAV (N45). As appropriate, OPNAV (N45) shall keep ASN(EI&E) informed of any problems, interagency disagreements, and other significant issues, along with courses of action for resolution of identified issues.
d. Management of Internal Navy Comments on Preliminary Draft Versions of EISs

(1) Table 10-4 standardizes the nomenclature for review and release versions of a DEIS and FEIS. The first internal version of an EIS (V.1) is always reviewed by the action proponent team. V.1 reviewers will compile their comments in a comment matrix or by other appropriate methods. When the EIS is suitable for echelon 1 staff review (i.e., OPNAV staff, ASN(EI&E) staff, and cooperating agencies), the action proponent will forward a clean version (V.2) for a coordinated 30-working day review (unless an alternative review schedule is agreed upon between OPNAV (N45) and the action proponent). Subsequent versions of the EIS will use redline-strikeout text to highlight changes that have occurred since the immediately preceding version and to facilitate the review of the next version of the document. Separate comment matrices will be prepared for and accompany each internal version of the document. The comment matrix (electronic) or other commenting method must list all internal Navy comments (and cooperating agency comments, if applicable) and describe how the action proponent has responded to those comments in revising the environmental planning document.

(2) Due to the complexity of preparing high quality environmental planning documents and staffing review through internal and external stakeholders, there may be more than four versions of an EIS. Variations in this document review management scheme may occur after coordination with OPNAV (N45).

Table 10-4. Summary of Environmental Planning Document Version Nomenclature and Management

<table>
<thead>
<tr>
<th>Version Identification</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-draft DEIS or pre-draft FEIS Version 1 (V.1) - team review</td>
<td>First reviewable version of the EIS prepared by the action proponent and reviewed internally by the action proponent team. Typically, OPNAV (N45) and ASN(EI&amp;E) staff will not formally participate in internal V.1 tiger team reviews and meetings.</td>
</tr>
<tr>
<td>Pre-draft DEIS or pre-Draft FEIS Version 2 (V.2) - staff review</td>
<td>Second reviewable version of the EIS prepared by the action proponent. It is transmitted to OPNAV (N45) in printed and electronic form and is submitted with: • Proper organizational endorsements or chain of command endorsements; • Statement of technical review; and • Memorandum of legal sufficiency. OPNAV (N45), ASN(EI&amp;E) staff, other concerned or involved OPNAV N codes, and cooperating agencies (if involved) concurrently review the V.2 document for the</td>
</tr>
</tbody>
</table>
10-21

Version Identification | Explanation
--- | ---
| | time period identified in exhibit B posted in the reference library module of the OPNAV (N45) Environmental Planning Library Web site or a time period that has been mutually agreed to by OPNAV (N45) and the action proponent, depending on the work load. Comments are returned to the action proponent in a comment matrix or by another acceptable method. A joint tiger team meeting may be held to discuss the comments. However, internal Navy review must be conducted prior to release of V.2 to a cooperating agency.

Pre-release DEIS or pre-release FEIS Version 3 (V.3) - fatal flaw review | Action proponent incorporates OPNAV (N45), ASN(EI&E), and other comments, as applicable, and prepares V.3 of the pre-release DEIS or FEIS. V.3 is a redline version of the document and is transmitted electronically to OPNAV (N45), ASN(EI&E), and any cooperating agencies. V.3 shall be accompanied by the completed comment matrix that describes how each Navy or cooperating agency comment was responded to within the document. OPNAV (N45), ASN(EI&E) staff, and others (as applicable) shall review V.3 for completeness and fatal flaws. If necessary, the action proponent shall resubmit a revised V.3 redline for OPNAV (N45), ASN(EI&E), and cooperating agency staff review.

DEIS or FEIS Version 4 (V.4) for public release - release version | V.4 is the version of the EIS ready for filing with EPA. It is transmitted to OPNAV (N45) in printed and electronic form.

Note: Numbers of copies per version and their distribution is discussed in exhibit B available in the reference library module of the OPNAV (N45) Environmental Planning Library Web site (refer to appendix E (Web Sites) for Web site address).

e. Continuing Activities (Continuing Actions)

(1) The Council on Environmental Quality (CEQ) defines major Federal actions subject to NEPA evaluation to include "continuing activities," in addition to new projects or programs (part 1508.18, paragraph (a) of reference (a)). A continuing activity (action), which may necessitate the preparation of a NEPA document, is one that either:

(a) Began before January 1970 and that has continued substantially in the same manner and environment; or

(b) Began after January 1970, for which the requisite environmental planning has been completed, and that has continued in substantially the same manner and environment.

(2) An environmental planning document (new or supplement) is required for a continuing Navy action where any of the following apply:
(a) The currently occurring environmental effects have not been 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 of applicable situations include the discovery that significant beach erosion is occurring due to continuing amphibious exercises; new wetland habitat has been designated; or the discovery that an endangered species is inhabiting the area of the continuing activity;

(b) There is a discovery that either a major change in the nature of a continuing activity or the circumstances surrounding that activity have resulted in environmental impacts that are significantly or quantitatively different or more severe than previously predicted in an existing environmental planning document prepared in connection with the commencement of that activity;

(c) There has been a substantial change in a continuing activity (such as a substantial change in operational tempo, area of use, or in technique or equipment) which has the potential for significant environmental impacts; or

(d) The existing environmental planning document is outdated or inadequate (e.g., a new methodology for assessing effects is developed, or those data, which were the basis for the analysis in the original document, become suspect) (refer to section 10-3.4.f for additional information when relying on previously approved environmental planning documentation).

f. Reliance on Previously Approved Navy NEPA or E.O. 12114 Environmental Planning Documentation

(1) Validating the Previously Approved Documentation. When an action proponent considers relying on previously approved Navy environmental planning documentation, the action proponent must validate the analysis. As a general rule, when previously approved Navy NEPA or E.O. 12114 environmental planning documentation was prepared or approved 5 or more years prior to the scheduled implementation of a proposed action, the action proponent should evaluate the continued validity of the analysis for future decision-making or for incorporation by reference into new environmental planning documents. Specifically, the action proponent should carefully examine the description of existing conditions and the analytical methodologies used to assess environmental impacts. The results
of this examination should be justified in writing for the administrative record.

(2) Preparing an MFR when Relying on Previously Approved and Valid Navy Environmental Planning Documentation. When an action proponent decides to rely on previously prepared and valid Navy environmental documentation for coverage of a new proposed action under NEPA or E.O. 12114, an MFR shall be prepared. The MFR need not be lengthy but at a minimum should:

(a) Identify the NEPA or E.O. 12114 documents relied upon and confirm they were reviewed to ensure they apply to the proposed action;

(b) Acknowledge coordination with the "owner" of the NEPA or E.O. 12114 environmental planning document;

(c) Delineate the mitigation required by permits and regulatory consultations applicable to the proposed action (the action proponent is required to comply with mitigation and monitoring reporting and tracking as required in section 10-3.7.e); and

(d) Identify any other program-related considerations that are part of the proposed action.

g. Programmatic Environmental Planning Documents and Tiering

(1) Programmatic Documents

(a) A programmatic or broad-scale environmental planning document (as opposed to a comprehensive site- or study-specific analysis) may be prepared to address conceptual or planning alternatives that may include a number of phases or involve common elements (e.g., groups of geographically- or generically-related projects or actions). The intent of a programmatic document is to provide "high level" analysis (i.e., broad-brush analysis) that requires at least one more level of site-specific NEPA or E.O. 12114 analysis before an action proponent can begin on-the-ground implementation (refer to table 10-5 and the subsequent section). The action proponent should avoid segmenting an action.
Table 10-5. Comparison of Programmatic and Site-Specific Environmental Planning Documents

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Programmatic Document</th>
<th>Site-Specific or Comprehensive Study Area Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier</td>
<td>First Tier</td>
<td>Second Tier</td>
</tr>
<tr>
<td>Proposed Action</td>
<td>Policy, Strategy, Program</td>
<td>Specific Activity or Facility</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Typically a set of policies or scenarios, the specifics of which are not yet known; range of alternatives may have differing objectives.</td>
<td>Well-defined proposal with a known location(s); range of alternatives includes different ways to meet a common objective.</td>
</tr>
<tr>
<td>Affected environment</td>
<td>Broad geographic area or regional in scope; may cross political boundaries and cover numerous ecosystems.</td>
<td>Emphasis on individual project site and immediate surroundings or geographic study area.</td>
</tr>
<tr>
<td>Impact focus</td>
<td>Emphasis on cumulative effects of multiple activities.</td>
<td>Emphasis on direct and indirect effects of a single activity or group of related activities.</td>
</tr>
<tr>
<td>Mitigation</td>
<td>Emphasis on developing broad environmental policies, programs, or plans that would apply to many future projects, the details and location of which are not yet known.</td>
<td>Emphasis on minimizing impacts of a proposed action.</td>
</tr>
</tbody>
</table>

(b) When deciding whether to prepare a programmatic environmental planning document, the action proponent should consider such factors as the ripeness of the program, policy, or action for discussion; and cost-effectiveness, long-term applicability, and complexity of the proposed policy, program, or action. In addition to the content required by this manual for other environmental planning documents, the programmatic document must provide, in as much detail available at the time of preparation:

1. A description of the subsequent stages or sites that may ultimately be proposed, including where and when deferred issues will be addressed;

2. The environmental impacts that will result from establishment of the overall program itself that will be similar for subsequent stages or sites as further implementation plans are proposed; and

3. The appropriate mitigation measures that will be proposed for subsequent stages or sites.
(2) **Tiering.** Tiering is appropriate when the action proponent prepares a site-specific NEPA or E.O. 12114 analysis for a subsequent stage or phase of an action previously assessed in a completed programmatic environmental planning document. This helps the action proponent focus on those issues ripe for decision-making and exclude issues already decided or not yet ripe for consideration. Each subsequently tiered analysis should:

(a) Summarize the program-wide issues discussed in the programmatic analysis, incorporating by reference the analysis contained in the overarching programmatic document;

(b) Concentrate on the issues specific to the subsequent action; and

(c) State where the earlier document is available.

**h. Supplemental Environmental Planning Documents**

(1) A supplemental EA or EIS is prepared to amend an original environmental planning document when the action proponent determines that:

(a) Substantial changes have been made in a proposed action that are beyond the scope of the original environmental planning document (e.g., new or additional alternatives are being considered);

(b) Significant new circumstances occur or information becomes available that could affect the proposed action and its potential environmental impacts (e.g., baseline conditions have changed or new analytical methodologies are available to assess potential environmental impacts); or

(c) Navy determines that Navy interests or the purposes of NEPA or E.O. 12114 will be furthered by doing so.

(2) The original environmental planning document should be incorporated by reference into the supplemental document. However, sufficient detail should be provided in the supplement to allow the public to understand the substance of the new information and how the proposed action and its potential environmental impacts may have changed since the public release of the original environmental planning document. In addition, all supplemental environmental planning documents submitted for
review and approval by OPNAV (N45) must be complete documents. Submission of changed pages with the original document being supplemented as an attachment is not acceptable. Action proponents will prepare and circulate supplements as required in this manual for environmental planning documents including the publication of a notice of intent (NOI) in case of an EIS. Although scoping is not required, it may be appropriate depending on the reason for the supplement and if public interest is indicated.

i. Administrative Record. The development of an administrative record begins when the environmental planning process is initiated by the action proponent's command. The administrative record consists of all papers, documents, memoranda, studies, and other bibliographic references used by Navy to reach a decision on whether or not to go forward with a particular proposed action. All documents and materials relevant to Navy's decision-making process shall be included in the administrative record. The administrative record can include all documents and materials prepared, provided, reviewed, or received by Navy personnel, and used by or available to the decision-maker, even though the decision-maker may not actually have reviewed or known about those documents and materials.

(1) General Guidelines on Documents to be Included in the Administrative Record. The term "document" has a very broad definition. It includes not only paper documents, but also e-mail messages, computer tapes and discs, microfilm and microfiche, maps, graphics, raw data, videotapes, cassette recordings, and any other format used to communicate, store, present, or maintain information. The term "document" even includes electronic messages and data that have been stored but not printed.

(2) Responsibilities for Maintaining the Administrative Record. The action proponent should designate the person responsible for maintaining the administrative record and develop a plan for what will be included in the administrative record at the outset of the environmental planning process. All environmental planning team members should be provided a copy of the plan. The administrative record should be kept up-to-date throughout the development of the environmental planning document.

j. Incorporation by Reference. To the extent practicable, action proponents preparing NEPA or E.O. 12114 analyses shall
incorporate material by reference to 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.

k. Incomplete or Unavailable Information. When the action proponent is evaluating significant adverse effects on the human environment in an environmental planning document and there is incomplete or unavailable information, the action proponent shall always make clear that such information is lacking. CEQ provides more detailed guidance at section 1502.22 of reference (a).

(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 in terms of funding or time, the action proponent will include the information in the environmental planning document; and

(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 provide a statement explaining the circumstances within the environmental planning document.

l. Classified Actions

(1) Some aspects of a proposed action may involve information not releasable to the public because it is classified within the definition of E.O. 13526 (reference (m)) or sensitive for some other legal reason (e.g., regulatory agency restrictions on the release of certain information to the public, such as the exact location of specific resources protected under ESA or NHPA). This does not relieve the action proponent of the duty to comply with the requirements of this chapter. Personnel and commands preparing material that may be classified are responsible for the proper handling, control, and safeguarding of all information and analyses that may be
classified per appropriate Department of Defense (DoD) and Navy requirements.

(2) The action proponent shall prepare, safeguard, and disseminate environmental planning documents per the requirements applicable to classified or sensitive unclassified information. Even so, when the components of the environmental planning document have been thoroughly scrubbed so that each component contains only unclassified information, the action proponent must continue to be sensitive to the potential for the final assemblage of that information to be considered classified. The requirement to safeguard classified information takes precedence over any requirement to disclose records to the public.

(3) When feasible, the action proponent should organize the environmental planning document 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. If classified information must be included in an environmental planning document, in an appendix or otherwise, the action proponent shall coordinate special handling procedures with OPNAV (N45).

10-3.5. Cooperating Agency and Other External and Internal Coordination Requirements

a. Cooperating Agencies

(1) Identifying Cooperating Agencies. Cooperating agencies should be identified early in the environmental planning process for all levels of NEPA or E.O. 12114 documentation. Consideration must be given to federal 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 or E.O. 12114 analyses. Should a need be identified to partner with a state, local, or tribal government through a cooperative agreement, the action proponent shall coordinate with OPNAV (N45) on the best manner to accommodate the legal requirements of Navy and other parties. This may necessitate additional coordination because of the unique legal requirements of state and local governments (reference (n)).

(2) Invitations to Cooperating Agencies
(a) OPNAV (N45) will be responsible for inviting and coordinating with cooperating agencies at the national level (headquarters). When appropriate, such invitations and coordination will be conducted, as required, with the Navy Secretariat. The action proponent will be responsible for inviting and coordinating with cooperating agencies at the regional or district level, including state, local, and tribal governments. Establishing a cooperating agency relationship neither creates a requirement nor constitutes a presumption that a lead agency provides financial assistance to a cooperating agency. When extending an invitation to another agency to enter into a cooperating agency relationship, the action proponent should consider:

1. Whether such agencies are interested in and appear capable of assuming the responsibilities of becoming a cooperating agency;

2. Setting time limits, identifying milestones, assigning responsibilities for analysis and documentation, specifying the scope and detail of the cooperating agency's contribution, and establishing other appropriate ground rules addressing issues such as availability of pre-decisional information; and

3. Documenting their expectations, roles, and responsibilities in a memorandum of agreement (MOA) or correspondence.

(b) Whenever invited federal, state, tribal, or local agencies elect not to become cooperating agencies, they should still be considered for inclusion in interdisciplinary teams engaged in the environmental planning process and on distribution lists for review and comment on environmental planning documents.

(3) Declining a Cooperating Agency Invitation. Navy commands or activities that do not accept cooperating agency status in whole or in part for a proposed action shall respond to the request in writing and provide a copy of that response to OPNAV (N45) for annual reporting purposes to CEQ.

(4) Adoption of an EA or EIS

(a) Sufficiency of Navy Environmental Planning Documents to Meet Other Agencies' NEPA Adoption Requirements. For actions where Navy environmental planning may be adopted for
the purpose of another Federal agency's compliance with NEPA (e.g., for agency permit issuance), Navy commands shall identify this need, to the extent those requirements are known, as part of the notification process and prior to any interagency coordination. Note that specific additional analyses may be required in order for the Navy environmental document to suffice in meeting another agency's NEPA requirements.

(b) Adopting Another Agency's EA or EIS. Navy may adopt an EA or EIS prepared by another Federal agency (even if a cooperating agency relationship has not been established), where the Navy's proposed action is substantially the same as that described in the EA or EIS. In such cases, the Navy action proponent must independently review the EA or EIS and determine that it is current and that it satisfies the requirements of this chapter. The Navy then prepares its own FONSI or ROD, as appropriate, and conducts the required public notification. In situations where the proposed action is not substantially the same as that described in the EA or the EIS, a Navy action proponent may adopt the EA or EIS, or a portion thereof, by circulating the EA or EIS, as appropriate, as a draft and then preparing the final EA or EIS and decision document. A Navy action proponent may not adopt an environmental planning document prepared by a state agency unless the Navy has participated in the preparation of the document (analysis and documentation) to ensure it satisfies the requirements of NEPA.

(5) Annual Reports to CEQ on Cooperating Agency Status. OPNAV (N45) provides an annual report of Navy cooperating agency status on all EISs and EAs begun during each fiscal year for submission to CEQ. Echelon 2 commands with delegated FONSI signature authority shall input cooperating agency status as part of its annual program review summary to the OPNAV (N45) Environmental Planning Library Web site.

b. Joint Basing Relationships. Refer to section 1-3.2.e for roles and responsibilities in meeting environmental planning requirements for joint basing and host and tenant relationships, etc.

c. Coordination with Director of Naval Nuclear Propulsion Program. Under reference (o), statutorily prescribed by Public Law 98-525, section 7558 of title 42, United States Code (U.S.C.), the Director, Naval Nuclear Propulsion Program (CNO (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 the safety and health of workers, operators, and the general public. Accordingly, the Director or designee, in coordination with OPNAV (N45) or the 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. CNO (N00N) shall coordinate with OPNAV (N45) in any decision to prepare an EIS. As appropriate, ASN(EI&E) or ASN(RD&A) is the signature authority on any ROD.

d. Coordination with the Department of State (DOS) Under E.O. 12114. The Secretary of State conducts U.S. foreign policy. When a proposed major Navy action may significantly harm the environment of a foreign territorial sea or the territory of a foreign nation, coordination with the DOS may be required. OPNAV (N45), per reference (j), will assist the Navy Secretariat in executing any necessary coordination with DOS.

e. Coordination with Area Environmental Coordinator or Regional Environmental Coordinator. If a proposed action assessed in an environmental planning document will occur in the area of responsibility (AOR) of an area environmental coordinator or REC, the action proponent shall coordinate with the affected area environmental coordinator or REC. As appropriate, the area environmental coordinator or the REC shall provide written acknowledgement (an e-mail is sufficient or signature on a statement of technical sufficiency) to the action proponent concerning the consistency of each proposed action with fleet operations occurring within their AOR, including the alternatives considered and mitigation.

10-3.6. Mitigation Identification and Implementation

a. As required by reference (p), the action proponent shall include a mitigation matrix or table (which may be documented in a separate mitigation chapter) in all environmental planning documents. This matrix shall provide the following information:

(1) Specific detailed description of the mitigation measure(s), including any compensatory mitigation;

(2) Description of the anticipated benefit of the mitigation. Environmental planning documents shall identify those measures that result from regulatory compliance requirements such as ESA consultation or MMPA permitting. The anticipated benefit of any identified regulatory mitigation measure must be discussed in environmental planning documents;
(3) Criteria for evaluating the efficacy of mitigation applied to avoid significance or reduce the severity or intensity of the impacts of an action;

(4) Description of how the mitigation measures will be implemented and monitored;

(5) Assignment of command responsibility for implementing mitigation measures and determining their effectiveness (i.e., through monitoring); and

(6) Estimated completion date for implementation of the mitigation, as applicable.

b. An action proponent is legally responsible for implementing all mitigation it has committed to implement as part of its decision-making (e.g., in a FONSI, FONSH, ROD) whether undertaken for environmental planning purposes or to satisfy a regulatory requirement. Refer to section 10-3.7.e for information on mitigation and monitoring reporting and tracking.

10-3.7. Environmental Planning Library and Reporting Requirements

a. Environmental Planning Library - General

(1) The OPNAV (N45) Environmental Planning Library Web site (refer to appendix E (Web Sites) for Web site address) is an online, searchable electronic repository of completed Navy environmental planning documents covering Navy actions worldwide. The library also serves as a tool for the submission of required annual environmental planning and cooperating agency reports to the Navy Secretariat and other authority.

(2) In addition, the library is maintained as a resource for Navy environmental planners and includes related statutes, regulations, DoD and Navy policy, and other guidance documents. Specific policy adopted by OPNAV (N45) for processing environmental planning documents (i.e., processing timelines), reviewing Navy environmental planning documents (e.g., the environmental planning checklist), and other aids to Navy environmental planners may be accessed within the library.

b. Access to the OPNAV (N45) Environmental Planning Library. The library is accessible to individuals with a navy.mil e-mail address and an assigned password. A password
account may be established by sending an e-mail request to OPNAV (N45)'s functional e-mail account: N456EnvPlanning.opnav@navy.mil. Individuals outside Navy (e.g., contractors without a navy.mil e-mail address) who have a demonstrated need to obtain access to the library may request temporary access through a Navy sponsor. A Navy sponsor should send an e-mail request to OPNAV (N45)'s functional e-mail account (N456EnvPlanning.opnav@navy.mil). The e-mail request should identify the non-Navy individual (including e-mail address) who requires access to the library, the reasons for needing access, and the time period during which access may be approved.

c. Requirement to Upload Environmental Planning Documents

(1) Action proponents shall upload the environmental planning and associated compliance documents to the OPNAV (N45) Environmental Planning Library Web site not later than 30 working days after a decision document (e.g., FONSI, FONSH, or ROD) is signed or a notice of availability (NOA) is published for an environmental planning document in the Federal Register:

(a) Notification letters to prepare an EA, OEA, ER, ES, or an NOI package for an EIS, OEIS, or hybrid document with proper endorsements;

(b) Approved EAs, OEAs, ERs, ESs, EISs, OEISs, or hybrid document (draft and final);

(c) Signed decision documents (e.g., FONSI, FONSH, ROD);

(d) Related completed environmental compliance documents such as:

1. ESA biological assessments or evaluations (with transmittal letters) and biological opinions;

2. MMPA permit applications (with transmittal letters), rules, and letters of authorization and incidental take authorizations;

3. EFH assessments and consultation letters; and

4. CZMA consistency and negative determinations;
(e) Records of CATEX that rely on CATEX #44 or #45 (refer to table 10-6); and

(f) Annual monitoring and exercise report submitted to regulators (when available).

(2) In addition, the action proponent shall input mitigation it has committed to implement in environmental planning decision documents to the mitigation reporting tool in the required reporting module of the OPNAV (N45) Environmental Planning Library Web site, as required by section 10-3.7.e.

(3) DO NOT UPLOAD PRELIMINARY OR DRAFT DOCUMENTS (PUBLISHED DEISs ARE UPLOADED), NOR MEMORANDA OF LEGAL SUFFICIENCY OR STATEMENTS OF TECHNICAL REVIEW.

(4) Uploaded documents shall be in the latest Navy Marine Corps Intranet-approved version of Adobe Acrobat. In preparing the document for upload, action proponents shall make sure the document is saved such that text may be copied and images captured for the purpose of "cut and paste" into a word processing document and that the file has been optimized to shrink their size and boost display speed. There are additional requirements for EISs that will be uploaded to EPA's e-NEPA Web site. Action proponents should verify these requirements with the assigned OPNAV (N45) action officer. Commands wishing to obtain electronic copies of OPNAV (N45) Environmental Planning Library Web site documents in a word processing format such as Microsoft Word should contact the command that published the document.

d. Contacting OPNAV N45 via E-mail

(1) OPNAV (N45) has established an e-mail address (N456EnvPlanning.opnav@navy.mil) to provide real-time notification or status of proposed actions.

(2) DO NOT E-MAIL ENVIRONMENTAL PLANNING DOCUMENTS TO THE OPNAV (N45) ACTION OFFICERS.

(3) The use of the e-mail address is not appropriate for the transmission of large environmental planning documents. Copies of final documents should be uploaded to the OPNAV (N45) Environmental Planning Library Web site and draft documents sent to OPNAV (N45) on a CD-ROM via an express mail function or electronically by use of an internet file transfer protocol Web
site. Routine project specific correspondence should always be sent to the e-mail address of the assigned OPNAV (N45) action officer.

e. Mitigation and Monitoring Reporting and Tracking. "Mitigation" reduces or avoids potentially significant adverse effects of an action on the environment. "Monitoring" provides information on the effects of the action on the environment and the effectiveness of the mitigation measures themselves. Results from mitigation and monitoring reporting will be used to support negotiations with the regulatory agencies to ensure only effective mitigation measures are employed, to assist in adaptive management efforts, and to track completion of mitigation the action proponent has committed to implement in an environmental planning decision document.

(1) Inputting Mitigation and Monitoring Requirements to the OPNAV (N45) Environmental Planning Library.

(a) Action proponents shall input mitigation and monitoring requirements committed to in approved environmental planning decision documents into the OPNAV (N45) Environmental Planning Library Web site (mitigation and monitoring tool found in the library's required reporting module) as soon as possible after completion of the proposed action (but in any case, no later than 30 working days after the signing of the applicable decision document).

(b) Mitigation and monitoring data that will be input to the Web site are discussed in detail in reference (p). In general, all mitigation committed to within the applicable environmental planning decision document that brings potential adverse environmental impacts below the level of significance shall be reported until the project has been completed. In addition to the information required in the mitigation and monitoring matrix, requirements include the direct financial cost (present value) of implementing the mitigation (beginning with estimated future mitigation and monitoring costs, where applicable), and actual costs at project completion.

(2) Actions Spanning a Period of Years. For implementation of those actions that span a period of years, the action proponent shall, at a minimum, annually review and revise the mitigation and monitoring data submitted to the required reporting module of the OPNAV (N45) Environmental Planning Library Web site. This review and revision requirement may be
discontinued upon completion of all mitigation measures committed to in a FONSI or ROD.

(3) When Mitigation and Monitoring Reports are Prepared and Submitted to Regulators. Some actions proposed in an environmental planning decision document or associated permits require the preparation and submission of annual monitoring and exercise or test event reports to regulators in compliance with consultations and permits (e.g., operational range EISs). To avoid duplication, such annual monitoring and exercise or test event reports may be substituted for the mitigation and monitoring reporting required in this section provided the action proponent inputs the financial costs of implementing each mitigation or monitoring requirement to the Web site. All annual monitoring and exercise or test event reports submitted to regulators should also be uploaded to the OPNAV (N45) Environmental Planning Library Web site (refer to section 10-3.7.c).

f. Annual Certification Requirement and Annual Program Review Summary

(1) Annual Certification Requirement. No later than 45 working days following the end of each fiscal year, flag officers or civilian equivalents exercising NEPA or E.O. 12114 decision authority delegated under this manual and PEOs (flag officers or senior executive service) exercising NEPA or E.O. 12114 authority delegated under reference (b), shall certify by letter sent by official mail to OPNAV (N45) (and uploaded to the OPNAV (N45) Environmental Planning Library Web site) that all notifications, final environmental planning documents, and reporting as required for the previous fiscal year under sections 10-3.7.c and 10-3.7.e have been uploaded and reported as required in a timely manner to the OPNAV (N45) Environmental Planning Library Web site. This certification will enable OPNAV (N45) to prepare reports to the Navy Secretariat required by references (p) and (q). The annual certification shall also identify the members of their qualified legal and environmental staff. Substantial nonconformance with the requirement to submit the annual certification by upload to the OPNAV (N45) Environmental Planning Library Web site (accompanying the annual program review summary) will result in revocation of delegated NEPA or E.O. 12114 decision authority.

(2) Annual Program Review Summary. No later than 45 working days following the end of each fiscal year, each command with delegated FONSI signature authority will input its program
review summary via the OPNAV (N45) Environmental Planning Library Web site (required reporting module) to include:

(a) **Type of Document, Title, and Date Signed.** Provide type of document, title, and date signed for each EA, OEA, EIS, OEIS, ER, ES, or record of CATEX for use of CATEX #44 or #45 approved during the preceding fiscal year. For record of CATEX #44 or #45, document title should be the type of training exercise or test conducted (e.g., BOMBEX, GUNEX, MISSILEX) or, in the case of a test, the equipment used;

(b) **Important or Controversial Environmental Issues.** Provide succinct descriptions of the important or controversial environmental issues addressed in the document (e.g., water quality, ordnance, sound in the water (e.g., sonar, pile driving or any other sound sources), MOA with state historic preservation officer). Any consultations undertaken with regulators (e.g., NMFS, USFWS) should also be identified;

(c) **Cooperating Agency.** For any EA completed during the previous fiscal year and any EIS for which an NOI was issued or where cooperating agency status changed during the previous fiscal year, the annual program summary should identify the:

1. Name of the cooperating agency (e.g., NMFS, Federal Aviation Administration, National Park Service, tribal government);

2. Name(s) of the agency(ies) who declined an invitation to participate as a cooperating agency or with whom Navy failed to reach agreement on establishing a cooperating agency relationship, and agencies whose cooperating agency status ended (include the reasons cooperating status was not established or was ended); and

3. Current status, if reporting on an EIS or OEIS.

(d) **Cost.** Costs should be reflective of expenditures for each environmental planning document prepared during the previous fiscal year, not total costs obligated for each environmental planning document.

10-3.8. **Pre-Planning Process Requirement**

a. Action proponents are required to establish a written pre-planning process to identify environmental planning
requirements and notional timelines as early as possible when developing a proposed action. The written pre-planning process must have elements that:

(1) Ensure environmental planning begins as early as possible in developing a proposed action and results in a clearly defined purpose and confirmation of the need for the proposed action;

(2) Establish a process for communication and development of consensus among internal Navy stakeholders;

(3) Provide adequate information for cost-effective contracting and document preparation and review; and

(4) Ensure collection and development of current information, data, statistics, and best available science that are the foundation of sound analysis and high quality environmental planning documents.

b. The pre-planning process must culminate in a common understanding and consensus among Navy stakeholders as to why the proposed action is necessary, when and where it will occur, how it will be carried out, what requirements are essential to achieving the proposed action’s purpose, and what reasonable alternatives could achieve this purpose. This information is particularly necessary in preparing a preliminary description of proposed action and alternatives (DOPAA), which is a component of the NOI package for an EIS or OEIS (refer to table 10-9 for more information).

10-3.9. Action Proponent Responsibility to Produce Quality Documents. Navy action proponents shall ensure environmental planning documents are consistent with the requirements of this chapter and are legally defensible if challenged. OPNAV (N45) recommends development and implementation of a quality assurance plan in the form of a standard operating procedure that focuses attention on the need for quality documents and delineates the action proponent reviews that will be undertaken to ensure quality. In addition, it is recommended that action proponents develop a diverse internal stakeholder team to support the technical development and review of a quality document. Echelon 2 commands are responsible for ensuring documents submitted to OPNAV (N45) and the Navy Secretariat have been properly reviewed to ensure quality (an environmental planning checklist is available on the OPNAV (N45) Environmental Planning Library Web site). Quality Navy environmental planning documents shall be:
a. **Comprehensive and Logical.** The analyses must consider all relevant data and the conclusions must clearly be supported by appropriate data;

b. **Consistent Across Navy.** The discussions of purpose and need, proposed action, and environmental setting; and analysis of environmental consequences, mitigation measures, and cumulative impacts analysis shall be internally consistent, to the extent practicable, with other environmental planning documents prepared by the same command and by other Navy commands. The OPNAV (N45) Environmental Planning Library Web site should be consulted to see how various issues have been treated in recently completed environmental planning documents;

c. **Legally Sufficient.** The scope of issues and alternatives considered and the adequacy of the technical analysis must be sufficient to meet legal standards established in NEPA, E.O. 12114, Administrative Procedures Act, and other applicable statutes;

d. **Technically Sufficient.** Each environmental planning document shall be based on the best available scientific information and data. The evaluation of all potentially affected areas of the environment and the analyses shall be prepared by subject matter experts knowledgeable about the resource at issue. Furthermore, the analyses shall be objective and unbiased, take a "hard look" at the issues, and anticipate and respond to potentially opposing views; and

e. **Understandable.** An environmental planning document should be written so a member of the general public, who has no advanced education or knowledge of Navy, can easily understand the purpose and need for the project, how each alternative would meet the project's goals, and the strengths and weaknesses associated with each alternative. Each document shall be kept as brief as possible, using clear, concise writing; an easy-to-use format; effective graphics and visual elements; and discussion of issues and impacts in proportion to their significance. Consider including highly technical information in an appendix or using text boxes to explain technical terms in laypersons language.

**10-3.10. Training Requirements**

a. Navy environmental planners shall receive, at a minimum, the following training:
(1) Environmental laws and regulations (within 1 year of assignment). Completion of Naval Civil Engineer Corps Officers School (CECOS) Basic Environmental Law (A-4A-0058) will satisfy this requirement;

(2) Introductory NEPA training (within 1 year of assignment). Completion of CECOS National Environmental Policy Act (NEPA) Application (A-4A-0077) will satisfy this requirement; and

(3) Advanced NEPA training (within 1 year of assignment). Completion of CECOS Advanced Environmental Law (A-4A-0068) will satisfy this requirement.

b. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

10-3.11. Weapons Systems Acquisition Programs

a. The program manager (PM) must comply with NEPA and E.O. 12114 when a research, development, test, and evaluation (RDT&E) related proposed action may affect or harm the environment. It is prudent for the PM to consider environmental compliance at the earliest stages of the acquisition process to avoid potential schedule delays and cost, as well as to ensure efficient introduction of weapons systems to fleet use (reference (b)).

b. References (b) and (r) require PMs to prepare programmatic environment, safety, and occupational health evaluations (PESHE) at various phases in the acquisition process. The PESHE is a tool for PMs to integrate environmental considerations and risk into program decisions. The PESHE requires a NEPA or E.O. 12114 compliance schedule that summarizes program actions that may require NEPA or E.O. 12114 documentation. While the schedule is a mandatory component of the PESHE, it does not satisfy the environmental planning requirements for each identified action.

c. PESHEs prepared by PMs should be reviewed by the environmental and legal staffs of the affiliated SYSCOM headquarters before being provided to gate and milestone reviewers during the acquisition process. For further details or guidance on preparing a PESHE or other systems acquisition
environmental issues, refer to chapter 11 (Environmental Readiness in the Acquisition Process).

10-3.12. Responsibilities for Environmental Planning Under NEPA. NEPA of 1969 is the basic charter for environmental planning within the United States. It requires federal decision-makers to inform themselves of the environmental consequences of proposed actions that may significantly affect the human environment and consider those consequences in determining courses of action. NEPA requires a high degree of public involvement in the decision-making process.

10-3.13. NEPA Compliance Overview. NEPA created CEQ, which issues regulations to implement NEPA. CEQ regulations prescribe a three-tiered approach (refer to figure 10-2) for determining and documenting predicted effects of proposed actions:

a. CATEX;

b. EAs; and

c. EISs.

10-3.14. Categorical Exclusions

a. CEQ regulations allow federal agencies to identify CATEXs for those actions that, after consideration, have been found not to have a significant effect categorically excluded. Action proponents may not split a single proposed action into separate elements for the purpose of applying multiple CATEXs as a substitute for preparing an EA. However, there may be limited situations where independent actions may be considered together for administrative or fiscal purposes such that separate CATEXs may be applied to each of those independent actions (refer to the following example).

b. It is the responsibility of the action proponent (often at the activity level) to decide whether a proposed action does not affected the quality of the human environment individually or cumulatively, under normal circumstances, and therefore does not require preparation of an EA or an EIS. CATEXs 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, or whose effect is primarily economic or social. The list of approved Navy CATEXs is identified in table 10-6.
Questions to be answered: Is the action a major Navy action? Is the activity new? Is there a substantial change in a continuing action? Is NEPA coverage out of date?

Yes

Complete Pre-Planning Process:
• Proposal development by action proponent; and
• Internal Navy scoping.

No

Is the action exempt by legislation?

Yes

Implement and monitor, if appropriate.

No

Is the action on CATEX list (table 10-6)?

Yes

Submit notification letter to OPNAV (N45) and prepare EA.

No

“Kickout” criteria apply?

Yes

Record of CATEX (signed by commanding officer (CO), PM, or Chief of Naval Research).

No

Is the action on example EA list (table 10-7) or significance of impacts unknown?

Yes

Submit notification letter to OPNAV (N45) and prepare EA.

No

Impacts known to be significant?

Yes

Submit EIS NOI package to OPNAV (N45).

No

Impacts significant?

Yes

Is the action one that typically requires an EIS, is a matter of national concern, or without precedent?

No

Prepare EA.

Yes

Public and agency involvement as appropriate.

No

Designated HQ official, OPNAV N45, PM, or Chief of Naval Research signs FONSI. Action proponent publishes FONSI locally.

Yes

Action proponent forwards EA to OPNAV N45 via chain of command. OPNAV N45 issues FONSI and publishes FONSI in Federal Register.

No

Designated HQ official, OPNAV N45, PM, or Chief of Naval Research signs FONSI. Action proponent publishes FONSI locally.

Action proponent forwards EA via chain of command to their HQ. OPNAV N45 reviews, if required.

Action proponent waits 30 days for public review of FONSI.

Action proponent uploads EA or EIS, decision documents, and any supporting documents to Environmental Planning Library Website and inputs mitigation measures committed to in the FONSI or ROD to the Environmental Planning Library Website Required Reporting Module within 30 working days of decision. Implement action. Monitor effectiveness and completion.
Example in Which Reliance on More Than One CATEX May Be Appropriate

Separate CATEXs exist for the construction of a building and for the demolition of a building (CATEX #34 and #35). Even though Navy would normally contract and fund, as a single action, the demolition and reconstruction of a new building on the same site of the demolished building, these two activities are really two different actions. Given the relationship between these two types of actions, the application of two separate CATEXs may be appropriate in lieu of preparing an EA, provided environmental impacts remain the same (e.g., same level of traffic generated, same noise levels).

c. Conditions Under Which a CATEX Cannot Be Used

(1) When Effects May be Significant, Individually or Cumulatively, or the Action Meets the "Kickout" Criteria. Even if a proposed action generally fits the description of a particular CATEX, a CATEX will not be used if the proposed action would have a significant effect on the human environment individually or cumulatively, or the proposed action would meet any of the following "kickout" criteria (i.e., extraordinary circumstances):

   (a) Would adversely affect public health or safety;

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

   (c) Establish precedents or make decisions in principle for future actions that have the potential for significant impacts;

   (d) Threaten a violation of federal, state, or local environmental laws applicable to Navy; or

Table 10-6. Department of the Navy List of CATEXs

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Routine fiscal and administrative activities, including administration of contracts;</td>
</tr>
<tr>
<td>2.</td>
<td>Routine law and order activities performed by military personnel, military police, or other security personnel, including physical plant protection and security;</td>
</tr>
<tr>
<td>3.</td>
<td>Routine use and operation of existing facilities, laboratories, and equipment;</td>
</tr>
<tr>
<td>4.</td>
<td>Administrative studies, surveys, and data collection;</td>
</tr>
<tr>
<td>5.</td>
<td>Issuance or modification of administrative procedures, regulations, directives, manuals, or policy;</td>
</tr>
<tr>
<td>6.</td>
<td>Military ceremonies;</td>
</tr>
<tr>
<td>7.</td>
<td>Routine procurement of goods and services conducted in accordance with applicable procurement regulations, executive orders, and policies;</td>
</tr>
</tbody>
</table>
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, and 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 stormwater and sanitary and industrial wastewater collection and treatment systems, and installation of firefighting 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 when moved, handled, or distributed are 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, renovation, and donation or other transfer of
structures, vessels, aircraft, vehicles, landscapes or other contributing elements of facilities listed or eligible for listing on the National Register of Historic Places which will result in no adverse effect;

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 anticipated;

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, stormwater, 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, polychlorinated biphenyls (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) which 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 to protect human or animal life;  
44. Routine testing and evaluation of military equipment: (1) on a military reservation or an established range, restricted area, or OPAREA; (2) 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 (3) conducted in accordance with all applicable standard operating procedures protective of the environment; and  
45. Routine military training associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and weapons systems: (1) conducted at the unit or minor exercise level; (2) 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 (3) conducted in accordance with all applicable standard operating procedures protective of the environment.

Source: Reference [j].

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

1. Have an adverse effect on Federally-listed endangered and threatened species or marine mammals.

2. Have an adverse effect on coral reefs or on federally designated wilderness areas, wildlife refuges, marine sanctuaries, or parklands;

3. Have an adverse effect on the size, function, or biological value of wetlands and is not covered by a nationwide or regional permit;

4. 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

5. Result in an uncontrolled or unpermitted release of hazardous substances or require a conformity evaluation under the standards of the CAA General Conformity Rule (reference (s)).

(2) When an EA is Being Prepared. A CATEX 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) Programmatic CATEXs. CATEXs may not be used programmatically because case-by-case review of the "kickout" criteria is required for each reliance on a CATEX.

(4) For Renewable Energy Projects. If a proposed project will rely on an approved Navy CATEX, pre-planning coordination must be completed with potentially affected mission-related commands prior to signing the written record of CATEX.

d. Documenting Reliance on a CATEX. When a proposed action meets the scope of a Navy CATEX, a record of CATEX may be prepared, which is then signed by the commanding officer (CO) or his or her designee for a non-weapons systems acquisition action or the PM for a weapons systems acquisition action.

(1) Criteria for Determining Whether to Prepare a Record of CATEX. A written record of CATEX need not always be prepared. In determining whether it is appropriate to prepare a record of CATEX for a proposed action, the signatory should consider the following:

(a) Some activities may carry little risk of significant environmental effects such that there is no practical need for, or benefit from, preparing and signing a record of CATEX. Examples of such activities include routine fiscal and administrative activities (CATEX #1), routine use and operation of existing facilities (CATEX #3), or routine personnel actions (CATEX #10);

(b) For other proposed actions (e.g., CATEX #17, new activities conducted at established laboratories and plants), preparation of a record of CATEX may be appropriate and or necessary to demonstrate that the proposed action comports with
any limitations identified in prior NEPA analysis and that there are no potentially significant impacts expected as a result of extraordinary circumstances (i.e., one or more of the "kickout" criteria in section 10-3.14.c.1 apply). In such cases, the documentation should address proposed specific factors and show consideration of extraordinary circumstances with regard to the potential for localized impacts;

(c) A record of CATEX may be necessary to demonstrate compliance with the consultation and coordination requirements of other laws, regulations, and policies, such as ESA or NHPA, when the "kickout" criteria (refer to section 10-3.14.c.1) are determined not to apply;

(d) A decision to apply CATEX #44 and CATEX #45 to a proposed action always requires the preparation and signing of a record of CATEX. Records of CATEX relying on CATEX #44 and #45 must be uploaded to the OPNAV (N45) Environmental Planning Library Web site per section 10-3.7.c; and

(e) If lengthy documentation is needed to establish a rationale for applying a CATEX in a particular situation, the CO should consider whether it is appropriate to apply the CATEX or if an EA should be prepared instead.

(2) Contents of a Record of CATEX. A record of CATEX is concise (normally one to two pages in length) and must describe:

(a) The CATEX found applicable by the action proponent;

(b) Specific considerations of whether the exceptions to the use of a CATEX are applicable (refer to "kickout" criteria in section 10-3.14.c.1); and

(c) Facts supporting the use of the applicable CATEX (if one or more CATEXs are being relied upon, the record of CATEX must address the potential for cumulative impacts).

(3) Requirements for Retaining a Record of CATEX. At a minimum, the record of CATEX should be retained in command files for 6 years and made available for review during environmental quality assessments.

10-3.15. Environmental Assessments

a. General
(1) An EA is an analysis of the potential environmental impacts of a proposed action. Action proponents must prepare an EA when they do not know beforehand whether or not a proposed action will significantly affect the human environment or be controversial regarding environmental effects. An EA will either result in a FONSI or, if a significant impact is identified in the EA, a decision to prepare an EIS.

(2) Procedural requirements applicable to NEPA, as indicated in sections 10-3.4 through 10-3.9, must be followed in the preparation of EAs. These include requirements to: include regulatory and statutory conclusions in environmental planning documents; address mitigation measures and their implementation; and upload final environment planning documents to the OPNAV (N45) Environmental Planning Library Web site. Additional guidance follows.

b. Actions Normally Requiring EAs. The action proponent prepares an EA for an action unless it is determined that an EIS shall be prepared or that it may be appropriate to categorically exclude the action. Table 10-7 lists examples of actions that, under normal conditions, would require the preparation of an EA.

Table 10-7. List of Actions Normally Requiring an EA

| a. | Training exercises on or over (airspace) non-military property where such training is not consistent with the type and tempo of existing non-military airspace, land, and water use. |
| b. | 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. |
| c. | Dredging projects that increase water depth over previously dredged or natural depths. |
| d. | Proposed utilization of tidal and non-tidal wetlands that would require an individual permit. |
| e. | Real estate acquisitions or outleases of land involving 50 acres or more where existing land use will change and will not be categorically excluded. |
| f. | Real estate acquisition of any size or in-grants or out-grants, which may be considered environmentally controversial, regardless of the appropriation or intended use. |
| g. | Family housing projects when resident population changes substantially. |
| h. | New target ranges or range mission changes that would increase environmental impact. |
| i. | Actions conducted at the request of states or territorial governments (e.g., ship sinking for artificial reefs) wherein an environmental impact is expected. |
| j. | New low-altitude aircraft training routes or special use airspace and warning areas where overflights impact persons or wildlife (particularly endangered species). |
| k. | Mission changes, base closures, relocations or 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.  

1. Any activity proposed that may adversely affect threatened or endangered species, or the designated or proposed critical habitat of an endangered species. Chapter 12 (Natural Resources Conservation) discusses the associated but separate need for a biological assessment and consultation under ESA.  

m. Any activity proposed that would adversely affect historical or cultural sites either now listed in the National Register of Historical Places or deemed eligible for inclusion in the National Register (refer to chapter 13 (Cultural Resources Compliance and Management)). 

n. Permanent closure or limitations on public access to any areas previously open to public use, such as roads or recreational areas. 

o. 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). 

p. Irreversible conversion of "prime or unique farmland" to other uses. 

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

r. Any action requiring incidental take authorizations under MBTA. 

s. Any action that may adversely affect the conditions of coral reef ecosystems. 

c. Pre-Planning and Notification 

(1) Pre-Planning Process. The pre-planning process described in section 10-3.8 should be used in initiating or conducting pre-planning activities during the environmental planning process for EAs. 

(2) Notification. Notification to OPNAV (N45) facilitates overall awareness of internal Navy environmental planning activities and proposed projects, ensures consistent application of policy, and avoids planning conflicts and delays. Notification also facilitates awareness by the chain of command of potentially controversial issues or the action proponent's intent to release a document for public review. 

(3) Notification Letters. BEFORE beginning to draft an EA (or OEA), the action proponent shall notify OPNAV (N45) in writing, via the chain of command, and upload the notification letter to the current document tracking module of the OPNAV (N45) Environmental Planning Library Web site. The notification to OPNAV (N45) must be coordinated with the AEC and REC, and if involving a renewable energy project, evidence of coordination with all affected mission-related commands. 

(a) Length of the Notification Letter. Notification letters for EAs should normally be three to five pages (not including any attachments).
(b) Contents of the Notification Letter. The contents of a notification letter for an EA should be sufficient to provide the reader with a clear understanding of the proposed action and its elements, as well as the alternatives proposed for analysis. Notification letters for EAs should be based on current knowledge and address the information identified below:

1. A brief description of proposed action and the need for the action;

2. Location(s) of the proposed action supported with maps or charts, as appropriate;

3. Date(s) of proposed action;

4. A brief explanation of how a reasonable range of alternatives will be generated and evaluated (refer to table 10-8 on EA content for further guidance on alternatives and guidance with respect to EAs supporting implementation of Integrated Natural Resources Management Plan (INRMP)). If screening criteria will be used (e.g., operational or location needs), they must be listed. Alternatively, a summary of the basis for identifying reasonable alternatives for analysis must be provided;

5. A description of any underwater sound sources that may be used (e.g., sonar, explosives, pile driving). If applicable, identify the criteria and thresholds that will be applied and the entity that will be performing the acoustic effects analysis;

6. For projects that may require permits, consultations, or authorizations, adequate advance planning time is required to ensure completion prior to the finalization of an EA and the signing of a FONSI. See exhibits posted on the Reference Materials Library on the OPNAV N45 Environmental Planning Library Web site for guidance on required coordination with OPNAV N45 and any details on the permitting, consultation, or authorization processes that may be required in a notification letter;

7. Based on current knowledge, an identification of important or potentially significant environmental issues that will be analyzed in the document (e.g., wetlands, endangered species, high noise levels, presence of marine mammals);
8. Based on current knowledge, an identification of issues of potential controversy or public interest. The action proponent will indicate whether public involvement is being considered in the form of public meetings, hearings, or public release of the document for comment (note that internet web sites that may be established to support environmental planning effort shall be in compliance with current Navy policy);

9. An identification of federal or state agencies or elected officials or tribal governments with whom the action proponent anticipates coordination, and the identity of the agency(ies) with whom a cooperating agency relationship is being considered, as well as any specific documentation needs (content or timing) that would facilitate the cooperating agency adopting the environmental planning document;

10. For joint basing actions or where there are host and tenant relationships, there should be an explanation about how the proposed action will be coordinated and approved (e.g., FONSI is to be signed by both parties) (refer to chapter 1 (Organization and Coordination) for details on host and tenant relationships);

11. For EAs requiring OPNAV (N45) endorsement or FONSI signature, or coordination with OPNAV (N45) for permits, consultations, or other authorizations, a milestone schedule (e.g., stick chart, which is preferred instead of a GANTT chart) must be included in the notification letter that identifies, at a minimum:

   a. Anticipated arrival date of the document at OPNAV (N45) for review;

   b. Projected target date for document approval or endorsement; and

   c. Any time-sensitive considerations (e.g., expiring funds);

A notional stick chart for an EA is posted on the Reference Materials Library on the OPNAV N45 Environmental Planning Library Web site.

12. If the EA involves potentially sensitive public interest issues or is scientifically controversial regarding environmental effects, the schedule should be flexible
enough to allow the scheduling of briefings if requested by OPNAV (N45) or Secretary of the Navy (SECNAV) staff or to allow for expanded public participation, if necessary; and

13. For EAs or OEAs not requiring OPNAV (N45) action, a target date by which the FONSI is expected to be signed.

(4) Cancellation Letter. If the action proponent cancels an activity for which a notification letter was submitted to OPNAV (N45), then a timely cancellation letter should be submitted to OPNAV (N45) as soon as possible after the decision to cancel a proposed action is made.

d. EA Content. When preparing an EA, the action proponent should focus on the issues of concern and make the EA no longer than required to sufficiently address those issues. The core elements that must be included in an EA are identified in table 10-8. In addition:

(1) Guidance on Assessing Impacts. The discussion of environmental impacts must provide sufficient information to support a decision to either prepare an EIS or FONSI, taking into account the definition of "significantly," as defined in section 10-5.31.

(2) Climate Change. The action proponent must address the effects of climate change in an EA. In addition to identifying greenhouse gases (GHG) that may be generated in executing the proposed action (i.e., carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride), the action proponent should quantify GHG emissions (where possible) and describe the beneficial activities being implemented Navywide to reduce GHG emissions (e.g., energy efficient construction). Prior to finalizing analysis, the action proponent should consult the latest guidance on climate change from CEQ and OPNAV (N45).

<table>
<thead>
<tr>
<th>Table 10-8. Core Components of an EA</th>
</tr>
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<tbody>
<tr>
<td><strong>EA Component</strong></td>
</tr>
</tbody>
</table>
| **Inside Cover Sheet** (1 page) | 1. A designation of the analysis as an EA.  
2. Title of the proposed action that is the subject of the EA (and if appropriate list related cooperating agency actions), together with the state(s) (or other jurisdiction(s) if applicable) where the action is located.  
3. Identity of the action proponent. Neither the Navy preparer nor the contractor shall be identified on the outside or inside cover pages. |
<table>
<thead>
<tr>
<th>EA Component</th>
<th>Guidance</th>
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<tbody>
<tr>
<td>4. Name, address, and telephone number of the person at the responsible command who can supply further information.</td>
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<tr>
<td>5. One paragraph abstract of the statement.</td>
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</tr>
<tr>
<td>Executive Summary</td>
<td>Place immediately after the cover sheet and before the table of contents to include:</td>
</tr>
<tr>
<td>(3-5 pages maximum)</td>
<td>1. Name of the action.</td>
</tr>
<tr>
<td></td>
<td>2. Brief description of the action and the affected geographical region (state and county, as applicable).</td>
</tr>
<tr>
<td></td>
<td>3. Description of alternatives considered.</td>
</tr>
<tr>
<td></td>
<td>4. Summary of the environmental impacts and major mitigating actions required.</td>
</tr>
</tbody>
</table>

### Body of EA

#### Need for the Action

Briefly describe the proposed action and concisely and objectively explain the need for the proposed action, setting out the essential requirements that must be satisfied.

#### Alternatives Including the Proposed Action

The number of alternatives identified and carried through the analysis should be determined by the level of unresolved conflicts concerning alternative uses of available resources and identified issues. For all EAs (except those prepared in support of implementing an Integrated Natural Resources Management Plan or INRMP), alternatives should, at a minimum, include the proposed action, no action, and at least one other reasonable action alternative. The rationale for not including an action alternative in addition to the proposed action and no action must be explained in detail. For actions associated with implementation of an INRMP, analysis of the proposed action and no action alternatives is acceptable without including a supporting rationale.

#### Existing Environment of the Proposed Action

1. Concisely describe the human environment and natural resources that would be affected by implementation of the proposed action. The baseline is used to compare the impacts of the various alternatives.
2. The amount of detail provided should be commensurate with the extent and impact of the action (i.e., context and intensity) and with the amount of information required at the particular level of decision-making.

#### Environmental Consequences

1. Describe the environmental impacts of reasonable alternatives in terms of direct and indirect effects and cumulative impacts, including their significance (i.e., an assessment of the positive and negative effects of the proposed action), giving primary attention to the discussion of those factors most evidently affected by the proposed action. Analyze cumulative effects.
2. Compliance with applicable regulatory processes must be addressed in the analysis and conclusions reached should be consistent with the guidance in section 10-3.4.a:
   (a) Refer to chapter 14 (Coastal Zone Management) for additional information regarding federal consistency under CZMA;
   (b) The action proponent must discuss the potential effect on threatened or endangered animal or plant species and designated critical habitat (refer to chapter 12 (Natural Resources Conservation));
<table>
<thead>
<tr>
<th>EA Component</th>
<th>Guidance</th>
</tr>
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<tbody>
<tr>
<td>(c) The action proponent must address effects on cultural and historic resources (refer to chapter 13 (Cultural Resources Compliance and Management)); and (d) Climate change using CEQ guidance in conducting the analysis.</td>
<td></td>
</tr>
<tr>
<td>3. Means to mitigate and monitor adverse environmental impacts (include in mitigation matrix or separate chapter as required by section 10-3.6).</td>
<td></td>
</tr>
<tr>
<td>List of Agencies and Persons Consulted</td>
<td>List any non-Navy agencies, organizations, groups, and persons consulted in the development of the EA.</td>
</tr>
<tr>
<td>List of Preparers (1-2 pages)</td>
<td>List the names, expertise, experience, and professional disciplines of the persons who were primarily responsible for preparing the documents or significant background papers, including Navy personnel directly responsible for review.</td>
</tr>
<tr>
<td>Appendix</td>
<td>To substantiate impact analysis and to verify consultation and coordination has been completed, each final EA must include, as appropriate and preferably in an appendix, associated correspondence, memos to file, associated e-mails, studies, biological evaluations or assessments and biological opinions, permits, final rules, the record of non-applicability (where required), etc.</td>
</tr>
</tbody>
</table>

(3) **CAA General Conformity Rule.** The action proponent must determine if the CAA General Conformity Rule (reference (s)) applies to the proposed action as defined in the EA. The CAA General Conformity Guidance (refer to chapter 22 (Clean Air Ashore)) describes the requirements and procedures for preparing a conformity evaluation. The action proponent should include the results of the conformity evaluation as an appendix to an EA proposing an action in a non-attainment or maintenance area:

(a) Where a record of non-applicability is required for a proposed action occurring in a non-attainment or maintenance area, the action proponent shall sign the record and include it, along with the supporting analysis, in the EA as an appendix; and

(b) Where a conformity evaluation is required for a proposed action, the action proponent shall distribute a "review EA" (with the draft conformity evaluation as an appendix to the EA) to the appropriate review agencies listed in the conformity rule and interested parties for a 30 working day comment period (refer to chapter 22 (Clean Air Ashore)). Concurrently, the action proponent shall publish a public notice on the availability of a draft conformity evaluation in the local newspaper. Once the EA and its conformity evaluation are
finalized by the action proponent, Navy shall process the EA internally as shown in figure 10-2.

e. **Processing EAs**

   (1) **Submitting the EA for Approval and Signature**

      (a) If the action proponent is in one of the following commands: COMUSFLTFORCOM, COMPACFLT, CNIC (and CNIC region commanders), COMNAVSEASYSCOM, or COMNAVAIRSYSCOM, he or she shall submit the designated number of copies of the completed EA via the chain of command to the flag-level official designated to sign FONSI s at its headquarters;

      (b) If the action proponent is weapons systems acquisition-related, the EA shall be processed per reference (b);

      (c) If the action proponent is not in any of the chains of command mentioned above and the proposed action is not weapons systems acquisition-related, the action proponent shall submit the EA to OPNAV (N45) for action via the chain of command;

      (d) If, based on the contents of a notification letter, OPNAV (N45) determines the proposed action involves effects of national concern, an action closely similar to one that normally requires preparation of an EIS, or an action without precedent, the action proponent will forward the EA to OPNAV (N45) via the AEC and REC (as appropriate) and the chain of command. OPNAV (N45) will review the EA and determine if a FONSI is appropriate. If so, OPNAV (N45) shall prepare the FONSI for review by ASN (EI&E) and publication in the Federal Register. OPNAV (N45) will consult with the action proponent regarding completion of any additional public notification requirements; and

      (e) EAs that require OPNAV (N45) review or action (including those involving potentially sensitive public interest issues or are scientifically controversial regarding environmental effects), shall be submitted to OPNAV (N45) with sufficient time to allow for a minimum of 30 working days for review by OPNAV (N45). Information on EA and OEA processing times is available in exhibit A in the reference library module on the OPNAV (N45) Environmental Planning Library Web site (refer to section 10-3.7.a).
(2) **EA Review and Decision-Making**

(a) **Required Reviews and Certifications.** Each EA submitted for review by the chain of command must be accompanied by a memorandum of legal sufficiency (refer to section 10-5.18) and a statement of technical review (refer to section 10-5.32).

(b) **Review of the EA.** The designated headquarters official for the commands previously listed 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 each EA includes, as applicable, appropriate regulatory and statutory conclusions as supported by the analysis (refer to section 10-3.4.a for further guidance on regulatory and statutory conclusions).

(c) **FONSI.** After evaluating the EA, the designated official of the command that has been delegated FONSI signature authority shall decide whether a FONSI is appropriate or whether the proposed action would generate significant impacts requiring preparation of an EIS.

1. The inclusion of mitigation measures as part of the proposed action may bring impacts below the threshold of significance. All mitigation committed to in the FONSI is legally binding on the action proponent and he or she must implement it.

2. All consultation and authorization processes required by law, including but not limited to, those set forth in ESA, MMPA, NHPA, MSFCMA, MBTA, CZMA, CAA, and CWA shall be completed before a FONSI may be signed (see section 10.3.4.c for specific guidance).

3. If the EA is released for public review, the FONSI shall address the comments received.

4. The FONSI shall identify the alternative to be implemented by the action proponent.

(d) **Public Notification of Signed FONSI.** If appropriate, the designated official shall prepare and sign a FONSI. After the FONSI is signed, the designated official shall notify the action proponent to complete required public notification.
1. 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 costs, the action proponent may opt for a broad mail-out of the FONSI to all regulatory and 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.

2. For projects that meet the criteria in table 10-8, the action proponent shall make the FONSI available to the public for 30 calendar days (public notices shall be published in local newspapers in addition to publication in the Federal Register by OPNAV (N45)) before the decision becomes final, after which time the action may begin.

(3) Mitigation Tracking and Uploads to Environmental Planning Library Web Site

(a) Within 30 days of FONSI signature, the mitigation measures committed to in the FONSI shall be inputted to the OPNAV (N45) Environmental Planning Library Web site using the mitigation and monitoring tracking tool within the required reporting module for subsequent tracking to completion.

(b) The action proponent must ensure that within 30 working days of FONSI signature, a copy of the final EA and FONSI is uploaded to the OPNAV (N45) Environmental Planning Library Web site. Guidance on the OPNAV (N45) Environmental Planning Library Web site is provided in section 10-3.7.c. Do not upload memoranda of legal sufficiency or statements of technical sufficiency. These documents should be retained in command files for 6 years.

(4) Public Participation Considerations for EAs

(a) CEQ's regulations recognize the importance of public participation in preparing EAs. EAs involving the preparation of a conformity evaluation must always be circulated for public review for 30 calendar days. For other EAs, the means for involving the public described in this chapter
pertinent to EISs may be employed at the action proponent's discretion. The intent is to allow the action proponent flexibility while encouraging public participation for EAs in most situations. At a minimum, action proponents should ensure appropriate communications are initiated and maintained with affected and interested parties. Action proponents desiring to involve the public in the preparation of an EA should notify OPNAV (N45) in advance of any public review of an EA or of their intent to hold public meetings (refer to notification letter requirements in section 10-3.15.c.3).

(b) In determining the extent to which public participation, including public review periods and public meetings, is practicable for an EA, the action proponent should consider the following factors:

1. The complexity and scope of the proposed action;

2. The magnitude of the environmental effects and the extent to which mitigation measures are needed to bring potential impacts to a less than significant level;

3. Anticipated public interest;

4. Any relevant questions of national security and classification; and

5. State, local, and regional common practices regarding public participation.

(c) When an action proponent decides it is appropriate to circulate an EA for public review, the public notice announcing the availability of the draft EA for public review shall be placed in local papers. The action proponent may also release a draft FONSI for public review at the same time. To provide adequate time for review of the documents, the public shall be allowed a minimum review period of 15 calendar days unless a public meeting is proposed, in which case the minimum review period is 30 calendar days. Upon completion of the final EA and the signing of a FONSI, the action proponent shall notify the public of its decision.

(d) Internet websites that may be established to support environmental planning efforts shall be in compliance with current Navy policy.
10-3.16. **Environmental Impact Statements.** In an EIS, the action proponent provides full and unbiased analysis of significant environmental impacts and informs the decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impact or enhance the quality of the human environment. Procedural requirements applicable to NEPA, as indicated in sections 10-3.4 through 10-3.9, must be followed in the preparation of EISs. These include requirements to: include regulatory and statutory conclusions in environmental planning documents; address mitigation measures and their implementation; and upload final environment planning documents to the OPNAV (N45) Environmental Planning Library Web site. Additional guidance is provided below.

a. **Actions Normally Requiring an EIS.** When an action is among those listed below, closely analogous to the same, deemed to have the potential for significant environmental impacts, or when an EA concludes impacts to be significant, the action proponent will prepare an EIS using procedures outlined in this chapter. The following are examples of actions that may have a significant impact on the quality of the human environment, 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 (large is in the context of the body of water to be dredged);

2. Proposed major construction and filling in tidelands or wetlands;

3. Establishment of major new installations;

4. Major land acquisitions that result in a change in how the property is used (a major land acquisition is as defined in reference (y));

5. New sanitary landfills; and

6. Long-term use of ranges and OPAREAs for training exercises and RDT&E, which is expected to result in takes of protected species.

b. **Pre-Planning and NOI Package**

(1) After conducting pre-planning, the action proponent will prepare an NOI package as indicated in table 10-9. The NOI package will be prepared and submitted to OPNAV (N45) via the
chain of command, including coordination with the AEC and REC. The NOI package shall also be uploaded to the current document tracking module of the OPNAV (N45) Environmental Planning Library Web site. OPNAV (N45) is responsible for conducting technical and legal review of the NOI package and coordinating with ASN(EI&E).

Table 10-9. Elements of the NOI Package

<table>
<thead>
<tr>
<th>Elements of the NOI Package</th>
<th>(Preferably no more than 20 pages total)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Cover Letter</strong></td>
<td></td>
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<tr>
<td>a. The identity of the action proponent;</td>
<td></td>
</tr>
<tr>
<td>b. The identity of the agency(ies) with which a cooperating agency relationship is being considered. For joint basing actions or where there are host or tenant relationships, there should be an explanation about how this project will be coordinated and approved, as described for EAs;</td>
<td></td>
</tr>
<tr>
<td>c. Identify any required permits, consultations, or authorizations that will be undertaken as part of the proposed action and the agencies with regulatory jurisdiction; and</td>
<td></td>
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<tr>
<td>d. List of technical and legal points of contact.</td>
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</tr>
<tr>
<td><strong>2. Draft Stick Chart</strong></td>
<td>(stick chart is preferred, rather than a GANTT chart): Ensure the stick chart delineates key milestones, including but not limited to:</td>
</tr>
<tr>
<td>a. Anticipated publication of the NOI;</td>
<td></td>
</tr>
<tr>
<td>b. Dates for scoping meetings;</td>
<td></td>
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<tr>
<td>c. Key dates for submittal of permit applications and consultation packages and proposed and final rules and biological opinions, as appropriate;</td>
<td></td>
</tr>
<tr>
<td>d. Anticipated date for completion of a draft EIS;</td>
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<tr>
<td>e. Target date for completion of an FEIS and ROD signature; and</td>
<td></td>
</tr>
<tr>
<td>f. Tiger team reviews.</td>
<td>An example stick chart is provided in the reference material module of the OPNAV (N45) Environmental Planning Library.</td>
</tr>
<tr>
<td><strong>3. Endorsements:</strong> Ensure the NOI package contains proper chain of command endorsements.</td>
<td></td>
</tr>
<tr>
<td><strong>4. Preliminary DOPAA:</strong> (10 pages excluding maps and charts)</td>
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</tr>
<tr>
<td>a. Cover with the identity of the action proponent and, if applicable, the cooperating agency(ies);</td>
<td></td>
</tr>
<tr>
<td>b. Summary and scope of the proposed action including locations to be affected (with maps or charts);</td>
<td></td>
</tr>
<tr>
<td>c. Summary of purpose and need (including mission and background, as appropriate);</td>
<td></td>
</tr>
<tr>
<td>d. A brief explanation of how a reasonable range of alternatives will be generated and evaluated. If screening criteria will be used (e.g., operational or location needs), they must be listed. Alternatively, a summary of the basis for identifying reasonable alternatives for analysis must be provided;</td>
<td></td>
</tr>
<tr>
<td>e. Proposed alternatives (with maps or tables);</td>
<td></td>
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<tr>
<td>f. Regulatory considerations (e.g., potential permitting, consultations);</td>
<td></td>
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<tr>
<td>g. Based on current knowledge, a summary of anticipated issues of</td>
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10-61
concern, including Congressional issues, public interest issues, and issues of other interested parties;

h. Summary of public involvement plan (which shall include how internet websites that may be established to support the environmental planning effort shall be in compliance with current Navy policy); and

i. Summary of project schedule.

5. Draft NOI: Prepare a draft NOI using the template below.

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent to Prepare an Environmental Impact Statement for [PROPOSED ACTION] at [INSTALLATION/RANGE/OPAREA], [CITY/COUNTY], [STATE] and to Announce Public Scoping Meetings

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to section (102)(2)(c) of the National Environmental Policy Act (NEPA) of 1969, and the regulations implemented by the Council on Environmental Quality (parts 1500-1508 of title 40 CFR), the Department of the Navy (Navy) announces its intent to prepare an environmental impact statement (EIS) to evaluate the potential environmental consequences of [SUMMARY OF PROPOSED ACTION AND ITS COMPONENTS].

DATES AND ADDRESSES: Public scoping meetings will be held in [CITY/COUNTY/STATE] to receive oral and written comments on environmental concerns that should be addressed in the EIS. Public scoping meetings will be held on [DAYS, DATES, TIMES, LOCATIONS].

FOR FURTHER INFORMATION CONTACT: [POC, COMMAND, ADDRESS, TELEPHONE, FACSIMILE, E-MAIL ADDRESS].

SUPPLEMENTAL INFORMATION: [TEXT SHOULD COVER THE FOLLOWING, AS APPROPRIATE]:

- Brief description of the proposed action, including identification of action proponent and any cooperating agency.
- Locations to be affected.
- Purpose and need for the action.
- Alternatives to be considered.
- Extent and duration of action.
- Resources to be evaluated based on knowledge of sensitive issues.
- Deadline for receipt of written comments.
- Point of contact with address, telephone, facsimile, and e-mail address (as appropriate) to whom comments should be sent.

(2) OPNAV (N45) will coordinate the NOI with ASN(EI&E), then publish the NOI in the Federal Register. The action proponent will mail the NOI directly to concerned agencies and persons and also publish the NOI in local newspapers. The action proponent will also post the NOI on the project Web site, if established by an action proponent. Per reference (t), whenever practicable and appropriate, the action proponent will translate the NOI and scoping meeting announcement for non-English speaking communities or interested persons.
(3) If the action proponent cancels an activity for which an NOI was published, then the action proponent shall submit a cancellation letter (with proper endorsements) via the chain of command to OPNAV (N45) as soon as possible after the decision to cancel a proposed action is made.

c. Scoping

(1) Action proponents shall ensure the scoping process employed fulfills the requirements of NEPA or E.O. 12114, as applicable.

(2) Action proponents may hold public 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.

(3) If a public scoping meeting is to occur, a notice of the public scoping meeting will be included as part of the NOI. Scoping meetings shall be held at least 15 calendar days following the publication of the NOI. The action proponent should refer to section 10-3.16.e.2 for guidance on procedures for conducting public meetings and hearings. Action proponents shall use public input received during scoping to identify and eliminate from detailed study insignificant issues or those previously covered by other environmental planning documents.

d. DEISs

(1) Process Timeline. EISs shall be prepared in an expeditious manner taking into consideration timelines required for compliance with applicable laws, regulations, and this manual. Information on EIS processing times is available in the reference library module on the OPNAV (N45) Environmental Planning Library Web site (refer to section 10-3.7.a).

(2) DEIS Content

(a) General Guidelines. Action proponents shall prepare EISs considering the following:

1. EISs should be analytic rather than encyclopedic. The action proponent should make every effort to
restrict the document only to pertinent facts, excluding material not directly applicable to the expected impact and ensure there is sufficient information and baseline data to support the conclusions reached. If desired, the action proponent may include additional data in appendices to the EIS; and

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

(b) Core Components of the DEIS. The core components for an EIS are identified in table 10-10. All relevant resource areas should be addressed in the description of the existing environment and the analysis of environmental consequences. In addition, where appropriate, the EIS must identify the effects of climate change that may occur in executing the proposed action. GHG emissions should be analyzed as recommended by CEQ guidance and the beneficial activities being implemented Navywide to reduce GHG emissions (e.g., energy efficient construction) should be described. Prior to finalizing analysis, the action proponent should consult the latest guidance on GHGs from OPNAV (N45).

(c) Document Formatting. It is preferable documents be formatted such that they may be readily reproduced by the public. Accordingly, to the extent practicable, action proponents should prepare all pages of the original document on 8 1/2 by 11-inch bond, although it is permissible to use foldout sheets as long as they retain the 11-inch vertical dimension.

Table 10-10. Core Components of an EIS

<table>
<thead>
<tr>
<th>EIS Component</th>
<th>Guidance</th>
</tr>
</thead>
</table>
| Inside Cover Sheet | 1. Designation of the analysis as a DEIS or FEIS, or draft or final supplement.  
2. Title of the proposed action that is the subject of the environmental analysis (and, if appropriate, list of related cooperating agency actions), together with the state(s) (or other jurisdiction if applicable) where the action is located.  
3. Identity of the action proponent. Neither the Navy preparer nor the contractor shall be identified on the outside or inside cover pages.  
4. Name, address, and telephone number of the person at the responsible command who can supply further information.  
5. One paragraph abstract of the statement. |
<p>| Executive Summary | Place immediately after the cover sheet and before the table of contents to include: |</p>
<table>
<thead>
<tr>
<th>EIS Component</th>
<th>Guidance</th>
</tr>
</thead>
</table>
| (Preferably less than 20 pages) | 1. Name of the action.  
2. Description of the action and the affected geographical region (state and county, as applicable).  
3. Description of alternatives considered.  
4. Summary of the environmental impacts and major mitigating actions required.  
5. Summary of significant environmental impacts of the proposed action and the alternatives in comparative (matrix) form (no more than 5 pages). |

**Body of EIS**

**Purpose of and Need for the Action**

Briefly describe the proposed action and explain the purpose of and need for the proposed action concisely and objectively. Set out the justification for the action (its purpose, goal, or objective to be achieved by the proposed action) and the essential requirements that must be satisfied to achieve the purposes of the action (its need or why the requirement is essential to Navy).

**Alternatives Including the Proposed Action**

1. Rigorously explore and objectively evaluate the environmental impacts of all reasonable alternatives, particularly those that might enhance environmental quality or avoid some or all adverse environmental effects.  
2. Describe the criteria for selecting alternatives. Where relevant, include alternatives to the proposed action not within the existing authority of the agency.  
3. Indicate those considerations, including factors not related to environmental quality that are likely to be relevant and important to a decision to prevent premature foreclosure of options that might enhance environmental quality or have less detrimental effects.  
4. Examples of alternatives include: taking no action; postponing action; selecting actions of a significantly different nature (i.e., meeting mission and project objectives with different environmental impacts); and different designs or details of the proposed action that would present different environmental impacts (including mitigation measures).  
5. The alternatives analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the proposed action and each reasonable alternative.  
6. The FEIS shall identify the action proponent's preferred alternative (if not previously identified in the DEIS).

**Existing Environment of the Proposed Action**

1. Concisely describe the human environment and natural resources that would be affected by implementation of the proposed action. The baseline is used to compare the impacts of the various alternatives.  
2. The amount of detail provided should be commensurate with the extent and impact of the action (i.e., context and intensity) and with the amount of information required at the particular level of decision-making.

**Environmental Consequences**

1. Describe the environmental impacts of reasonable alternatives in terms of:  
   a. Direct and indirect effects and their significance (i.e., an assessment of the positive and negative effects of
### EIS Component

<table>
<thead>
<tr>
<th>Guidance</th>
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<tbody>
<tr>
<td>the proposed action) giving attention those factors most evidently affected by the proposed action.</td>
</tr>
<tr>
<td>b. Cumulative impacts as appropriate and in context with the action's scope and magnitude.</td>
</tr>
<tr>
<td>c. Relationships between the proposed action and the objectives of Federal, State, and local land use plans, policies, and controls for the area concerned.</td>
</tr>
<tr>
<td>d. Irreversible or irretrievable commitments of resources anticipated upon implementation of the proposed action.</td>
</tr>
<tr>
<td>e. Adverse environmental impacts that cannot be avoided if the proposal is implemented.</td>
</tr>
<tr>
<td>f. Relationship between local, short-term use of man's environment and maintenance and enhancement of long-term biological productivity.</td>
</tr>
<tr>
<td>g. Means to mitigate and monitor adverse environmental impacts as required by section 10-3.6 (include in a separate chapter or at a minimum in a mitigation matrix).</td>
</tr>
<tr>
<td>h. Compliance with applicable regulatory processes must be addressed in the analysis (refer to section 10-3.4.a and section 10-3.4.c).</td>
</tr>
</tbody>
</table>

2. For FEISs, discuss and provide responses to substantive public comments received on the DEIS.

3. Summarize the significant environmental impacts of the proposed action and the alternatives in comparative (matrix) form (no more than five pages) (same matrix as used in the executive summary).

### List of Preparers

List the names, expertise, experience, and professional disciplines of the persons who were primarily responsible for preparing the documents or significant background papers, including Navy personnel directly responsible for review. The list should not exceed two pages.

### Distribution List

List the names and addresses of all Federal, State, and local organizations and persons to whom the EIS is distributed.

### Appendix

1. Include any of the following information as appendices to the EIS:
   a. Material prepared in connection with an EIS (as distinct from material that is not so prepared or bulky documentation that is incorporated by reference).
   b. Analytic and relevant material to the decision to be made (e.g., biological evaluations or assessments and biological opinions; coastal consistency or negative determinations; archaeological, historical, or cultural evaluations).
   c. Material that substantiates any analysis fundamental to the impact statement (e.g., permits, final rules).
   d. The results of the conformity evaluation as an appendix to the EIS if the proposed action is in a non-attainment or maintenance area.

2. To substantiate impact analysis and to verify consultation and coordination has been completed, each final EA must include, as appropriate and preferably in an appendix,
(3) **DEIS Review and Processing**

(a) **Headquarters Review of Preliminary DEIS.** The action proponent shall submit the preliminary DEIS for review by OPNAV (N45) and ASN(EI&E) staff beginning with V.2 (staff review) (refer to table 10-4 for an explanation regarding EIS versions). The V.2 staff review of the DEIS shall be accompanied by a written status summary (no more than three pages in length) on the progress of all consultation, coordination, and authorization processes pertaining to the proposed action.

(b) **Filing of the DEIS.** Upon ASN(EI&E) approval, OPNAV (N45) files DEIS V.4 (release version) with the Environmental Protection Agency (EPA) and informs EPA via e-mail of the project's Web site. The Office of Legislative Affairs (OLA) will make the Congressional notification no later than 3 working days prior to publication of the NOA in the Federal Register. The action proponent will ensure the DEIS is posted electronically on the project Web site the same day as the DEIS is filed with EPA.

(c) **Public Distribution of the DEIS.** Reference (u) requires that action proponents publicly distribute DEISs no later than the time the DEIS is filed with EPA. Action proponents, OPNAV (N45), and the Navy Secretariat must coordinate closely to ensure the DEIS is approved for release early enough to enable the action proponent to make the required distribution. The action proponent shall forward copies of the DEIS to the appropriate state, regional, and metropolitan clearinghouses (unless otherwise designated) at the same time (same day) that the DEIS is distributed. Unless there is a specific request for paper copies, Navy prefers to post the DEIS on its project Web site and distribute electronic copies of the document. The DEIS should be made available for public review in local outlets such as libraries or county commissioners' offices, whenever possible. Whenever practicable and appropriate, the action proponent shall translate the DEIS executive summary into languages other than English.
Public Review Period. A minimum of 45 calendar days is allocated for agency and public review, beginning with the date on which EPA publishes the NOA of the DEIS in the Federal Register. Normally that date shall be the Friday following the week that the DEIS is filed with EPA. Congressional notifications by the Navy OLA must be conducted prior to the publication of the NOA in the Federal Register. The action proponent may extend the review time in response to a timely written request for additional comment time. An interested party’s failure to file timely comments shall not be a sufficient reason for Navy to extend the review period. Where the case requires a conformity evaluation, the action proponent shall publish a notice on the availability of a draft conformity evaluation in the local newspaper when the DEIS is filed with EPA, and ensure the comment period runs concurrently with the 45-day DEIS review period.

e. Public Involvement

(1) Public Involvement Plans. Action proponents should prepare a public involvement plan when undertaking preparation of an EIS. In this plan, the action proponent should consider distributing the DEIS for review and conducting other outreach efforts, as appropriate, to:

(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) Tribal governments when the effects of Navy proposed actions may impact their rights in any manner, on or off reservations;

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

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

(f) Minority and low-income populations.
(2) **Guidance for Conducting Public Meetings and Hearings**

(a) **General.** Action proponents may conduct public meetings and hearings to fulfill the public involvement requirements of NEPA. Public meetings and hearings are appropriate in the following situations:

1. Where Navy's proposed action will have a direct or peculiar environmental impact on the people living in a particular geographic area;

2. Where public organizations or members of the public possess expertise concerning the environmental impact of the action that may not otherwise be available;

3. 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;

4. When another agency with jurisdiction over the action submits a request for a hearing and supports its reasons why a hearing will be helpful; or

5. Where the proposed action may affect a minority or low-income population.

(b) **Formats for Public Meetings or Hearings.** The format for a public meeting or hearing should be tailored to meet the action proponent's objectives. The formats available to Navy environmental planners include town hall meetings, public information or poster sessions, and combinations thereof. These formats share the same basic premise, which is to open up lines of communication to increase knowledge and understanding, enhance trust and credibility, and resolve conflict. Whenever practicable and appropriate, the action proponent shall translate crucial meeting materials (e.g., factsheets, summaries, displays) into languages other than English and provide interpreters at public meetings to ensure all citizens, including those with limited writing ability and who speak limited English, can provide comments.

(c) **Timing and Notice of Public Meeting or Hearing**

1. If the action proponent decides to hold a public meeting or hearing, it shall be scheduled at least 15
calendar days after the publication of the NOA by EPA in the Federal Register and preferably no less than 10 calendar days before the close of the public comment period to allow adequate time for the submission of written comments. OPNAV (N45) is responsible for publishing the notice of public hearing (NOPH) in the Federal Register.

2. The action proponent shall include information listed in table 10-11, as appropriate, in the draft NOPH submitted to OPNAV (N45) for publication. The Federal Register notice is in addition to publication of a NOPH in local newspapers. Public meetings not required under NEPA need not be announced in the Federal Register; announcement in local newspapers is sufficient. Per reference (t), wherever practicable and appropriate, announce public meetings in local foreign language newspapers.

3. Formal written requests received from Federal, State, or local elected officials, agencies, tribal governments, nongovernmental organizations, or individuals to extend public comment periods should be coordinated with OPNAV (N45). When appropriate, OPNAV (N45) will arrange for a public comment period extension notice to be published in the Federal Register. The action proponent will be responsible for the publication of similar notices in local newspapers.

Table 10-11. Information Required in NOPHs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Navy point of contact with mailing address of who is designated to receive all written comments or answer questions.</td>
</tr>
<tr>
<td>2</td>
<td>The location, date, and time for the public hearing or meeting.</td>
</tr>
<tr>
<td>3</td>
<td>A summary of the proposed action.</td>
</tr>
<tr>
<td>4</td>
<td>A summary of the findings contained in the environmental planning document.</td>
</tr>
<tr>
<td>5</td>
<td>Any limitations on the length of oral statements and a suggestion that technical statements or statements of considerable length be submitted in writing.</td>
</tr>
<tr>
<td>6</td>
<td>The date by which comments must be received or postmarked.</td>
</tr>
<tr>
<td>7</td>
<td>The location(s) where the environmental planning document is available for examination.</td>
</tr>
</tbody>
</table>

(d) Translations. When practicable and appropriate, the action proponent shall translate the FEIS executive summary into languages other than English.

(e) Record of Attendance. It is recommended that a record of the names and addresses of meeting attendees be kept, when appropriate, to ensure a complete administrative record and for purposes of mailing lists. In some instances, keeping a
tally or count of the number of meeting attendees may be appropriate because of the impracticality of having attendees sign in due to logistics issues. Action proponent shall take the necessary steps to protect the names and address information of private citizens from disclosure to the extent allowable by law.

f. FEISs

(1) Process Timeline. The action proponent may announce availability of the FEIS no less than 45 days from the date the announcement of the DEIS appears in the Federal Register.

(2) Core Components of FEISs. In addition to the core components of a DEIS identified in table 10-10, the action proponent shall:

(a) Identify a preferred alternative in the FEIS if not previously identified in the DEIS.

(b) If appropriate, include the final conformity evaluation in the FEIS.

(c) Incorporate into the FEIS all relevant 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 in the FEIS the relevant individual comments received from agencies and the public, followed by an appropriate response. Including verbatim transcripts of public hearings in the FEIS is not required or desired but should be included in the administrative record. Action proponents shall also include a meaningful response to all reasonable opposing views that have not been adequately addressed in the DEIS. Possible types of comment response strategies that the action proponent may employ in preparing the FEIS may include:

1. Modify alternatives including the proposed action;

2. Develop and evaluate alternatives not previously given serious consideration;

3. Supplement, improve, or modify the analyses;

4. Make factual corrections;
5. Provide explanations of 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; and

6. 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) FEIS Review and Processing

(a) FEIS Submittal. The action proponent shall submit the FEIS for review to OPNAV (N45) and ASN(EI&E) staff beginning with V.2 (staff review). Information on EIS processing times is available on the OPNAV (N45) Environmental Planning Library Web site (refer to section 10-3.7.a).

(b) Completion of Consultation and Authorization Processes. All consultation and authorization processes required by law, including but not limited to those set forth in ESA, MMPA, NHPA, MSFCMA, MBTA, CZMA, CAA, and CWA, shall be completed prior to FEIS publication. In the context of CAA and CWA, it is expected that the initial coordination with the regulatory agency will have occurred and any design or operating requirements or parameters have been identified and assessed as part of the NEPA or E.O. 12114 process (refer to section 10-3.4.c).

1. With the submission of V.2 of the preliminary draft FEIS (refer to table 10-4 for an explanation regarding versions), the action proponent shall include an update on the status of completion for all consultation, coordination, and authorization processes pertaining to the proposed action. The summary should be no more than three pages in length and shall identify whether such consultation, coordination, and authorization processes will be completed prior to FEIS briefing to ASN(EI&E). This updated status summary must be accompanied by supporting official correspondence, e-mail, meeting records, etc. that support the report's findings;

2. In situations where completion of the required consultation, coordination, or authorization processes cannot be completed in time to support the completion of the
FEIS, a detailed justification for moving forward with the FEIS must be submitted to OPNAV (N45) and ASN(EI&E); and

3. If appropriate, the action proponent shall include the final conformity evaluation in the FEIS.

(c) FEIS Processing. Upon ASN(EI&E) approval, OPNAV (N45) files FEIS V.4 (release version) with EPA. 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. Reference (u) requires that action proponents publicly distribute FEISs no later than the time the FEIS is filed with EPA. Action proponents, OPNAV (N45), and the Navy Secretariat must coordinate closely to ensure the FEIS is approved for release early enough to enable the action proponent to make the required distribution. Congressional notifications by the Navy OLA must be conducted prior to the publication of the NOA in the Federal Register. The FEIS should be made available for public review in the same local outlets as the DEIS. Unless there is a specific request for paper copies, Navy prefers to post the FEIS on its project Web site and distribute electronic copies of the document. OLA will make the Congressional notification not later than 3 days prior to publication of the NOA in the Federal Register. The action proponent will ensure the FEIS is posted electronically on the project Web site no later than when OPNAV (N45) files the FEIS with EPA.

g. ROD. The signing of a ROD completes the EIS process. OPNAV (N45) and ASN(EI&E) staff, in coordination with the action proponent, prepares the ROD for publication and ASN(EI&E) or ASN(RD&A), as appropriate, approves it. All mitigation committed to in a ROD is legally binding on the action proponent.

(1) Template for a ROD. RODs should be prepared using the template identified in table 10-12, as appropriate. As a matter of special emphasis, the ROD must be totally consistent with information presented in the EIS (i.e., every factual assertion in the ROD must be supported by specific analysis or discussion in the EIS). The ROD must be grammatically correct and carefully proofread. It should also be written in standard English and avoid the use of overly technical terms or jargon.

(2) Publishing a Notice in the Federal Register. OPNAV (N45) shall publish a notice summarizing the signed ROD in the Federal Register. The action proponent shall distribute a ROD.
notice to all interested parties, and, if appropriate, publish an NOA of the final conformity evaluation in local newspapers and distribute it to agencies and interested parties within 30 calendar days of the approval of the ROD.

(3) Implementing the Action

(a) Action proponents shall delay committing resources irreversibly for a proposed action until the later of the following dates:

1. Ninety calendar days after publication of the Federal Register notice announcing the filing of the DEIS with EPA; or

2. Thirty calendar days after publication of the Federal Register notice of the filing of the FEIS with EPA (wait period).

(b) Within 30 days of ROD signature, the mitigation measures committed to in the ROD shall be inputted to the OPNAV (N45) Environmental Planning Library Web site using the mitigation and monitoring tracking tool within the required reporting module for subsequent tracking to completion.

Table 10-12. Template for a ROD

<table>
<thead>
<tr>
<th>DEPARTMENT OF DEFENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of the Navy</td>
</tr>
<tr>
<td>Record of Decision for the Final Environmental Impact Statement (FEIS) for [PROPOSED ACTION] at [INSTALLATION/RANGE/OPAREA], [CITY], [STATE]</td>
</tr>
<tr>
<td>AGENCY: Department of the Navy, DoD.</td>
</tr>
<tr>
<td>ACTION: Record of Decision.</td>
</tr>
<tr>
<td>SUMMARY: The U.S. Department of the Navy (Navy), after carefully weighing the strategic, operational, and environmental consequences of the proposed action announces its decision to [SUMMARY OF DECISION].</td>
</tr>
<tr>
<td>FOR FURTHER INFORMATION CONTACT: [POC, COMMAND, ADDRESS, TELEPHONE, FACSIMILE, E-MAIL ADDRESS].</td>
</tr>
<tr>
<td>A. SUPPLEMENTARY INFORMATION: Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, sections 4321 et seq. of title 42, U.S.C., Council on Environmental Quality regulations (parts 1500-1508 of title 40 CFR), and Department of the Navy regulations (part 775 of title 32 CFR), Navy announces its decision to [STATE DECISION]. This decision will enable Navy to [COMPLETE WITH RESTATEMENT OF HOW PROPOSED ACTION MEETS PURPOSE AND NEED].</td>
</tr>
</tbody>
</table>
B. BACKGROUND AND ISSUES: [Provide background essential for reader to understand the issue(s) or context of the action].

Purpose and Need

Public Involvement

Alternatives Considered
- Describe the screening process used to identify a reasonable range of alternatives, including alternatives eliminated from consideration (where applicable).
- Summarize the range of alternatives.
- Identify the environmentally preferable alternative.

Environmental Impacts: [SUMMARIZE ENVIRONMENTAL EFFECTS].

Mitigation Measures
- Identify any mitigation measures selected.
- State whether all practicable means to avoid or minimize significant environmental harm from the selected alternative were adopted, and if not, why they were not.

Summarize any provisions for monitoring, where applicable, for mitigation.

Agency Consultation and Coordination: [Include identification of cooperating agencies and their expertise, where applicable].

Responses to Comments Received on the FEIS [Discuss only substantive comments not already addressed in the DEIS]: Navy reviewed and considered all comments that were received during the 30-day wait period following the issuance of the Notice of Availability of the FEIS. The comments summarized here represent the major substantive comments received. A total of XX comment letters or e-mails totaling XXX comments were received on the FEIS. All but XX of the comments were similar or identical to comments received on the Draft EIS that were previously considered and addressed in the FEIS. The majority of the comments received were concerned with [ISSUE 1] (XX percent). The next most significant number of comments concerned [ISSUE 2] (XX percent), [ADDRESS ADDITIONAL SIGNIFICANT CONCERNS]. The remaining comments addressed [SUMMARY OF REMAINING COMMENTS]. Comments warranting specific responses are provided below.

Comment 1, etc.: [SUMMARIZE COMMENT].
Response: [RESPONSE TO COMMENT].
C. CONCLUSION:

- Explain the rationale for the decision.
- Discuss preferences among alternatives based on relevant factors including economic, technical, and mission considerations.
- Identify and discuss any essential considerations of national policy that entered into the decision.

Discuss any factors that were not discussed in the EIS (e.g., cost or operational considerations).

Example Text: Based on the environmental impacts analyzed in the FEIS, comments from regulatory agencies as well as those received from members of the public, mitigation (if applicable), costs (if applicable), and other factors discussed above, I select alternative [IDENTIFY ALTERNATIVE SELECTED] to implement the proposed action [include, if necessary, discussion of additional factors outside the EIS that influenced the decision, otherwise cover in the Conclusion].

10-3.17. Emergency Actions

a. CEQ regulations allow the use of "alternative arrangements" in place of an EIS in emergency circumstances when approved by CEQ. Requests for such determinations must be submitted to OPNAV (N45) via the chain of command. Action proponents shall consult with OPNAV (N45) prior to submitting such requests.

b. DO NOT DELAY IMMEDIATE ACTIONS NECESSARY TO EITHER SECURE THE LIVES AND SAFETY OF PERSONNEL OR PROTECT NATIONAL SECURITY ASSETS BEFORE CONSULTING WITH OPNAV (N45), BUT CONSULT WITH OPNAV (N45) AS SOON AS POSSIBLE THEREAFTER.

10-3.18. Environmental Planning Under E.O. 12114 Compliance Overview

a. E.O. 12114 provides the exclusive and complete set of requirements for assessing the effects of major Navy actions that may significantly harm the environment of places outside the U.S., its territories, and possessions. This section describes environmental policy and procedures for carrying out the purpose of E.O. 12114 in the U.S. EEZ, the global commons (high seas), FEEZs, and foreign territorial seas and territory. Nothing in this section is intended to conflict with international legal requirements in an EEZ of a foreign nation. However, for actions ashore, the requirements of chapter 34 (Overseas Environmental Compliance Ashore) and applicable FGS for the affected host nation(s) apply. If FGS have not been issued for the affected host foreign nation(s), Navy shore
activities will comply with the applicable SOFA and reference (i).

b. For each proposed major Navy action that is not excluded or exempted from compliance with E.O. 12114, the action proponent shall complete environmental planning documentation per sections 10-3.19, 10-3.25, or 10-3.26, as appropriate. Figure 10-3 illustrates the E.O. 12114 environmental planning process as described below.

10-3.19. Major Navy Actions Abroad. E.O. 12114 (reference (e)) only applies to Navy actions carried out directly or indirectly funded by Navy, including Navy training and testing at sea. A CO is responsible for determining which at-sea activities are being conducted primarily for the purposes of training.

a. Factors to Consider in Determining if an Action is a Major Navy Action Abroad. In making a determination whether an action is a major Navy action, the action proponent shall consider the following:

(1) Per reference (f), a major action involves substantial expenditures of time, money, and resources by Navy; affects the environment on a large geographic scale or has substantial environmental effects on a more limited geographical area; and is substantially different or a significant departure from other Navy actions.

(2) Per reference (c), major training exercises are major Navy actions. Other factors for consideration are:

(a) Unique characteristics of the geographic area affected;

(b) Intensity and scope of the action; and

(c) Nature of the effects (direct and indirect).
Figure 10.3. E.O. 12114 Environmental Planning Flow Chart for Navy Actions

Determine the Applicability of E.O. 12114 to Navy Activities Abroad

<table>
<thead>
<tr>
<th>Major Federal (Navy) Action (section 10-3.19)</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does action affect the U.S. EEZ, global commons, or a foreign nation(s) (including a foreign EEZ or foreign territorial sea or territory)?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does an exemption apply (section 10-3.20)?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does an overseas CATEX apply (none currently listed)?</td>
<td>No</td>
</tr>
<tr>
<td>Is previously approved Navy environmental planning documentation available for the action?</td>
<td>No</td>
</tr>
<tr>
<td>E.O. 12114 DOES NOT APPLY.</td>
<td>No further action required.</td>
</tr>
</tbody>
</table>

Where effects are within the U.S. territorial sea and the U.S. EEZ, a combined NEPA/E.O. 12114 environmental planning document is prepared.

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<thead>
<tr>
<th>Action Affects FEEZ (200-12 NM) (notes 1,2)</th>
<th>Action Affects Territorial Sea or Territory of Foreign Nation (12-0 NM) (notes 1,2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of action are unknown</td>
<td>Action may not significantly harm</td>
</tr>
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<td>Action may significantly harm</td>
<td>Action may significantly harm</td>
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<td>Action may not significantly harm</td>
<td>Action may not significantly harm</td>
</tr>
<tr>
<td>MOI package to OPNAV (N45).</td>
<td>Prepare an ES or ER (section 10-3.27).</td>
</tr>
<tr>
<td>Prepare an OEA (section 10-3.25).</td>
<td>Implement action, upload ER or OES, and input mitigation to Environmental Planning Library Website, and monitor effectiveness and completion (section 10-3.7.c).</td>
</tr>
<tr>
<td>Coordinate and submit notification letter to OPNAV (N45).</td>
<td>Document decision (section 10-3.27.e).</td>
</tr>
<tr>
<td>Implement action, upload ER or OES, and input mitigation to Environmental Planning Library Website, and monitor effectiveness and completion (section 10-3.7.c).</td>
<td>Implement action, upload ER or OES, and input mitigation to Environmental Planning Library Website, and monitor effectiveness and completion (section 10-3.7.c).</td>
</tr>
</tbody>
</table>

NOTES:
1) Within a foreign nation's territorial sea, U.S. forces conduct training or testing only when the foreign nation has expressly or implicitly given concurrence or approval (i.e., the "host" nation is always a participant).
2) An FEIS is prepared when a major Navy action may significantly harm a protected global resource (none currently designated).
3) The application of the Protective Measures Assessment Protocol (PMAP) in conducting Navy training or testing precludes any Navy at sea training exercise or testing in an FEEZ from significantly harming the environment.
4) An OEIS is prepared when it is in the best interest of the Navy and regulator requirements.
b. Navy Action is Not a Major Action Abroad. If the action proponent determines that a proposed action is not a major Navy action, E.O. 12114 does not apply and no further action is necessary.

(1) Per reference (f), actions involving the routine deployment of ships, aircraft, or other mobile military equipment are not major Navy actions.

(2) Routine training, testing, and minor exercises at sea are not major Navy actions. Generally, routine training, testing, and minor exercises:

(a) Are associated with transits; maneuvering; safety and engineering drills; replenishments; flight operations; and shipboard or airborne gunnery, missile, or torpedo firings;

(b) Are conducted as unit operating schedules permit;

(c) Are not repeated in the same vicinity;

(d) Use available sensors and assets within normal operating parameters;

(e) Are conducted per all applicable standard operating procedures protective of the environment (e.g., apply the Protective Measures Assessment Protocol or PMAP); and

(f) Ordinarily have only minor, localized, and transient effects on the environment.

10-3.20. Exemptions to the Requirement to Prepare Environmental Documentation Under E.O. 12114. References (e) and (f) establish a number of exemptions from E.O. 12114 applicability when a major Navy action would affect a FEEZ, territorial sea, or territory. A negative decision is the appropriate documentation for reliance on an exemption (refer to section 10-3.21).

a. General Exemptions. References (e) and (f) establish general exemptions that can be used without approval from a higher authority. The general exemptions most commonly applicable to Navy actions are as interpreted below:
(1) Actions that lack any potential to cause significant harm to the environment outside the United States (refer to section 10-3.24 for guidance on making a significant harm determination). To rely on this exemption, action proponents must be certain that a proposed action lacks the potential to cause significant harm;

(2) Actions taken or directed by the President or a cabinet officer during armed conflict. This exemption applies to actions during armed conflict and as long as the armed conflict continues. Armed conflict includes: a state of war declared by Congress and hostilities for which Congress has authorized the use of armed force; hostilities or situations for which a report is prescribed by section 4(a)(1) of the War Powers Resolution (section 1543 (a)(1) of reference (v)); and other actions by U.S. Armed Forces involving defensive use or introduction of weapons into situations in which hostilities have occurred or are reasonably expected;

(3) Actions taken or directed by the President or a cabinet officer when national security or national interests are involved that the Under Secretary of Defense (Acquisition Technology & Logistics) (USD(AT&L)) has determined, in writing, to involve national security or national interest;

(4) Activities applicable to the Office of Naval Intelligence pursuant to reference (f);

(5) Activities of the Navy International Programs Office and other activities pertaining to arms transfer. Arms transfer includes granting, loaning, leasing, exchanging, and selling defense articles and services to foreign governments or international organizations, and extending or guaranteeing credit in connection therewith;

(6) Navy participation in disaster and emergency relief, or providing assistance to, relief efforts; and

(7) Actions involving nuclear activities and nuclear material, excluding actions providing "nuclear production;" a "utilization facility," as defined in reference (w); or a "nuclear waste management facility" to a foreign nation.

b. Case-by-Case Exemptions. If a case-by-case exemption applies, the action proponent shall obtain written approval of the SECNAV via the chain of command to apply the exemption to the proposed action. Upon receipt of written approval of the
SECNAV, the action proponent shall prepare a negative decision (refer to section 10-3.21).

(1) **Emergencies.** This exemption applies to actions to promote national defense or security that must be taken without delay and to actions necessary to protect life or property. The SECNAV will report the granting of this exemption to USD(AT&L) who, working through the Assistant Secretary of Defense (International Security Affairs) (ASD(ISA)), will inform and consult with DOS. For cases within the purview of CEQ, ASN(EI&E) will notify and confer with CEQ as soon as it is feasible.

(2) **IMMINENT DANGER:** IMMEDIATE ACTIONS NECESSARY TO EITHER PRESERVE LIVES OR PROTECT NATIONAL SECURITY ASSETS FROM IMMINENT DANGER SHOULD NOT BE DELAYED TO ACCOMMODATE IDENTIFIED CONSULTATION AND COORDINATION REQUIREMENTS.

(3) **Special Circumstances.** National security considerations, exceptional foreign policy interests, and other special circumstances not identified in the general exemptions listed above may preclude or be inconsistent with preparation of environmental planning documentation. In such cases, the SECNAV, with approval of USD(AT&L), may exempt an action from the environmental planning requirements of section 10-3.20.a. Before granting approval, USD(AT&L), working through ASD(ISA), shall consult with DOS and CEQ.

(4) **Class Exemptions for Related Actions.** At present, there are no class exemptions. The SECNAV, after coordination with other interested DoD components, may submit a request for a class exemption for groups of related actions to USD(AT&L), who is the approval authority for exemptions. Working through ASD(ISA), USD(AT&L) shall consult with DOS and CEQ on such requests.

10-3.21. Negative Decision. Negative decisions are prepared and signed by the CO or his or her designee or the PM for a weapons systems acquisition action. As applicable, a negative decision shall include the elements identified in table 10-13.

10-3.22. Overseas Categorical Exclusions. At present, there are no approved overseas CATEXs. Should overseas CATEXs be established by the Office of the Secretary of Defense, OPNAV (N45) will provide implementation guidance. Refer to section 10-5.23 for guidance in submitting recommendations for establishing an overseas CATEX.
Table 10-13. Elements of a Negative Decision

| Element (1): Describe or provide a reference to the proposed action, including its location - foreign nation, foreign nation's territorial sea, or FEEZ. | • All negative decisions |
| Element (2): Identify whether or not the action is a major Navy action. | • All negative decisions |
| Element (3): Identify how or where the affected foreign nation (or other foreign nations) is participating. | • When the affected foreign nation is participating |
| Element (4): Identify the exemption or overseas CATEX (none currently listed) being applied. | • Only when an exemption or overseas CATEX applies (there are currently no approved overseas CATEXs) |
| Element (5): Briefly discuss the facts supporting the negative decision (such as how the action is exempt from the requirement to prepare environmental documentation under E.O. 12114; OR how the action would not cause significant harm to a FEEZ). | • Only when an exemption or overseas CATEX applies (there are currently no approved overseas CATEXs) |

10-3.23. Determining Type of Environmental Planning Documentation Based on Location of Effects. The appropriate environmental planning documentation that must be prepared for a proposed major Navy action is determined by where the effects on the physical environment occur rather than where the action takes place. Table 10-2 provides a summary of the appropriate environmental planning documents, which based on location of effects, an action proponent should prepare to comply with the requirements of E.O. 12114.

a. Environmental Planning Documentation for Actions Affecting the U.S. EEZ or Global Commons. Per reference (f), an OEA or OEIS is prepared when a major Navy action will significantly harm the environment of the U.S. EEZ or the global commons (high seas). NEPA and E.O. 12114 hybrid documents (e.g., EA and OEA or EIS and OEIS) may be prepared depending on the location of effects. An action proponent may not prepare a hybrid document where one component is a NEPA Record of CATEX. The preparation of an EA and OEA hybrid is appropriate in such circumstances.

b. Guidance for Complying with E.O. 12114 Environmental Planning Requirements for Actions Affecting a FEEZ. Guidance is as follows:
(1) When the affected foreign nation is participating in the major Navy action, the Navy action proponent prepares a negative decision; and

(2) When the affected foreign nation is not participating in a major Navy action, the Navy action proponent shall first determine if the action will significantly harm the environment of that nation. If the action proponent determines the action will not significantly harm the environment of the foreign nation affected by the action, a negative decision is prepared. If the action proponent determines the action will significantly harm the environment of the affected foreign nation, an ER will be prepared. Hybrid documents (e.g., OEA and ER or OEIS and ER) will not be prepared.

c. Environmental Planning Documentation for Actions Affecting a Foreign Nation or Foreign Territorial Seas. Per reference (f), a negative decision is prepared when a major Navy action will not significantly harm the environment of a foreign nation's territorial sea or the foreign nation itself. If the action will significantly harm the environment of the affected foreign nation, an ER or ES will be prepared.

d. Actions Affecting Protected Global Resources. Per reference (f), and upon consultation with OPNAV (N45), an ES is prepared when a major Navy action may significantly harm a protected global resource regardless of whether there is foreign nation participation. There are currently no designated protected global resources.

10-3.24. Determining Significant Harm

a. Per reference (e), an action significantly affects the environment if it does significant harm to the environment even though on balance the action may be beneficial.

b. Per reference (f), "significant harm" occurs when the major Navy action will introduce to a foreign nation's territory, territorial sea, or EEZ the following:

   (1) A product, or involve a physical project, that produces a principal product, emission, or effluent that is prohibited or strictly regulated by federal law in the United States because its toxic effects on the environment create a serious public health risk (i.e., a "toxic product"); or
(2) A physical project that is prohibited or strictly regulated in the United States by federal law to protect the environment against radioactive substances (i.e., a "radioactive substance").

c. The application of the PMAP in conducting Navy training and testing precludes any Navy at-sea training or testing exercise in an FEEZ from resulting in significant harm to natural and physical resources.

10-3.25. Overseas Environmental Assessments

a. General. An OEA is an environmental analysis similar to an EA under NEPA. The objective of an OEA is to document the environmental consequences of a proposed action, allowing the reviewing authority to determine whether or not the effects of the action will significantly harm the environment (refer to section 10-5.31 for the definition of significantly). If the action will affect the environment in the U.S. EEZ and the global commons (high seas) (refer to figure 10-1 and table 10-1) and it is unknown whether the action will significantly harm the environment, the action proponent shall prepare an OEA. If it is known that the proposed action will significantly harm the environment, an OEIS shall be prepared. Figure 10-3 is a flowchart illustrating the logic flow for determining the proper E.O. 12114 document to prepare.

b. Pre-Planning and Notification

(1) Pre-Planning and Other Procedural Requirements. Procedural requirements applicable to both NEPA and E.O. 12114 planning, as indicated in section 10-3.4, must be followed in the preparation of OEAs. These requirements include, but are not limited to, correct regulatory and statutory conclusions (where applicable), inclusion of mitigation measures and their implementation, and the upload of final environment planning documents to the OPNAV (N45) Environmental Planning Library Web site. Additional guidance is provided below.

(2) Notification. BEFORE beginning to draft an OEA, the action proponent shall notify OPNAV (N45), via the chain of command, of the intent to prepare an OEA. The contents of the notification letter for an OEA are generally the same as for an EA (refer to section 10-3.15.c.3 for guidance in preparing a notification letter and section 10-3.7.c for uploading to the OPNAV (N45) Environmental Planning Library Web site). Note in the case of an OEA where the proposed action will affect the
U.S. EEZ (12 to 200 NM), the analysis of two reasonable action alternatives is required, in addition to the no action alternative. If an additional action alternative is not practical, the notification letter and the OEA must explain in detail the rationale for not including an additional alternative.

c. **OEA Content.** The document should be brief and concise and not encyclopedic. For example, detailed descriptions of potentially affected species should not be included in the body of the document (but could be included in appendices depending on the needs of cooperating or reviewing federal agencies). The size of an OEA should be commensurate with the complexity of the proposed action and may range in size from 10 pages to 150 pages. OEAs should contain sufficient information and analysis upon which to make a determination on whether it is reasonably likely that an action will significantly harm the environment. Accordingly, an OEA shall include those core components identified in table 10-14.

<table>
<thead>
<tr>
<th>Table 10-14. Core Components of an OEA</th>
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<tbody>
<tr>
<td>1. Description of the proposed action in sufficient detail to allow a reader unfamiliar with it to understand fully what is proposed, the location of the proposed action, the timing of the action, and any other pertinent details.</td>
</tr>
<tr>
<td>2. Discussion of the need for the action.</td>
</tr>
<tr>
<td>3. Identification and analysis of alternative means to accomplish the proposed action. For actions affecting the environment of the U.S. EEZ (12 to 200 NM), the analysis of two reasonable action alternatives is required, in addition to the no action alternative. If an additional action alternative is not practical, the notification letter and the OEA must explain in detail the rationale for not including an additional alternative.</td>
</tr>
<tr>
<td>4. The OEA must address all potential effects to the natural and physical environment, including but not limited to underwater acoustics, water quality, air quality, marine biology, EFH (where applicable, refer to table 10-1), marine geology, etc.</td>
</tr>
<tr>
<td>5. A description of the mitigation measures (planned or taken) to avoid or reduce environmental effects (may be in a matrix or separate chapter).</td>
</tr>
<tr>
<td>6. Identification of the preparers of the document, including their names and areas of expertise.</td>
</tr>
<tr>
<td>7. To substantiate impact analysis and to verify that consultation and coordination have been completed, include as appropriate and preferably in an appendix, associated correspondence, memos to file, e-mails, studies, biological evaluations and assessments and biological opinions, permits, final rules, etc.</td>
</tr>
</tbody>
</table>

d. **OEA Processing.** An OEA shall be submitted for review and processing via the chain of command in the same manner as described for an EA in section 10-3.15. An OEA is an internal Navy document; public participation during its preparation is
not required. It is releasable under reference (x), subject to restrictions on records that are classified or exempt.

e. Review and Decision

(1) The decision-maker for an OEA is the same as identified for an EA in section 10-3.15. After considering the documented effects of the proposed action on the environment, the decision-maker shall decide whether a FONSH is appropriate using the same criteria as described for a FONSI. If appropriate, he or she shall prepare a FONSH.

(2) The inclusion of mitigation measures as part of the proposed action may bring impacts below the threshold of significance. The action proponent must implement all mitigation committed to in the FONSH and shall document the completion of mitigation measures committed to in the FONSH using the mitigation and monitoring tool available on the OPNAV (N45) Environmental Planning Library Web site.

(3) The FONSH shall contain a conclusion that the proposed action will not significantly harm the environment and that an OEIS will not be prepared. Within 30 days of FONSH signature, the mitigation measures committed to in the FONSH shall be inputted to the OPNAV (N45) Environmental Planning Library Web site using the mitigation and monitoring tracking tool within the required reporting module for subsequent tracking to completion.


a. General. An OEIS is an environmental analysis similar to an EIS under NEPA. The objective of an OEIS is to document the environmental consequences of a proposed action that may cause significant harm to the environment. Action proponents shall prepare an OEIS for proposed major Navy actions that significantly harm the environment in the U.S. EEZ and the global commons (high seas) (refer to figure 10-1 and table 10-1 and refer to section 10-5.31 for the definition of significantly).

b. Pre-Planning and Notification

(1) Pre-Planning Process and Other Procedural Requirements. Procedural requirements applicable to both NEPA and E.O. 12114 environmental planning, as indicated in section 10-3.16, where applicable, must be followed in the preparation
of OEISs. These requirements include, but are not limited to, correct regulatory and statutory conclusions in environmental planning documents, inclusion of mitigation measures and their implementation, and the upload of final environmental planning documents to the OPNAV (N45) Environmental Planning Library Web site. Additional guidance is provided below.

(2) NOI. The action proponent shall notify OPNAV (N45), via the chain of command, of its intent to prepare an OEIS. The contents of the NOI package for an OEIS are generally the same as for an EIS. OPNAV (N45) will coordinate with ASN(EI&E), then publish the NOI in the Federal Register.

c. Scoping. There is no requirement for conducting public scoping under E.O. 12114, but scoping may be appropriate depending on the reason for the OEIS and if public interest is indicated. Such scoping would be conducted within the United States. If the environment of any foreign nation is potentially affected, OPNAV (N45), per reference (j), will assist the Navy Secretariat in executing any necessary coordination with DOS.

d. Draft OEISs

(1) Core Content. The document should consist of concise and analytical discussions (rather than encyclopedic and descriptive) of the reasonably foreseeable environmental effects of the proposed action. The core content and format of an OEIS shall include the same information as listed in table 10-10 for an EIS, except that the OEIS will focus on potential effects to the natural and physical environment as defined in section 10-5.4. Content includes, but is not limited to, underwater acoustics, water quality, air quality, marine biology, EFH (refer to table 10-1 for EFH applicability), and marine geology. The OEIS shall evaluate reasonably foreseeable significant effects using the best scientific information available.

(2) Process Timeline. A preliminary draft OEIS V.2 shall be submitted to OPNAV (N45) via the chain of command as soon as it is available for review. Further information on OEIS processing following submittal to OPNAV (N45) is available in the reference material library module on the OPNAV (N45) Environmental Planning Library Web site.

(3) Distribution and Review. A draft OEIS shall be made available for public comment in the United States. The public comment period shall be for a period of 45 calendar days unless USD(AT&L) determines that a lesser period is required to enable
Navy authorities to make a timely decision or to take effective action. Consideration will be given to whether any foreign government should be informed of the availability of the document and any notifications to foreign governments shall be coordinated with DOS. OPNAV (N45), per reference (j), will assist the Navy Secretariat in executing any necessary coordination with DOS.

(a) Once approved by ASN(EI&E) or ASN(RD&A), OPNAV (N45) will direct the action proponent to forward the draft OEIS to CEQ and other interested federal agencies, as appropriate. In addition, if the environment of any foreign nation is potentially affected, OPNAV (N45), in conjunction with the Navy Secretariat, will execute any necessary coordination with DOS. OPNAV (N45) will be responsible for publication of the NOA for the draft OEIS in the Federal Register. The action proponent shall provide a draft NOA to OPNAV (N45) no less than 3 weeks prior to the preferred date of publication in the Federal Register. The date of publication in the Federal Register will signify the first day of the public comment period.

(b) Public hearings or meetings are not required, but may be held in the United States, if directed by ASN(EI&E), after consultation with ASD(ISA), DOS, and CEQ. Factors to be considered in determining if public hearings should be held shall include: foreign relations sensitivities; whether the hearings would be an infringement or create the appearance of infringement on the sovereign responsibilities of another government; requirements of domestic and foreign governmental confidentiality; requirements of national security; whether meaningful information could be obtained through hearings; time considerations; and requirements for commercial confidentiality. There is no requirement that all of the listed factors be considered when one or more factors indicate public hearings would not produce a substantial net benefit to those responsible for authorizing or approving the proposed action.

(c) If a public hearing(s) or meeting(s) is to be held, the Navy action proponent shall prepare a draft notice (which will be combined with the NOA for the draft OEIS and identify the schedule for hearing(s) or meeting(s)). OPNAV (N45) will be responsible for publication of the notice in the Federal Register. The action proponent shall provide the draft notice to OPNAV (N45) at least 3 weeks in advance of the preferred date of publication in the Federal Register. The preferred date for publication shall take into account the need to publish the notice in the Federal Register no less than 15
calendar days prior to the first scheduled hearing(s) or meeting(s).

(d) The action proponent should refer to section 10-3.16.e for guidance on procedures for conducting a public hearing(s).

e. Final OEISs

(1) A final OEIS will be prepared that considers, individually or collectively, all substantive comments on the draft OEIS. All final OEISs, including drafts submitted for action, concurrence, or endorsement shall identify the responsible technical and legal points of contact involved in their preparation and review.

(2) The final OEIS shall be made available to the public in the United States. OPNAV (N45) will publish the NOA for the final OEIS in the Federal Register. A draft NOA shall be provided to OPNAV (N45) by the action proponent no less than 3 weeks prior to the preferred date of publication in the Federal Register.

f. Decision

(1) Action proponents shall not take any action that would cause or result in significant harm to the environment or limit choice among reasonable alternatives until a decision document is signed for the final OEIS. No decision may be made until the later of 90-calendar days after the draft OEIS has been made available and notice thereof published in the Federal Register, or a 30-calendar day wait period after the final OEIS has been made available and notice thereof published in the Federal Register. The 90-day period and the 30-day wait period may run concurrently.

(2) The decision document prepared on the proposed action by ASN(EI&E) or ASN(RD&A), or their delegated authority, shall indicate that the final OEIS has been considered in the decision-making process. Within 30 days of decision-making, the mitigation measures committed to in the decision document shall be inputted to the OPNAV (N45) Environmental Planning Library Web site using the mitigation and monitoring tracking tool within the required reporting module for subsequent tracking to completion.

10-3.27. Overseas Environmental Reviews or Environmental Studies
a. Pre-Planning and Notification

(1) Pre-Planning Process and Other Procedural Requirements. Procedural requirements applicable to E.O. 12114 planning, as indicated earlier, should be tailored to and followed in the preparation of ERs or ESs. These requirements include, but are not limited to, correct include regulatory and statutory conclusions, inclusion of mitigation measures and their implementation, and the upload of final environment planning documents to the OPNAV (N45) Environmental Planning Library Web site. Additional guidance is provided below.

(2) Notification

(a) Before drafting an ER or ES, the action proponent shall notify OPNAV (N45), via the chain of command, of the intent to prepare an ER or ES. The contents of the notification letter for an ER or ES are generally the same as for an EA.

(b) Because an ES is a cooperative, bilateral, or multilateral effort, OPNAV (N45) will elevate ES notification letters to ASN(EI&E), who will coordinate with DOS. ASN(EI&E) will decide for Navy whether to participate in an ES after consultation with ASD(ISA). Once a decision to conduct an ES has been made, the Navy action proponent will not take any action that would significantly harm the environment until the ES is completed and approved by ASN(EI&E).

b. ER or ES Content. The contents of an ER and ES should be commensurate with the complexity of the proposed action. These documents are intended to be concise surveys of important environmental issues and effects to be used in the decision-making process. Generally, an ER will include the core components identified in table 10-15. However, the precise content of an ES must be flexible because of such considerations as the sensitivity of obtaining information from foreign governments, the availability of useful and understandable information, and other national security factors.

c. Processing an ER or ES. An ER or ES shall be submitted for review, processing, and decision-making via the chain of command in the same manner as an EA that is submitted for OPNAV (N45) action. ERs and ESs are internal Navy documents; public participation during their preparation is not required. An ER
or ES is releasable under reference (x), subject to restrictions on records that are classified or exempt.

Table 10-15. Core Components of an ER or ES

1. A statement of the action to be taken, including its timetable, physical features, general operating plan, and other similar broad gauge descriptive factors.
2. Identification of the important environmental issues involved.
3. The aspects of the actions taken or to be taken by the Navy action proponent that ameliorate or minimize the impact on the environment.
4. Identification of the actions known to have been taken or to be planned by the government of any participating and affected foreign nations that will affect environmental considerations.
5. Identification of the preparers of the document, including their names and areas of expertise.

d. Review and Decision. The decision-maker for an ER is OPNAV (N45). The decision-maker for an ES is ASN(EI&E). The decision-maker shall evaluate the analysis prepared for the proposed action and the proposed mitigation documented in the ES or ER. If appropriate, he or she shall prepare and sign a decision document. There is no follow-on documentation.

10-3.28. Combination NEPA and E.O. 12114 Environmental Planning Documents

a. As a matter of policy, if both NEPA and E.O. 12114 apply (refer to section 10-1.3), the analyses for both should be combined into a single environmental planning document. However, should the circumstances or nature of the proposed action warrant, two separate environmental planning documents may be prepared.

b. In combining analyses, the action proponent shall differentiate between NEPA and E.O. 12114 descriptions of the affected environment and the impact analysis so it is clearly understood which authority applies to the affected environment being assessed and the resources that are affected. In addition, the action proponent shall consider the following:

(1) Using charts or matrices to identify which authority applies to specific elements of a proposed action;

(2) Using charts or matrices to identify location of affected resources to assist in identifying which authority applies to the respective analyses;
(3) Separating sections or paragraphs to set out the respective findings specifically required by NEPA and E.O. 12114; and

(4) Combining the NEPA and E.O. 12114 discussions in a unified paragraph or text when discussing relevant regulatory permitting, authorization, and consultation requirements that apply within both NEPA and E.O. 12114 areas of applicability.

(5) Address E.O. 12114 conclusions in the NEPA ROD when a hybrid EIS and OEIS is prepared.

10-4 Responsibilities

10-4.1. OPNAV (N45) shall:

a. Develop and promulgate Navy environmental planning policy guidance, act as resource and assessment sponsor, and provide oversight of Navy's environmental planning program;

b. Review environmental planning documents submitted for the Navy Secretariat or OPNAV (N45) action to ensure compliance with Navy policy, consistency with Navy wide environmental planning practices, and avoidance of adverse Navy wide precedents. When appropriate, conduct these reviews concurrently with ASN(EI&E) staff. Inform ASN(EI&E) of any potentially controversial planning issues. For EAs prepared in compliance with NEPA and submitted for OPNAV (N45) review, make decisions on whether a FONSI is appropriate or if an EIS is required. Likewise, for OEAs prepared in compliance with E.O. 12114, make decisions on whether an OEIS is required;

c. Bring environmental planning matters that involve controversial issues or which may affect environmental planning policies or their implementation to the attention of ASN(EI&E) and, where appropriate, ASN(RD&A) for coordination and determination;

d. Conduct an annual audit of EAs prepared by Navy commands with delegated NEPA and E.O. 12114 signature authority;

e. Represent Navy to other U.S. Armed Services, the Office of the Secretary of Defense, CEQ, and other federal agencies at the headquarters level regarding environmental planning matters;
f. Coordinate with the Judge Advocate General regarding publication of environmental planning notices in the Federal Register;

g. Coordinate with Navy Office of Information for public release of environmental planning and decision documents; and

h. Coordinate with Navy OLA regarding Congressional notification of environmental planning documents.

10-4.2. Budget submitting offices; echelon 2 commands; regional commanders and COs; PEOs; weapons systems acquisition program managers; direct reporting program managers; and science and technology program managers shall:

a. Ensure compliance with the requirements of this chapter in matters under their cognizance;

b. Coordinate with the AEC and REC for all proposed actions that will occur within their respective AOR;

c. Plan and program for environmental planning documentation, as applicable, for anticipated proposed actions;

d. Ensure high quality environmental planning documents are produced for each proposed action. Each environmental planning document should be consistent with Navy environmental policy; rely on a common organizational structure; be based on the best available science; use understandable, simple, and concise writing so that the public can understand the explanations of project decisions; and clearly demonstrate compliance with the appropriate regulatory and legal requirements. Specific Navy quality assurance requirements are addressed in section 10-3.9;

e. Ensure funding for and implementation of any mitigation and monitoring requirements established in environmental planning and decision documents prepared pursuant to NEPA and E.O. 12114;

f. Plan, program, budget, and ensure training identified in section 10-3.10 is obtained by Navy environmental planners;

g. Ensure completed environmental planning documents are uploaded to the OPNAV (N45) Environmental Planning Library Web site; and
h. As appropriate, comply with required reporting, including submission of an annual certification, annual program review summary, and mitigation and monitoring reporting.

10-4.3. AECs shall:
   
   a. Coordinate and review all Navy mission and operational environmental planning occurring within their designated AOR; and

   b. Ensure all environmental planning documents and related permits, authorization, or consultations occurring within or affecting their AOR are coordinated with the RECs, as appropriate.

10-4.4. RECs shall:

   a. Participate in the preparation of environmental planning documents for proposed actions that affect resources under their control or issues of concern in their region; and

   b. Coordinate and review environmental planning documents involving actions that affect resources under their control.

10-5  Definitions

10-5.1. Action Proponent

   a. The action proponent is the commander, commanding officer, or civilian director of a unit, activity, or organization who initiates a proposal for action. The general rule is that the action proponent should be the most junior element in the chain of command that "controls" the entire proposed action. Where multiple Navy organizations are involved in a proposed action, it is sometimes not apparent which command should be the lead action proponent. Early discussion among the participating commands is necessary in these cases to identify the appropriate lead action proponent. If agreement cannot be reached, the matter shall be elevated promptly through their chains of command to OPNAV (N45). Table 10-16 provides examples where commands in the past have been action proponents for various types of proposed actions.

   b. The action proponent is responsible for coordination during the environmental planning process with respect to flow of information, document comment, review, concurrence, and approval and resolution of environmental issues. Coordination
between the action proponent and other interested parties and stakeholders, both internal and external to Navy, is necessary for the preparation of accurate, consistent, timely, and cost-effective documentation that supports the mission of all interested parties and stakeholders. Tenant command proposing actions at installation must follow all environmental guidance of the installation commander (refer to chapter 1 (Organization and Coordination)).

Table 10-16. Action Proponent Guidance

<table>
<thead>
<tr>
<th>Proposed Action</th>
<th>Usual Action Proponent</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions affect only one shore installation (non-mission-specific or operational issues)</td>
<td>Installation commander</td>
<td>Could also be region commander</td>
</tr>
<tr>
<td>Actions affect multiple shore installations in the same region (non-mission-specific or operational issues)</td>
<td>CNIC HQ or region commander</td>
<td>Supported by installation commanders</td>
</tr>
<tr>
<td>Homeporting or homebasing decisions</td>
<td>Fleet commander</td>
<td>Supported by region commander(s)</td>
</tr>
<tr>
<td>Major training exercises on or off established ranges and OPAREAs (and any other mission-specific or operational issues)</td>
<td>Fleet commander</td>
<td>Supported by region commander and numbered fleet</td>
</tr>
<tr>
<td>RDT&amp;E, radar, sonar, and other testing not involving the use of commissioned vessels</td>
<td>SYSCOMs or PEO</td>
<td>Coordinate with AEC, numbered fleet, REC, region commander, and range manager, as appropriate (refer to note). A SYSCOM is the action proponent for RDT&amp;E conducted on a SYSCOM range.</td>
</tr>
<tr>
<td>RDT&amp;E, sonar, explosives, and other testing involving the use of commissioned vessels</td>
<td>Fleet chain of command, SYSCOMs, or PEO</td>
<td>PEO is normally the action proponent for testing largely independent of fleet training activity. Fleet is normally the action proponent if RDT&amp;E testing is a small part of larger exercise (refer to note). A SYSCOM is the action proponent for RDT&amp;E conducted on a SYSCOM range.</td>
</tr>
<tr>
<td>Artificial reefing</td>
<td>Inactive ships PEO</td>
<td>Supported by region commander</td>
</tr>
<tr>
<td>Action involving NAVSPECWARCOM training</td>
<td>Range owner and NAVSPECWARCOM</td>
<td>For actions involving ranges owned by other Services (e.g., U.S. Marine Corps, Army, or Air</td>
</tr>
</tbody>
</table>
10-5.2. Categorical Exclusion (NEPA). A CATEX is a published category of actions, which under normal conditions, is excluded from further documentation requirements under NEPA. Categorically excluded actions do not individually or cumulatively have a significant effect on the human environment and have been found to have no such effect in procedures adopted by Navy for implementing the CEQ regulations. Also, refer to section 10-5.23 for the overseas CATEX definition.

10-5.3. Cooperating Agency. A cooperating agency is 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. Additionally, a state or local agency of similar qualifications or, when the effects are on a reservation (or impact usual and customary fishing grounds and sacred sites that are off reservation lands), a tribal government may by agreement with the lead agency become a cooperating agency.

10-5.4. Environment (E.O. 12114). As defined in reference (f), environment means the natural and physical environment and does not include social, economic, and other environments.

10-5.5. Environmental Assessment (NEPA). An EA is a concise public NEPA document that briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or a FONSI, aids in Navy's decision-making when no EIS is necessary, or facilitates preparation of an EIS when one is necessary.

10-5.6. Environmental Impact Statement (NEPA). An EIS is an analysis prepared pursuant to NEPA for actions with the potential to have a significant impact on the quality of the human environment or that are potentially controversial in
environmental effects. A DEIS requires a complete and comprehensive analysis of anticipated impacts to the human environment and is distributed for agency and public review. An FEIS considers and addresses public and agency comments received on the DEIS.

10-5.7. Environmental Planning. Environmental planning is a systematic process undertaken to identify, facilitate, and ensure compliance with the substantive and procedural requirements of laws, E.O.s, and regulations of the United States addressing environmental matters.

10-5.8. Environmental Review (E.O. 12114). Prepared unilaterally by the United States, an ER is a survey of the environmental issues associated with a major Navy action that may, if authorized or approved, significantly harm the environment of a foreign nation.

10-5.9. Environmental Study (E.O. 12114). Prepared bilaterally or multilaterally by the United States and one or more foreign nations or an international body or organization in which the United States is a member or participant, an ES informs officials of pertinent environmental considerations when authorizing or approving certain major Navy actions that do significant harm to the environment of a foreign nation or to a protected global resource (refer to section 10-5.27).

10-5.10. Exclusive Economic Zone. As described and governed by the relevant provisions of reference (g), an EEZ is an area beyond and adjacent to the territorial sea, subject to the specific legal regime established in part V and under which the rights and jurisdiction of the coastal state and the rights and freedoms of other states are governed. An EEZ may not extend beyond 200 NM from the baseline from which the territorial sea of a foreign nation is measured per reference (g).

10-5.11. Final Governing Standards. As defined in reference (i), FGSs are a comprehensive set of country-specific substantive provisions, typically in the form of technical limitations on effluents, discharges, etc., or a specific management practice. These environmental requirements for U.S. shore installations located in foreign nations are prepared per reference (i).

10-5.12. Finding of No Significant Harm. A FONSH is a determination based on an OEA that presents the factors for a proposed action that, if implemented, would not significantly
harm the natural environment and that an OEIS will not be prepared.

10-5.13. Finding of No Significant Impact. A FONSI is a determination based on an EA and other factors in the public planning record for a proposed action that, if implemented, would have no significant impact on the human environment and that an EIS will not be prepared.

10-5.14. Global Commons (High Seas). For purposes of Navy environmental planning, global commons do not include territorial seas or EEZs as defined in part V of reference (g). This definition of global commons is consistent with the definition of "high seas" found in part VII of reference (g).

10-5.15. Human Environment (NEPA). The human environment is the natural and physical environment and the relationship of people with that environment.

10-5.16. Impacts (Effects)

   a. The definition of impacts as used in this chapter is context sensitive depending on the applicability of NEPA or E.O. 12114 to the proposed action. Generally, impacts may include those resulting from actions, which may have both beneficial and detrimental effects, even if on balance the agency believes the effect will be beneficial.

   b. Direct impacts result from an 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, and are reasonably foreseeable. Indirect impacts include but are not limited to the following:

   (1) Growth-inducing effects;

   (2) Effects related to induced changes in the pattern of land use, population density, or growth rate; and

   (3) Related effects on the human environment.

   c. Cumulative impacts (NEPA) 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.

10-5.17. **Lead Agency.** The lead agency is the Federal agency preparing or having the primary responsibility for environmental planning documentation for major Navy actions. If Navy is lead agency, it will be responsible for conducting the required environmental planning as set forth in this chapter. If another Federal agency is lead agency, Navy will support the lead agency to the extent reasonable. When it is desirable to do so, two or more agencies may exercise joint lead. The following factors should be used in determining the appropriate lead agency jurisdiction:

   a. The magnitude of each agency's involvement in the proposed action;

   b. The authority of each agency to approve (or disapprove) the undertaking of the proposed action;

   c. The expert technical capabilities of each agency regarding the reasonably foreseeable effects of the proposed action;

   d. The duration of each agency's involvement in the proposed action; and

   e. The sequence of each agency's involvement.

10-5.18. **Memorandum of Legal Sufficiency.** A memorandum of legal sufficiency is a memorandum signed or endorsed by a legal advisor for the action proponent documenting the results of a legal review of an environmental planning document. The memorandum identifies any legal issues inherent in the proposed action and their resolution, discusses any aspects of the proposed action that may be considered controversial or sensitive, and assesses the risk of litigation relating to the proposed action. The memorandum shall be marked and handled as protected under the attorney-client privilege.

10-5.19. **Memorandum for the Record.** An MFR is prepared when an action proponent relies on previously approved NEPA and E.O. 12114 environmental planning documentation and regulatory consultation and coordination for a proposed action. An MFR describes the proposed action and briefly discusses the supporting facts.
10-5.20. **Mitigation.** Mitigation includes measures identified in environmental planning documents that reduce the severity or intensity of adverse impacts of a proposed action. Such measures may 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 the impact 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 for the maintenance and or replacement of equipment or structures so that future environmental degradation due to equipment or structural failure does not occur during the life of the action; and

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

10-5.21. **Negative Decision.** A negative decision is a document prepared when a determination has been made that the proposed action is exempt from the environmental planning requirements of E.O. 12114 or when the proposed action does not trigger the need to prepare an ER or ES.

10-5.22. **Notice of Intent.** An NOI is a required notice published in the Federal Register formally announcing Navy's intent to prepare an EIS under NEPA. The NOI formally opens the public scoping process and usually, though not required, provides information regarding public scoping meetings to be held. An NOI is normally not published nor public scoping normally conducted for an OEIS prepared under E.O. 12114, but may be appropriate depending on the reason for the OEIS and if U.S. public interest is indicated.

10-5.23. **Overseas Categorical Exclusion (E.O. 12114).** An overseas CATEX is a category of actions that normally do not, individually or cumulatively, do significant harm to the environment. Reference (f) authorizes the establishment of overseas CATEXs. Commands may develop white papers with recommendations and supporting rationale signed and approved by
their chains of command for submission to OPNAV (N45) and ASN(EI&E) for consideration and forwarding to (USD(AT&L)). USD(AT&L) is the approval authority for overseas CATEXs. Overseas CATEXs will be published as an addendum to this chapter; at present, there are none.

10-5.24. Overseas Environmental Assessment (E.O. 12114). An OEA is an environmental planning document that contains a concise analysis of the environmental consequences of a proposed action. The Navy action proponent uses an OEA to assist in determining whether implementation of a major Navy action may cause significant environmental harm in the U.S. EEZ or the global commons (high seas), thereby requiring preparation of an OEIS.

10-5.25. Overseas Environmental Impact Statement (E.O. 12114). An OEIS is an environmental planning document that contains an analysis of the likely environmental consequences of the proposed major Navy action that may cause significant environmental harm in the U.S. EEZ or the global commons (high seas).

10-5.26. Participating or Otherwise Involved Nation. A participating or otherwise involved nation is a foreign nation whose government has expressly or implicitly given its approval of or concurrence with U.S. actions within its EEZ, territorial sea, or territory. Approval may be expressed by the conferring of rights upon the United States in a SOFA, or by some other affirmative statement by the foreign nation's political leadership or a defense official. A foreign nation may also be considered participating or otherwise involved when its government sponsors, controls, or otherwise has knowledge of a coordinated military exercise or research and development effort in which the United States is also a participant.

10-5.27. Protected Global Resource. A protected global resource is a natural or ecological resource of global importance designated for protection by the President or such a resource as designated by the Secretary of State per international agreement binding in the United States. There are currently no protected global natural or ecological resources designated by either the President or the Secretary of State.

10-5.28. Record of Categorical Exclusion. The record of CATEX documents an action proponent's decision that a proposed action may be appropriately categorically excluded from the requirement to prepare an EA or EIS. The record of CATEX is signed by the
CO or his or her designee, or the PM for a weapons system acquisition action.

10-5.29. Record of Decision. The ROD is a decision document signed by an appropriate DON official completing an EIS. ASN(EI&E) is the appropriate official to sign RODs for DON except for weapons systems acquisition actions per reference (b) for which the ASN(RD&A) has cognizance.

10-5.30. Scoping. Scoping is an early and open process used to determine the scope of issues to be addressed and to identify the significant issues to be analyzed in depth and the range of alternatives to be considered in a NEPA document. Scoping begins as soon as practicable after the decision to prepare an EIS is made.

10-5.31. Significantly. "Significantly," as used in NEPA and E.O. 12114 (the latter for actions in the U.S. EEZ and global commons), requires consideration of both context and intensity of the environmental effects of an action (part 1508.27 of reference (a) contains the complete definition). Action proponents should also consider the following factors in evaluating an action's significance:

   a. The geographic extent of the action;
   
   b. Duration of the action's effects;
   
   c. The risk of controversial or highly uncertain or unique and unknown environmental impacts;
   
   d. Whether the action is related to other actions with individually insignificant but cumulative significant impacts; and
   
   e. Whether the action threatens a violation of federal, state, or local laws and regulations.

10-5.32. Statement of Technical Review. A statement of technical review is a verification that the environmental planning document has received internal Navy review by appropriate subject matter experts. The form is OPNAV 5090/3 (Sep 2010) and can be found at Naval Forms OnLine (refer to appendix E (Web Sites) for Web site address). The completed statement of technical review is not a substitute for obtaining proper organizational endorsements. In-house staff should be
used to verify the technical sufficiency of the document, based on their technical expertise.

10-5.33. Territorial Sea. Every nation has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 NM measured from baselines determined per reference (g). The United States claims a 12 NM territorial sea.

10-5.34. United States. The United States are the 50 states, District of Columbia, territories and possessions of the United States, and all waters and airspace subject to the territorial jurisdiction of the United States. As of the publication of this chapter, territories and possessions of the United States include American Samoa, Baker Island, Guam, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Island, Navassa Island, Commonwealth of the Northern Mariana Islands, Palmyra Atoll, Commonwealth of Puerto Rico, U.S. Virgin Islands, and Wake Island.
CHAPTER 11

ENVIRONMENTAL READINESS IN THE ACQUISITION PROCESS

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11-1 Scope

a. This chapter provides and implements Navy program policies and procedures to ensure environmental readiness at reduced cost over an acquired system's life-cycle. Environmental readiness in acquisition refers to the ability of a new system to be used in realistic testing, training, and operations, in full compliance with environmental requirements upon delivery to the fleets.

b. This chapter will assist acquisition programs, systems commands (SYSCOM), program executive offices (PEOs), and the fleet in their understanding and implementation of environmental requirements established by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)). It will guide Navy environmental subject matter experts
(SMEs) in their efforts to integrate environmental readiness into acquisition programs they support.

11-1.1. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) provides Navy policy guidance regarding National Environmental Policy Act (NEPA) compliance. Chapter 12 (Natural Resources Conservation) provides Navy program requirements for ensuring sustainable military readiness through the management of natural resources. Chapter 13 (Cultural Resources Compliance and Management) states Navy policy guidance and assigns responsibilities for historic preservation requirements and program management. Chapter 14 (Coastal Zone Management) contains policy guidance to ensure Navy action proponents proposing actions or activities that could potentially affect coastal uses or resources are in full compliance with the Coastal Zone Management Act (CZMA). Chapter 17 (Environmental Management Systems) provides further policy guidance regarding pollution prevention (P2) and green procurement. Chapter 22 (Clean Air Ashore) provides guidance regarding the acquisition and use of ozone-depleting substances (ODSs). Chapter 23 (Hazardous Materials Management Ashore) provides requirements and responsibilities for hazardous materials (HAZMATs) control and management at Navy shore facilities. Chapter 35 (Environmental Compliance Afloat) establishes operational policies and requirements for ships and shipboard environmental systems.

11-1.2. References

(a) SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System

(b) DoD Directive 5000.01 of 12 May 2003

(c) DoD Instruction 5000.02 of 8 December 2008

(d) SECNAV-M 5000.2, DON Acquisition and Capabilities Handbook

(e) SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs

(g) OPNAVINST 5100.24B, Navy System Safety Program Policy

(h) CNO (N4) Memorandum ser #N4/8U156042 of 29 Jul 2008, Environmental Readiness in Systems Acquisition

(i) CNO (N4) Memorandum ser #N4/9U156046 of 25 Aug 2009, Environmental Readiness in Navy Acquisition

(j) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management

(k) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance

(l) DFARS Subpart 223.8, Ozone-Depleting Substances, 19 Dec 2006

(m) 42 U.S.C. §4321

(n) E.O. 12114, Environmental Effects Abroad of Major Federal Actions

(o) 42 U.S.C. §13101-13109

(p) CJCSISNT 3170.01H, Joint Capabilities Integration and Development System, 10 Jan 2012

(q) Manual for the Operation of the Joint Capabilities Integration and Development System, 19 Jan 2012

(r) ASN(RD&A) Memorandum of 22 Dec 2011, Implementation of the Naval Audit Service Hazardous Noise Recommendations

(s) Principal Deputy Under Secretary of Defense Memorandum of 20 Apr 2011, Document Streamlining-Program Strategies and Systems Engineering Plan

(t) Principal Deputy Under Secretary of Defense Memorandum of 14 Sep 2011, Document Streamlining - Life-Cycle Sustainment Plan

(u) DON System Design Specification Guidebook

(v) Naval SYSCOM System Engineering Instruction of 7 Jul 2009

(w) Defense Acquisition Guidebook
(x) 40 CFR 1700

(y) ASN(I&E) Memorandum of 11 May 1999, Department of the Navy Environmental Policy Memorandum 99-01; Requirements for Environmental Considerations in Test Site Selection

(z) ASN(RDA) Memorandum of 19 Jan 1995, National Aerospace Standard 411


(cc) DoD Strategic Sustainability Performance Plan, FY 2012, 20 September 2012 (revised annually)

(dd) DoD Instruction 4715.4 of 6 June 1996


(ff) OPNAVINST 4520.1B, Navy Demilitarization Policy

(gg) OPNAVINST 4410.2A, Joint Regulation Governing the Use and Application of Uniform Source Maintenance and Recoverability Codes


(ii) ASN(RDA), Naval Probability of Program Success Guidebook of Sep 2008 (NOTAL)


(kk) Department of the Navy, Naval Systems Engineering Guide, 2004

(ll) NAVSO P-3692 of September 2006, Independent Logistics Assessment Handbook
11-1.3. **Applicability.** Environmental readiness policies and procedures in this chapter apply to all Navy affiliated programs identified in paragraph 5 of reference (a), unless otherwise exempted.

11-2 **Legislation**

a. The following legislation contains provisions that pertain to environmental planning and protection as well as preventing or reducing pollution at the source where feasible:

1. NEPA, and

b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, several laws including the Clean Air Act (CAA), Clean Water Act (CWA), CZMA, Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), and National Invasive Species Act also have provisions that impact environmental readiness practices.

c. State and local jurisdictions have their own environmental statutes and regulations, some of which may be more stringent than federal requirements.

11-3 **Requirements**

11-3.1. **Environmental Readiness in Acquisition**

a. Department of Defense (DoD) and Secretary of the Navy (SECNAV) policy concerning environmental readiness requirements
shall be applied to the Navy's implementation of the Defense Acquisition System. The Defense Acquisition System, which is described in references (b) and (c), establishes the framework of policy, processes, and documentation for the acquisition of systems, and the planning and decision-making for the life-cycle sustainability of those systems. For Navy acquisition programs, environmental readiness in acquisition requirements and considerations shall be fully incorporated into the development and testing of new systems to ensure realistic fleet training and operations, in full compliance with applicable environmental laws and regulations. Navy acquisition programs shall comply with DoD and SECNAV environmental provisions and policy as outlined in references (a) through (g). Table 11-1 provides a brief description of each of these references as they are applicable to environmental readiness requirements in the acquisition process.

Table 11-1. DoD and SECNAV Environmental Readiness in Acquisition Policy and Standard Descriptions

<table>
<thead>
<tr>
<th>Environmental Policy and Standards</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, Reference (a)</td>
<td>This SECNAV instruction issues mandatory procedures for the Department of the Navy's (DON) implementation of references (b) and (c). The instruction requires program managers (PM) to integrate environment, safety, and occupational health (ESOH) risk management into the overall systems engineering process for all developmental and sustaining engineering activities, report on the status of ESOH risks and acceptance decisions, and ensure the system will operate in compliance with all legal, regulatory, and policy requirements relating to ESOH. This instruction also defines key organizational roles and responsibilities to support DON acquisition, ESOH policy, and acquisition program oversight.</td>
</tr>
<tr>
<td>DoD Directive 5000.01, The Defense Acquisition System, 12 May 2003, Reference (b)</td>
<td>This DoD directive requires the following top level ESOH considerations: programs to be managed through a systems engineering approach that minimizes total ownership costs; acquisition and procurement of DoD weapons and weapon systems are consistent with all applicable domestic laws and treaties and international agreements; and testing and evaluation (T&amp;E) to determine whether a system is operationally effective, suitable, survivable, and safe.</td>
</tr>
<tr>
<td>DoD Instruction 5000.02, Operation of the Defense Acquisition System, 8 December 2008, Reference (c)</td>
<td>Per this DoD instruction, ESOH must be integral with systems engineering and integrated into T&amp;E planning and activities; and systems must be disposed of per all legal and regulatory requirements and policies relating to safety, explosives safety, and the environment.</td>
</tr>
<tr>
<td>SECNAV-M</td>
<td>This guidebook, intended to be used as a companion document</td>
</tr>
<tr>
<td>Environmental Policy and Standards</td>
<td>Brief Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>5000.2, DON Acquisition and Capabilities Handbook, Reference (d)</td>
<td>to reference (a), contains citations from reference (a) and other mandatory references for process clarification. The guidebook does not introduce new or additional mandatory ESOH policy, but provides clarifications to ESOH policy.</td>
</tr>
<tr>
<td>SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs, Reference (e)</td>
<td>This SECNAV instruction re-issues policy and assigns responsibilities within DON, per DoD policy and SECNAV instruction concerning environmental protection, natural resources, and cultural resources programs.</td>
</tr>
<tr>
<td>DoD MIL-STD-882E, DoD Standard Practice: System Safety, 11 May 2012, Reference (f)</td>
<td>This system safety standard practice identifies the DoD systems engineering approach to eliminating hazards, where possible, and minimizing risks where those hazards cannot be eliminated. This standard covers hazards as they apply to systems, products, equipment, and infrastructure throughout design, development, test, production, use, and disposal. This practice provides a consistent means of evaluating identified risks and is useful in the integrated management of environmental, safety, and health risks. The standard defines the system safety requirements to perform throughout the life-cycle for any system, new development, upgrade, modification, resolution of deficiencies, or technology development.</td>
</tr>
<tr>
<td>OPNAVINST 5100.24B, Navy System Safety Program Policy, Reference (g)</td>
<td>This system safety instruction provides guidance for implementation of system safety in Navy acquisition. Application of the risk management process of reference (f) is required by references (a) and (c). Due to the potential effects of environmental, safety, and occupational health issues in one area impacting other areas, collaboration between disciplines is necessary for integrated risk and cost management.</td>
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</table>

b. Assistant Secretary of the Navy (Research, Development, and Acquisition) is the DON component acquisition executive and service acquisition executive responsible for DON acquisition, and provides performance input to the Chief of Naval Operations (CNO) for SYSCOM commanders' support of program executive officers and direct reporting PMs per reference (a). Assistant Secretary of the Navy (Energy, Installations, and Environment) (ASN(EI&E)) provides environmental readiness policy and guidance for acquisition programs per reference (a).

11-3.2. **Environmental Readiness Requirements and Goals**
a. In support of Deputy CNO for Fleet Readiness and Logistics (CNO (N4)) acquisition logistics goals, the effective integration of environmental considerations shall be considered early and throughout the system's life-cycle as a vital element of fleet readiness and logistics requirements. This engagement is critical to ensure environmental compliance, improve operational readiness, reduce life-cycle costs, and maintain environmental stewardship in support of Navy acquisition.

b. Per references (h) and (i), the CNO (N4) objective for environmental readiness in the acquisition process is to:

1. Incorporate environmentally preferable design, materials, and practices into new systems through the systems engineering process, so as to facilitate efficient and effective environmental compliance throughout the life-cycle; and

2. Provide the ability for the warfighter to train and operate with the system, in full compliance with environmental planning and compliance requirements, at the time of system delivery.

c. In alignment with references (a), (b), (c), and (d), table 11-2 lists the specific environmental readiness requirements and goals outlined in reference (h). To support the implementation of the requirements and goals listed in table 11-2, this chapter outlines how to address environmental readiness requirements and considerations from defining capabilities through demilitarization and disposal of a weapon system or platform at the end of its useful life. It covers working through the Joint Capabilities Integration and Development System (JCIDS) requirements process, systems engineering process, acquisition program documents, and the integration of environmental considerations throughout the acquisition life-cycle (via acquisition phases and acquisition processes).

Table 11-2. CNO (N4) Requirements and Goals for Environmental Readiness in Systems Acquisition

<table>
<thead>
<tr>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Identify all potential environmental hazards associated with the system</td>
</tr>
<tr>
<td>through its life-cycle using the methodology in reference (f). Eliminate</td>
</tr>
<tr>
<td>identified environmental hazards or mitigate the associated risk to the</td>
</tr>
<tr>
<td>lowest acceptable level during system design (reference (c)).</td>
</tr>
<tr>
<td>(2) Identify the user representative for each acquisition program and ensure</td>
</tr>
<tr>
<td>all environmental risks are accepted by the appropriate ESOH risk acceptance</td>
</tr>
<tr>
<td>authority per reference (c).</td>
</tr>
<tr>
<td>(3) When making design, chemical, and material choices for systems and</td>
</tr>
</tbody>
</table>
### Requirements

Platforms, minimize the use and quantity of toxic and hazardous chemicals and materials required for manufacture and sustainment per references (i) and (k). Consider the risks and associated costs throughout the life-cycle of the system, including disposal, and maximize the use of sustainable environmental practices (reference (c)).

4. Minimize, to the greatest extent practical, the use of ODSs and ensure the approval for procurement of systems or equipment specifying the use of Class I ODSs is per reference (l). Ensure any unplanned use of the ODS reserve is approved per the process contained in chapter 22 (Clean Air Ashore).

5. Consistent with mission requirements, support use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy efficient, water efficient, and recycled content products, and use of paper of at least 30 percent post-consumer fiber content (references (j), (k), and chapter 22 (Clean Air Ashore)).

6. Improve energy efficiency, consistent with mission requirements and cost effectiveness, by implementing energy management strategies pursuant to references (j) and (k) such as: (a) using of alternative or synthetic fueled vehicles; (b) employing alternative and renewable systems (e.g., solar electric, solar lighting, geothermal, small wind turbines); (c) using highly efficient building alternatives; (d) reducing energy use; (e) increasing renewable energy consumption; and (f) reducing use of petroleum products.

7. Prepare quality and consistent NEPA and Executive Order (E.O.) 12114 (references (m) and (n)) analyses and documentation to determine the impact and effects of major federal actions on the environment such as (a) schedule and conduct an appropriate level of environmental planning early in the acquisition process so the results of the analysis can be used to reduce environmental impacts throughout the life-cycle of the system; (b) provide system-specific analysis and data sufficient to support other action proponent’s preparation of NEPA and E.O. 12114 documentation; and (c) ensure all acquisition systems which put sound into the marine environment conduct the appropriate effects analyses to fully identify system impacts on living marine resources, assess hazards, and mitigate associated risks to ensure the system can be deployed in full compliance with the MMPA and ESA.

8. Estimate and plan for the system’s demilitarization and safe disposal during the design process. Document HAZMATs contained in the system (reference (c)).

### Goals

1. Use respective PEO's or SYSCOM's targeted toxic and hazardous chemicals and materials lists, as available, to help minimize those toxic and hazardous chemicals and materials posing the greatest environmental risks and help Navy meet the goals of references (j), (k), and (o).

2. Minimize, to the greatest extent practical, the use of chemicals of emerging concern identified by the Emerging Contaminant Directorate when designing, manufacturing, upgrading, and sustaining new systems and platforms.

3. Design propulsion and power generation systems that (a) minimize gaseous and particulate emissions to allow for unencumbered system operation, training, and maintenance; (b) minimize near-field and far-field noise levels, avoiding increases compared to existing systems; and (c) utilize alternative or synthetic fuels where practical.

4. Ensure, through early and informed analysis, environmental compliance for research, development, test, and evaluation events is accomplished as efficiently as possible. Selecting less sensitive test locations or times
11-3.3. Environmental Considerations in the Joint Capabilities Integration and Development System Requirements Process

a. Future warfighter needs are addressed within the JCIDS requirements process (Figure 11-1) through a deliberate and analytical capabilities-based approach. Additional training regarding integrating ESOH in the JCIDS requirements process is available through the Defense Acquisition University requirements module, Continuous Learning Module, Requirements (CLR 030), Environment, Safety and Occupational Health in JCIDS. The module is designed to help the ESOH practitioner (i.e., ESOH SME) generate concise ESOH requirements appropriate for JCIDS documents. The module offers practical guidance in negotiating the JCIDS requirements process where different interests, ESOH related and non-ESOH related, often compete among stakeholders in a resource-constrained context.

Figure 11-1. JCIDS Requirements Process
b. Environmental readiness reviews throughout the JCIDS requirements process aid in reducing avoidable costs by eliminating and mitigating environmental risks and ensuring proper environmental planning requirements are executed. This DoD capability-based requirements generation process delivers three key documents: initial capabilities document (ICD), capability development document (CDD), and capability production document (CPD), that together define needed capabilities, guide materiel development, and direct the production of capabilities. References (p) and (q) include additional detailed information.

(1) Environmental Considerations in the ICD

(a) The ICD describes capability gaps or deficiencies, and provides an opportunity for the operational capability to define system requirements and encourage technological innovation. The ICD is the first JCIDS document requiring environmental readiness considerations.

(b) To support the environmental aspects of DoD's goal of eliminating or reducing ESOH risk and fielding sustainable systems, the ICD shall contain applicable environmental readiness requirements specific to the system it addresses. The system shall be developed to ensure full compliance with applicable environmental laws and regulations and to eliminate or mitigate environmental risk which impact mission readiness, suitability, and total ownership cost. The capabilities shall fully consider the environmental considerations relative to a specific system capability or attribute.

(2) Environmental Considerations in the CDD

(a) The service-approved CDD, a capability document that supports the technology development stage, and the CDD that is approved to support milestone (MS) B, captures the necessary information to propose capability solutions to satisfy validated capability requirements and to close capability gaps. The CDD defines authoritative, measurable, and testable technical performance criteria of the system that will deliver the needed capability described in the ICD. Integrating environmental language in the service-approved CDD and final CDD gives the program office the greatest influence through early intervention.

(b) Sections 14 and 15 of the CDD shall include applicable environmental readiness requirements that encompass:
1. How the system's design, production, testing, operation, maintenance, and disposal will eliminate or mitigate, to the greatest extent practical, environmental impacts, and document environmental risks to ensure mission readiness, maximize operational suitability, and minimize total ownership cost of the potential solution;

2. How the program will test, train, operate, and maintain the potential solution across its life-cycle, in full compliance with applicable environmental laws and regulations at the time of delivery, and dispose of the system at the end of its useful life;

3. How the program will incorporate environmental planning and full compliance with applicable environmental laws and regulations throughout the program life-cycle to mitigate risks and support sustainment of the system at the lowest life-cycle cost;

4. How the program will use the methodology outlined in reference (f) to identify and evaluate environmental hazards, to mitigate environmental risks, and to provide life-cycle documentation of risk acceptance;

5. How the program will use non-hazardous equipment and material where possible and will minimize toxic materials and HAZMATs required for the system, per the system's HAZMAT and chemical design criteria, as defined within the applicable SYSCOM, including those needed during operation and maintenance;

6. How the program will address environmental attributes (i.e., sound in the water) that tend to be design, cost, and risk drivers; and

7. How the program will address and provide any environmental asset requirements (e.g., infrastructure, testing ranges, training ranges) and the associated costs, as well as the availability MS schedule that support the capability.

(3) Environmental Considerations in the CPD

(a) The CPD incorporates lessons learned during the development process, describes the actual performance of the system that will go into production, and describes how the acquisition community and other stakeholders will support the
new system.

(b) In addition to including and updating the information provided in the CDD, section 13 of the CPD shall identify and summarize applicable environmental readiness requirements including:

1. Environmental requirements for the system through its life-cycle and policy considerations associated with fielding the system; and

2. Environmental considerations and risk that have a major impact on system effectiveness, suitability, and affordability.

11-3.4. Environmental Readiness in Systems Engineering

a. Systems engineering is an interdisciplinary approach for a structured, disciplined, and documented technical effort to simultaneously design and develop systems to satisfy the operational needs of the user. Systems engineering processes apply across the acquisition life-cycle and serve as a mechanism for integrating capability needs, design considerations (e.g., environment), design constraints, and risk, as well as for addressing the limitations imposed by technology, budget, and schedule.

b. DoD and SECNAV policy mandates acquisition programs integrate life-cycle environmental requirements and considerations into the overall systems engineering and risk management processes. As outlined in references (a) and (r), the effective integration of environmental considerations in the system's life-cycle encompasses:

(1) Establishing environment in acquisition responsibilities within the acquisition program's organizational structure;

(2) Developing strategies to ensure compliance with environmental statutory and regulatory requirements such as NEPA and E.O. 12114 by sharing basing criteria information, infrastructure requirements, training concepts, and delivery schedules;

(3) Identifying and managing HAZMATs, wastes, and pollutants for the life-cycle of the system (including during demilitarization and disposal);
(4) Identifying and tracking environmental hazards and mitigation status, eliminating environmental hazards through design selection, where possible, and managing environmental risks where hazards cannot be eliminated; and

(5) Formally accepting and communicating identified environmental risks and risk mitigation plans, including obtaining formal user representative concurrence on high- and serious-risks.

c. Table 11-3 defines how, where, and when the PM and their environmental readiness function should ensure environmental considerations have been integrated into a program's acquisition document in the systems engineering process.

11-3.5. Programmatic Environment, Safety, and Occupational Health Evaluation in Systems Engineering

a. Acquisition PMs are required to conduct a Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE) to include a NEPA/E.O. 12114 compliance schedule, which documents a program's approach for incorporating environmental considerations into the systems engineering process. References (a) and (c) state the PM shall conduct a PESHE for all programs, regardless of acquisition category (ACAT) level. The PESHE assists the PM in identifying, planning, evaluating, and summarizing key environmental management policies, issues, initiatives, tasks, and corrective actions that will be implemented to meet specific program MSs and goals.

b. The PESHE and NEPA/E.O. 12114 compliance schedule are tools that can assist the PM with the management of environmental issues that may pose potential risks to program cost, schedule, and performance. The PESHE is not intended to supersede or replace other environmental analysis and documentation (e.g., HAZMAT management plans, reference (m) and reference (n) documentation) but should incorporate these documents by reference and appropriately embed environmental considerations and decision-making into all aspects of a program.
Table 11-3. Integrating Environmental Considerations in Required Acquisition Documents in the Systems Engineering Process

<table>
<thead>
<tr>
<th>Name of Acquisition Document</th>
<th>Environmental Considerations in Acquisition Document</th>
<th>Goal of Environmental Considerations as Part of Systems Engineering Document</th>
<th>Environmental Reference</th>
<th>Timing Requirement</th>
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</table>
| PESHE                         | • Strategy for integrating environmental considerations into the systems engineering process;  
                                 | • Environmental risks and their status;  
                                 | • Method for tracking hazards throughout the life-cycle of the system;  
                                 | • Environmental hazards (HAZMATs, wastes, and pollutants (e.g., discharges, emissions, noise)) associated with the system and plans for their minimization and safe disposal;  
                                 | • NEPA/E.O. 12114 compliance schedule covering all system-related activities;  
                                 | • Program environmental roles and responsibilities. | Section 6.3 of reference (a); enclosure 12, paragraph 6(a) of reference (c); reference (s) | • Program initiation for ships  
                                 | | | | | | | • MS B  
                                 | | | | | | | • MS C  
<pre><code>                             | | | | | | | • Full-rate decision review (FRP DR) (or full-deployment DR) |
</code></pre>
<table>
<thead>
<tr>
<th>Name of Acquisition Document</th>
<th>Environmental Considerations in Acquisition Document</th>
<th>Goal of Environmental Considerations as Part of Systems Engineering Document</th>
<th>Environmental Reference</th>
<th>Timing Requirement</th>
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</thead>
</table>
| Analysis of alternatives (AoA) | • An environmental SME shall be part of the AoA integrated product team (IPT).  
• The SME's role is to assess potential system alternatives from an environmental readiness standpoint and assess the likely environmental challenges in developing, testing, operating, maintaining, and training with the preferred system alternatives. | Identify likely environmental factors early and identify material solutions to mitigate environmental life-cycle costs and risk to program schedule and to fleet readiness. | Section 5.4.3 of reference (a) | • MS A  
• Program initiation for ships  
• MS B (updated as necessary)  
• MS C (updated as necessary)  
• Full-deployment DR (for automated information system) |
| Acquisition strategy | • Address ESOH hazards, associated risks, and proposed mitigation plan. | Identify likely environmental hazards, risks, and mitigation plans early to mitigate environmental life-cycle costs and risk to program schedule and fleet readiness. | References (r) and (s) | • Program initiation for ships  
• MS B  
• MS C (updated as necessary)  
• FRP DR (or full-deployment DR) |
<table>
<thead>
<tr>
<th>Name of Acquisition Document</th>
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<th>Goal of Environmental Considerations as Part of Systems Engineering Document</th>
<th>Environmental Reference</th>
<th>Timing Requirement</th>
</tr>
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</table>
| Systems engineering plan (SEP) | • Provide a brief summary of the strategy for integrating ESOH into systems engineering process;  
• Identify ESOH responsibilities in the IPT structure;  
• Identify the ESOH point of contact responsible for producing the PESHE and coordinating ESOH actions;  
• Schedule for NEPA compliance; and  
• Embed the PESHE in the SEP or PM must provide a "hotlink" in the SEP that will permit responsible staff the opportunity to monitor system compliance. | Reflect the environmental strategies and plan in conjunction with systems engineering to assure identification of hazards and planned mitigation measures once a hazard is identified. | Section 6.1 of reference (a); enclosure 12, paragraph 2 of reference (c); reference (r); reference (s) | • MS A  
• MS B  
• MS C  
• FRP DR (or full-deployment DR) |
<table>
<thead>
<tr>
<th>Name of Acquisition Document</th>
<th>Environmental Considerations in Acquisition Document</th>
<th>Goal of Environmental Considerations as Part of Systems Engineering Document</th>
<th>Environmental Reference</th>
<th>Timing Requirement</th>
</tr>
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<tbody>
<tr>
<td>Test and evaluation strategy/test and evaluation master plan (TEMP)</td>
<td>• Address environmental planning for NEPA/E.O. 12114 requirements and potential impact considerations that directly affect testing; • Ensure testers understand the environmental hazards, associated risks, and the required mitigation and control measures; • Obtain user coordination for high and serious risks; and • Coordinate with SYSCOM and fleet environmental staffs supporting ranges and the fleet end-users to verify the review of potential environmental planning requirements for the system's T&amp;E.</td>
<td>Ensure the necessary information, time, and resources to meet NEPA/E.O. 12114 requirements before testing, training, or initial operating capability (IOC) will be fully satisfied.</td>
<td>Section 4.4.7 of reference (a); enclosure 6, paragraph 2 of reference (c)</td>
<td>• MS B • MS C (updated if necessary) • FRP DR (or full-deployment DR)</td>
</tr>
<tr>
<td>Life-cycle sustainment plan (LCSP)</td>
<td>Provide a description of: • Program's key environmental issues, • Environmental risks with their mitigation plans, • System's demilitarization, and • HAZMAT usage.</td>
<td>Describes details on how the program will field and sustain the product support package necessary to meet readiness and performance objectives, lower total ownership cost, reduce risks, and avoid harm to the environment and human health.</td>
<td>Enclosure 2, paragraph 8(c) of reference (c); reference (t)</td>
<td>• MS B • MS C • FRP DR</td>
</tr>
<tr>
<td>Name of Acquisition Document</td>
<td>Environmental Considerations in Acquisition Document</td>
<td>Goal of Environmental Considerations as Part of Systems Engineering Document</td>
<td>Environmental Reference</td>
<td>Timing Requirement</td>
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<tr>
<td>System design specifications (SDS)</td>
<td>Environmental criteria and requirements are incorporated into the SDS for future inclusion in the statement of objectives, solicitations, and contracts.</td>
<td>The SDS defines the attributes of the overall system and the platform-specific mission performance requirements from higher level capability documents. It identifies naval and industry design criteria and standards used during system development, and details the expected producibility, operability, maintainability, and supportability of the system. The SDS will provide greater insight into capabilities, schedule, costs, and risks of the system earlier in the acquisition process thus reducing risk associated with the design and acquisition of the system.</td>
<td>Reference (u)</td>
<td>• Approval at gate 4 review</td>
</tr>
<tr>
<td>Name of Acquisition Document</td>
<td>Environmental Considerations in Acquisition Document</td>
<td>Goal of Environmental Considerations as Part of Systems Engineering Document</td>
<td>Environmental Reference</td>
<td>Timing Requirement</td>
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</tr>
<tr>
<td>Request for proposal (RFP)</td>
<td>Environmental criteria and requirements are incorporated into the RFP.</td>
<td>The RFP provides detailed requirements by Navy in order to receive contractor offerings. The RFP process brings structure to the procurement decision and is meant to allow the risks and benefits to be clearly identified upfront.</td>
<td>Reference (a)</td>
<td>• Approval at gate 5 review</td>
</tr>
</tbody>
</table>
c. In its environmental capacity, the objectives of the PESHE are to: (1) identify current environmental actions and initiatives for the program; (2) formally identify environmental risks or issues requiring resolution; and (3) develop a roadmap for embedding environmental consideration into the program throughout its life-cycle. The underlying goals are to keep management apprised and to mitigate any environmental issues that might result in unplanned schedule and cost impacts.

d. The PESHE, approved after coordination with affiliated SYSCOM environmental SMEs, is a life-cycle document that continually documents environmental readiness decision factors and analyses findings. Per reference (s), PMs will provide a "hotlink" to the PESHE in the SEP. The PESHE is required at program initiation for ships and for all programs at MS B, MS C, and FRP DR (or full-deployment DR) per enclosure 4, table 2-1 of reference (c).

(1) Environmental Risk Management

(a) Enclosure 12, paragraph 6 of reference (c) requires PMs to integrate environmental risk management into the overall systems engineering process for all developmental and sustaining engineering activities for the entire life-cycle of the system. To accomplish this, the PM conducts and regularly updates the PESHE to describe environmental responsibilities across the program and the environmental risk management strategy in the systems engineering process. As part of risk reduction, section 6.3 of reference (a) requires PMs to eliminate environmental hazards where possible and manage environmental risk where hazards cannot be eliminated. Based on the methodologies of references (f) and (v), the preferred compliance and risk reduction strategy is through design and elimination, and then source reduction or equivalent, possibly by substituting a less hazardous chemical. Balancing the elimination or reduction of risk with an informed and structured residual risk acceptance process is essential in making a positive contribution to a program's efforts to meet cost, schedule, and performance requirements. References (a), (d), (r), (v), and (w) contain information to assist PMs and other acquisition staffs in meeting the environmental risk management requirements defined in reference (c).

(b) As an integral part of the overall risk management approach for the system, PMs execute environmental risk identification and management appropriate to the nature of
the environmental risks inherent with the system. The scope of risks considered must include, at a minimum, all regulatory compliance requirements applicable to the system. This includes not only HAZMATs and waste, but also other environmental regulatory compliance issues such as noise, air emissions, and impacts to natural resources (e.g., CAA, ESA, CWA, MMPA, CZMA, Resource Conservation and Recovery Act, National Historical Preservation Act, Pollution Prevention Act of 1990).

(c) References (a), (c), and (r) define the uniform risk acceptance authority and require PMs to report on the status of environmental risks and acceptance decisions at technical reviews and address the status of all high and serious risks and applicable environmental requirements at acquisition program reviews and fielding decisions. References (a), (c), and (r) also require the user representative (i.e., the fleets) to be part of this risk acceptance process throughout the life-cycle, including early design decisions, to ensure optimal sustainability of the system and to provide formal concurrence prior to all serious-risk and high-risk acceptance decisions.

(2) Environmental Regulatory Compliance

(a) Enclosure 1, section E1.1.15 of reference (b) requires acquisition programs to be conducted in compliance with applicable federal, state, and local laws and regulations, treaties, and agreements. Environmental compliance is a threshold for development and deployment of the system and the PM is responsible for ensuring environmental compliance can be achieved through system design and in the testing, operation, maintenance, support, and disposal processes and procedures. The PM should regularly review and analyze the environmental regulations and related E.O.s to evaluate the impact on their program's life-cycle cost, schedule, and performance.

(b) Environmental regulatory requirements constitute an external constraint that may restrict the program's ability to test, home-port or home-base, operate, maintain, and dispose of the system as intended to maintain mission readiness. These constraints and other environmental risks must be identified very early as part of a robust systems engineering and risk assessment process to affect system design and mitigate adverse impacts to life-cycle cost, schedule, and performance; support sustainable operations; and ensure continued access to training ranges and training areas. Additionally, the impact of environmental requirements on a program's life-cycle cost, schedule, and performance and the associated environmental
impact of a program's system on the user or operating environment shall be identified to the milestone decision authority (MDA) per reference (c).

(c) Effective environmental efforts should include developing strategies to ensure compliance with environmental regulatory requirements (e.g., current regulations; developing legislation such as the use of registration, evaluation, authorization, and restriction of chemicals). It should also include developing implementation regulations such as Uniform National Discharge Standards (UNDS), CAA developments (developments related to the 1-hour and 8-hour ozone standards), CWA developments, and hazardous and solid waste opportunities.

(d) As described in reference (x), the Environmental Protection Agency (EPA) Administrator and the Secretary of Defense have determined that certain vessel discharges, listed in section 35-3.10, are exempt from requiring controls by an UNDS due to the low likelihood of causing an environmental effect. System changes that alter the content of these ship discharges shall be avoided. If a change to the equipment, material, or procedures for systems that generate any of these discharges must be considered, a regulatory risk assessment shall be conducted to determine the potential for the new design, alteration, instruction, or procedure to affect the regulatory status of the discharge.

(e) Environmental compliance integration decreases overall program costs, such as reducing maintenance and disposal costs through the use of environmentally preferable materials, reducing operational liabilities and risks, and providing a more cost-effective system design that is less likely to contribute to notices of violation for non-compliance. Examples of environmental compliance activities are included in table 11-4.

Table 11-4. Examples of Environmental Compliance Activities

<table>
<thead>
<tr>
<th>Environmental Compliance Area</th>
<th>Examples of Environmental Compliance Activities Include, but are not Limited to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air pollution</td>
<td>• Reviewing maintenance procedures to ensure maintenance actions and solvents, oils, lubricants, and aerosols meet applicable air emission regulations; and</td>
</tr>
<tr>
<td></td>
<td>• Reviewing engine specifications, test data, and compliance certificates, including certificates demonstrating compliance with commercial engine emission standards, to ensure engine meets applicable air emission regulations.</td>
</tr>
<tr>
<td>Noise pollution</td>
<td>• Determining and reviewing a system's noise levels;</td>
</tr>
</tbody>
</table>
Examples of Environmental Compliance Activities Include, but are not Limited to:

<table>
<thead>
<tr>
<th>Environmental Compliance Area</th>
<th>Examples of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reviewing noise emission regulations;</td>
<td></td>
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<tr>
<td>• Identifying potential noise exposures; and</td>
<td></td>
</tr>
<tr>
<td>• Analyzing possible noise abatement measures for the system.</td>
<td></td>
</tr>
<tr>
<td>Water pollution</td>
<td>• Reviewing potential water contamination from the use, storage, handling, and transportation of the system and system components; and</td>
</tr>
<tr>
<td></td>
<td>• Reviewing maintenance procedures to ensure solvents, oils, lubricants, and petroleum tasks conform to applicable water emission regulations.</td>
</tr>
<tr>
<td>HAZMAT</td>
<td>• Ensuring compliance with HAZMAT requirements for design and production of the system;</td>
</tr>
<tr>
<td></td>
<td>• Reviewing the HAZMAT and waste streams for the system;</td>
</tr>
<tr>
<td></td>
<td>• Reviewing maintenance procedures to reduce HAZMAT usage; and</td>
</tr>
<tr>
<td></td>
<td>• Reviewing maintenance procedures to ensure solvent, oil, lubricant, and aerosol tasks meet applicable HAZMAT use and waste disposal regulations.</td>
</tr>
</tbody>
</table>

(3) NEPA and E.O. 12114 and the NEPA/E.O. 12114 Compliance Schedule

(a) NEPA, as amended, is a procedural law requiring federal agencies to fully disclose and consider environmental information in agency decision-making. Failure to comply with NEPA and E.O. 12114 requirements and identify NEPA and E.O. 12114 risks for programs by the PM may impact the program's schedule and cost. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) provides additional and detailed information regarding NEPA.

(b) The NEPA/E.O. 12114 section of the PESHE does not satisfy NEPA and E.O. 12114 requirements, but refers by reference to all NEPA and E.O. 12114 documents prepared. The NEPA/E.O. 12114 section provides the road map of future NEPA and E.O. 12114 actions in the current and upcoming phases of the program. Additionally in this section, the PM addresses what has been accomplished to date, and also lists the upcoming actions that may trigger NEPA and E.O. 12114 requirements and the level of NEPA and E.O. 12114 documentation required. If the PM indicates the requirement for NEPA and E.O. 12114 documentation be included in the PESHE, the NEPA and E.O. 12114 documentation must be completed before making a decision that has an environmental impact or limits a choice from reasonable alternatives.
(c) Per section 6.3 of reference (a); enclosure 12, paragraph 6(a) of reference (c); and reference (y), PMs are required to develop and document the NEPA/E.O. 12114 compliance schedule in the PESHE for system-related activities related to the design, production, manufacture, test (developmental and operational), live fire test, home-porting or home-basing, maintenance, operations, and disposal of the system. The NEPA/E.O. 12114 compliance schedule is a tool used to ensure all the responsible parties understand their role(s) in complying with NEPA and E.O. 12114 early in the planning process to prevent unexpected program costs or delays. It is the PM's responsibility to report on NEPA and E.O. 12114 executions at milestone decision reviews and to report to the appropriate SYSCOM environmental office, to coordinate with fleet end-users, and to ensure environmental planning requirements can be addressed prior to system deployment.

(d) Consistent with reference (w), the NEPA/E.O. 12114 compliance schedule identifies:

1. All specific events or proposed actions throughout the life-cycle of the program that may require NEPA and E.O. 12114 documentation;

2. The anticipated initiation date and planned duration of each action;

3. A designated action proponent for each proposed action;

4. Anticipated type of NEPA and E.O. 12114 analysis and document planned;

5. Start and completion dates for the final NEPA/E.O. 12114 document; and

6. The specific approval authority for the documents.

(e) References (b) and (c) outline the required designee as the approval authority for system-related NEPA and E.O. 12114 documentation. This is further clarified in this manual in section 10-3.3 (NEPA and E.O. 12114 Signature Authority). Additional mandates for compliance with NEPA and E.O. 12114 are specified in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).
(4) **HAZMAT and Waste Management**

(a) DoD guidance requires the PM to establish a HAZMAT management program. Reference (c) requires the PM to identify HAZMAT integral to the system and required for operations and maintenance. The identification of hazardous byproducts, pollutants, and emerging contaminants should also be assessed as part of overall HAZMAT requirements. During the design process, all HAZMAT used on the system shall be identified, quantified, and mapped by location on the system per references (a) and (w). PMs shall document their HAZMAT management strategy and representative HAZMATs contained in the system.

(b) Section 6.3.4 of reference (a) requires PMs to use the proven HAZMAT management procedures and processes outlined in this manual and reference (z) to develop, implement, and effectively integrate their HAZMAT management strategy into the system’s engineering process. Reference (z) assures appropriate consideration is given to the elimination or reduction of HAZMATs and to the proper control of HAZMATs that cannot be eliminated. The emphasis is on eliminating or reducing HAZMATs early in the design of processes and system products.

(c) During the design of the system, per references (aa) and (bb), the environmental readiness function within the program office should work closely with the engineers and logisticians to assess HAZMAT requirements as part of the supportability analysis process. Use of a GEIA-STD-0007 (reference (bb)) compatible program will ensure the appropriate HAZMAT management data is collected for use in technical publication development and existing DoD material management processes. It provides a means to communicate maintenance and supply instructions to various logistic support levels to ensure proper handling and disposal of HAZMATs and articles containing HAZMATs.

(d) During the supportability analysis, areas to be identified for the system include, but are not limited to:

1. The locations and quantities of HAZMAT on the system, where applicable;

2. Reasonably anticipated hazardous byproducts and discharges and expected quantities of hazardous waste (HW)
generated during normal use and maintenance, in addition to those anticipated under emergency situations (e.g., exhaust, fibers from composite materials released during accidents);

3. Special HAZMAT training and handling requirements; and

4. Demilitarization and disposal requirements for articles containing HAZMAT.

(5) P2

(a) The integration of P2 in acquisition promotes the identification and mitigation of potential environmental hazards which may pose risk to the environment but which may not be regulated by law or regulation. Reference (o) establishes a national policy and protocol for P2 and designates P2 as the primary means of environmental stewardship. Acquisition programs should comply with references (j), (k), (o), and (cc) which include goals for reducing energy use; increasing renewable energy consumption; reducing the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of; reducing petroleum products and the emissions of specific toxic chemicals into the environment; and improving and optimizing sustainability. Reference (dd) implements policies and procedures to develop P2 programs throughout DoD.

(b) All Navy acquisition programs shall identify in the PESHE means and methods for the elimination or minimization of pollutants and pollution impacts (e.g., noise, water, and air pollutants; HAZMAT use; generation of HW). Per references (a) and (w), a program's P2 efforts shall be integrated at the earliest stages of planning, design, and procurement of an acquisition system to ensure operational readiness, eliminate pollution sources, eliminate or reduce HAZMAT or HWs, and to help minimize environmental impacts and environmental life-cycle costs. Pollution sources and HAZMAT usage can greatly increase the total ownership costs and impose burdens on operations, maintenance, and the ultimate disposal of the system and system components.

(c) P2 is a smart business practice that a program should implement throughout the life-cycle of a program. The PM, in coordination with the designated environmental readiness function within the program office, works with the system contractor to reduce system pollutants at the source and to reuse and recycle materials where possible and cost effective.
Some P2 goals relevant to acquisition programs, to the maximum extent technically and financially feasible, are:

1. Use respective PEO's or SYSCOM's targeted toxic and hazardous chemicals and materials lists, as available, to help minimize those toxic and hazardous chemicals and materials posing the greatest environmental risks and help Navy meet the goals of references (j), (k), and (o);

2. Avoid designs with pollution sources, which result in geographic use limitation, and those that generate needs for additional manning, facilities, control technologies and equipment, time, or funding to meet environmental regulatory requirements;

3. Minimize the variety and quantity of consumable materials required to maintain and repair the acquisition system;

4. Design for recycling and disposal of life limited components, technology refresh items, and the total system at the end of its service life;

5. Design systems that minimize or eliminate the use of ODSs or hexavalent chromium and which are energy efficient to minimize emissions of EPA designated greenhouse gases (GHGs); and

6. Design propulsion and power generation systems to minimize emissions - avoiding any increase in gaseous and particulate emissions as compared to existing legacy or like systems.

(6) Demilitarization and Disposal

(a) At the end of its useful life, a system shall be demilitarized and safely disposed of per all legal and regulatory requirements and policy relating to the environment, safety (including explosives safety), and security. Demilitarization planning shall be developed to ensure the recovery, reutilization, and recycling of components and material. Consistent with reference (ee), ultimate decontamination, decommissioning, demilitarization, and disposal of a system and system components needs to be considered to control life-cycle costs; provide cost recovery, where feasible; and minimize the risk of regulatory violation by improper disposal.
(b) To ensure the effectiveness of design for demilitarization and disposal can be maximized while minimizing cost impact to the program, per references (ff) and (gg), it is important for the PM to define and incorporate demilitarization and disposal requirements and considerations early in the acquisition process and to maintain them as an intrinsic part of the design process. PMs shall estimate (i.e., cost and risk) and plan for the system's demilitarization and safe disposition, including consideration of the demilitarization of conventional ammunition (including any item containing propellants, explosives, or pyrotechnics), as stated in reference (ff).

(c) Demilitarization and disposal costs represent a significant part of a system's life-cycle cost and must be estimated for systems requiring demilitarization, disposal of nuclear waste or HAZMAT, solid propellant fuels, or other materials requiring detoxification or extended HW storage. Demilitarization and disposal costs must include estimates for mitigating the impacts to the environment and for executing environmental planning requirements; otherwise, a program could be subjected to unanticipated and unfunded environmental disposal costs.

11-3.6. Environmental Readiness in Acquisition Phases

a. PMs must ensure full compliance with all applicable environmental statutes, regulations, E.O.s, directives, and DoD and DON environmental compliance policies during all phases of the acquisition process. As such, it is incumbent on PMs to fully identify, document, and make available information on all potential environmental impacts of systems and platforms and their associated potential mitigation as part of the acquisition process to support future deployment, operation, testing, training, maintenance, and demilitarization requirements.

b. Environmental SMEs supporting Navy acquisition programs routinely support program actions associated with the design, development, T&E, deployment of new systems, and demilitarization and disposal during each acquisition phase. As such, they support PM responsibilities to fully identify, document, and make available information on all potential environmental impacts of systems and platforms and potential mitigation as part of the acquisition process. These efforts support the implementation of policy and the requirements and goals contained in reference (h).
c. Table 11-5 outlines the requirements and responsibilities required, at a minimum, throughout each acquisition phase. Reference (hh) provides additional environmental considerations to be incorporated through each acquisition phase.

11-3.7. Environment in Acquisition Processes. Throughout the acquisition process, reviews of various types are required to improve governance and insight into the development, establishment, and execution of acquisition programs; ensure alignment between capability requirements and acquisition; and gain a better understanding of risks and costs. The following acquisition review processes, when used collaboratively and correctly, provide for an efficient and effective acquisition program: two-pass/six-gate review, systems engineering technical review (SETR), independent logistics assessment (ILA), and program support review (PSR).

a. Two-Pass/Six-Gate Review

(1) Policy and guidance, including the chair and principal members for the two-pass/six-gate review process are found in references (a) and (ii). The six gates are strategically placed throughout the requirements and acquisition processes to review the program with respect to cost, risk, and budget using reference (ii) and to decide whether or not the program should proceed forward in the acquisition process. The goal of the two-pass/six-gate review is to ensure the acquisition is in line with the capability requirements and to improve senior leadership decision-making through a better understanding of risks and costs at all stages of a program's life-cycle. This process applies to the Major Defense Acquisition Program (MDAP) and Major Automated Information Systems (MAIS) Programs as follows: all pre-MDAP, MDAP (ACAT I), all pre-MAIS; all MAIS (ACAT IA), and selected ACAT II programs.
Table 11-5. Environmental Requirements and Responsibilities During Each Acquisition Phase.

<table>
<thead>
<tr>
<th>Environmental Requirement</th>
<th>Phases</th>
<th>Responsibility</th>
<th>Document</th>
<th>Source</th>
<th>Section in Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-MSA MSA TD EMD P&amp;O&amp;O JCDR Program Sponsor Office SYSCOM OPNAV N45 Fleets ASN (E&amp;I&amp;E)</td>
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<tr>
<td>Provide adequate environmental readiness considerations, requirements, and attributes within the appropriate JCIDS documents (ICD, CDD, CPD).</td>
<td>X X X X</td>
<td>OPR</td>
<td>R&amp;I (where applicable)</td>
<td>ICD (MSA), CDD (TD), CPD (EMD)</td>
<td>Enclosure E of reference (q); appendix A to enclosure G of reference (q)</td>
</tr>
<tr>
<td>Ensure an environmental SME shall be a part of the AoA IPT to review viable system alternatives from an environmental readiness standpoint.</td>
<td>X X</td>
<td></td>
<td></td>
<td>AoA study plan, study guide, final report</td>
<td>Section 5.4.3 of reference (a)</td>
</tr>
<tr>
<td>Consider potential environmental readiness impacts at every stage of design, testing, production, and deployment of a system.</td>
<td>X X X X</td>
<td>OPR</td>
<td>R&amp;I</td>
<td>R&amp;I</td>
<td>R&amp;I</td>
</tr>
<tr>
<td>Environmental Requirement</td>
<td>Phases</td>
<td>Responsibility</td>
<td>Document</td>
<td>Source</td>
<td>Section in Chapter</td>
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<td></td>
<td>Pre-MSA</td>
<td>MSA</td>
<td>TD</td>
<td>EMD</td>
<td>P&amp;O/O&amp;S</td>
</tr>
<tr>
<td>Identify, assess, eliminate, or mitigate; verify mitigation; track hazards to closure in hazard tracking system; and accept hazards and their associated risks, including HAZMATs.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>OPR</td>
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<tr>
<td>Ensure environmental considerations have been integrated into the SEP.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>OPR</td>
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<tr>
<td>Conduct and update, as necessary, PESHE at MS A (for ships), MS B, MS C, and FRP DR (or full-deployment DR).</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>OPR</td>
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*For ships only

FESHE (included as a "hotlink" in the SEP); hazard tracking database

Section 6.3 of reference (a); reference (c)

11-3.5, 11-3.7.d

SEP

Section 6.1 of reference (a); enclosure 12, paragraph 2 of reference (c)

11-3.5

FESHE (included as a "hotlink" in the SEP)

Section 6.3 of reference (a); enclosure 12, paragraph 6 and enclosure 2, paragraph 8 of reference (c)

11-3.5
<table>
<thead>
<tr>
<th>Environmental Requirement</th>
<th>Phases</th>
<th>Responsibility</th>
<th>Document</th>
<th>Source</th>
<th>Section in Chapter</th>
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<tbody>
<tr>
<td><strong>Prepare and maintain NEPA/E.O. 12114 compliance schedule and monitor implementation of NEPA/E.O. 12114 mitigation plans.</strong></td>
<td>Pre-MSA</td>
<td>X* X X X</td>
<td>OPR R6I R6O R6I</td>
<td>FESHE (included as a &quot;hotlink&quot; in the SEP)</td>
<td>11-3.5.d</td>
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<td>*For ships only</td>
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<tr>
<td><strong>Address environmental planning requirements, including NEPA/E.O. 12114, and potential environmental impact considerations that directly affect testing per NEPA and E.O. 12114 as part of the TEMP.</strong></td>
<td>Pre-MSA</td>
<td>X X X</td>
<td>OPR R6I R6I</td>
<td>TEMP</td>
<td>Section 6.3 of reference (a); enclosure 6, paragraph 2 of reference (c)</td>
</tr>
<tr>
<td><strong>Estimate, plan for, and update the system's demilitarization and safe disposal, including HAZMATs.</strong></td>
<td>Pre-MSA</td>
<td>X X X</td>
<td>OPR R6I R6I</td>
<td>PESHE (included as a &quot;hotlink&quot; in the SEP), demilitarization and disposal planning, LCSP</td>
<td>Enclosure 2, paragraph 8(c)(2) of reference (c)</td>
</tr>
<tr>
<td><strong>Implement and continue to monitor a P2 management program for the system's life-cycle.</strong></td>
<td>Pre-MSA</td>
<td>X X X</td>
<td>OPR R6I R6I</td>
<td>PESHE (include as a &quot;hotlink&quot; in the SEP)</td>
<td>Section 6.3.5 of reference (a)</td>
</tr>
<tr>
<td>Environmental Requirement</td>
<td>Phases</td>
<td>Responsibility</td>
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<td>Source</td>
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<tr>
<td>Document environmental considerations for life-cycle sustainment in the LCSP.</td>
<td>X X X X</td>
<td>OPR R&amp;I</td>
<td>LCSP</td>
<td>Enclosure 2, paragraph 8 of reference (c)</td>
<td>Table 11-3</td>
</tr>
<tr>
<td>Conduct no-control UNDS discharge assessment (as needed).</td>
<td>X X X X</td>
<td>OPR R&amp;I R&amp;O</td>
<td>Reference (x)</td>
<td>11-3.5.d.2</td>
<td></td>
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<tr>
<td>Support gate review process (gates 1-6):</td>
<td>X X X X</td>
<td>OPR R&amp;I R&amp;O</td>
<td>Section 1.11 of reference (a)</td>
<td>11-3.7.a</td>
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<tr>
<td>• PMs shall present the program's environmental status, including environmental criteria,</td>
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<td>considerations and requirements, and the status of all high and serious environmental</td>
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<td>risks (i.e., current, target, and residual) at appropriate gate reviews.</td>
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<td>Environmental Requirement</td>
<td>Phases</td>
<td>Responsibility</td>
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<td>Support SETR process:</td>
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<td>• PMs shall report on the</td>
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<td>status of environmental</td>
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<td>criteria, considerations,</td>
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<td>requirements, and risks</td>
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<td>and acceptance decisions</td>
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<td>at technical reviews; and</td>
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<td>• PMs shall address</td>
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<td>applicable environmental</td>
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<td>checklist items and</td>
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<td>questions for each SETR</td>
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<td>and determine compliance</td>
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<td>status.</td>
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<td>Support ILA process:</td>
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<td>• Address applicable</td>
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<td>environmental checklist</td>
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<td>items and questions for</td>
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<td>each separate ILA and</td>
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<td>determine compliance</td>
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<td>status.</td>
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**Phase Codes** – MSA: materiel solution analysis; TD: technology development; EMD: engineering and manufacturing development; P&D/O&S: production & deployment/operations & support

**Responsibility Codes** – OPR: office of primary responsibility; R&I: review and provide input; and R&O: review and oversight

Enclosure 12, paragraph 4 of reference (c); section 6.1 of reference (a) 11-3.7.b

Section 1.9 of reference (a) 11-3.7.c
(2) Table 11-6 highlights the desired outcomes and key potential environmental considerations that should be addressed at the various gate reviews. Two key environmental components, at a minimum, of an acquisition program are:

(a) Early and continuous participation of environmental SME(s) in the program for planning and executing environmental requirements and providing input to acquisition and contractual documents; and

(b) Completion of NEPA and E.O. 12114 analysis and documentation early-on and prior to decision-making and implementation of program events (proposed actions). This includes socialization with the fleet and end-users. Failure to plan and execute NEPA and E.O. 12114 requirements for program events (e.g., testing, fielding) can result in costly program delays.

Table 11-6. Gate Review Process: Desired Outcome and Environmental Consideration

<table>
<thead>
<tr>
<th>Gate</th>
<th>Desired Outcome of Gate Review</th>
<th>Potential Environmental Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Validate ICD and AoA guidance.</td>
<td>• Applicable environmental readiness requirements specific to the system are identified in the ICD.</td>
</tr>
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<td></td>
<td></td>
<td>• AoA guidance includes consideration of the impacts of environmental compliance and ownership costs.</td>
</tr>
</tbody>
</table>
| 2    | • Validate AoA results and preferred alternative.  
      | • Provide approval to develop CDD and concept of operations (CONOPS).  
      | • Authorize a program to proceed to the next event (i.e., to gate 3 when program initiation will be at MS A, or to MS A when program initiation will be at MS B). | • Ensure AoA adequately considered the impacts of environmental compliance and ownership costs. |
| 3    | • Approval of CDD and CONOPS. | • Applicable environmental readiness criteria and requirements specific to the system are identified in the CDD, including NEPA and E.O. 12114 requirements. |
| 4    | • Approval of the SDS.  
<pre><code>  | • Authorizes a program to proceed to gate 5 or MS B. | • Environmental criteria and requirements are incorporated into the SDS for future |
</code></pre>
<table>
<thead>
<tr>
<th>Gate</th>
<th>Desired Outcome of Gate Review</th>
<th>Potential Environmental Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>inclusion in the statement of objectives, solicitations, and contracts.</td>
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<tr>
<td></td>
<td></td>
<td>• PESHE is completed and environmental SME(s) are integrated into the IPT structure.</td>
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<tr>
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<td>• TEMP includes environmental considerations and planning and budgeting for NEPA and E.O. 12114 documentation to support T&amp;E.</td>
</tr>
<tr>
<td>5</td>
<td>• Approval to release the RFP.</td>
<td>• Environmental criteria and requirements are incorporated into the RFP.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Previous environmental criteria, considerations, and requirements are adequately implemented.</td>
</tr>
<tr>
<td>6</td>
<td>• Approval of CPD.</td>
<td>• Applicable environmental readiness criteria and requirements specific to the system are identified in the CDD, including NEPA and E.O. 12114 requirements.</td>
</tr>
</tbody>
</table>

b. **SETR**

(1) Consistent with references (a), (jj), and (kk), the SETR process is a structured technical assessment process that evaluates the technical health and design maturity at key event-driven development stages based on the program's schedule, deliverables, and technical readiness over the life of the program. SETRs assist PMs in documenting technical requirements, synthesizing certifiable designs, and assessing performance and environmental risk as well as producing and deploying systems to achieve a required capability.

(2) The PM, with naval SYSCOM and PEO engineers as active participants, tailors the SETR to match the complexity and risks of the program to assess its technical health and maturity. Figure 11-2 depicts the technical and program reviews within the acquisition process.

(3) Objective documentation and analysis on the technical health and maturity of the system is then compared with specific pre-defined entry and closure criteria to facilitate the management of scope for the SETR assessments. The early stages of SETR assessments focus on defining technical
requirements that reflect user's requirements. In later stages, where the system matures in development, SETR assessments focus on the breadth and depth of the design maturity, eventually leading to verification that the solutions align with design requirements and cost, schedule, and risk targets. SETRs should ensure trade studies used to assess risks have been considered and incorporated into work plans and the risk reduction measures, rationale, and assumptions have been appropriately approved.

(4) Per reference (a), all high and serious environmental risks and acceptance decisions shall be reported at SETRs. Risk reduction for a program includes the identification and management of environmental hazards and their associated risks and compliance with applicable environmental laws and regulations. The PM identifies the severity category and probability level associated with each environmental risk, using the method outlined in reference (f). Assessing and managing environmental risk through the SETR process helps prevent environmental requirements from adversely impacting schedule, performance, or life-cycle cost of an acquisition program.

c. ILA

(1) References (a), (ll), and (mm) provide policy and guidance for planning, conducting, and reporting ILAs within DON. ILAs provide PMs, PEOs, and MDAs with an evaluation of a program's overall product support and sustainment planning and implementation, particularly in the early acquisition phases, to facilitate identification and mitigation of supportability risk issues, before they negatively impact cost, schedule, or performance. ILAs are conducted by an independent team of SMEs to evaluate each of the integrated product support element (IPSE) assessment criteria outlined in reference (ll) and other SYSCOM guidance. Environment within ESOH is one of the IPSEs evaluated during the ILA.
Figure 11-2. Systems Engineering Technical Review Timing (Illustrated Example of Program Initiation at MS B)
(2) Reference (ll) and SYSCOM guidance and checklists outline the recommended IPSE assessment criteria to be used as a guide to assess the planning and status of the program. The environmental assessment criteria in reference (ll) are derived from both policy and best practices, which have proven to produce optimal supportability. As a result of varying program requirements and acquisition strategies, tailoring of the criteria may be required. The assessment criteria for environment address the following:

(a) Evaluation of the PESHE development and execution;

(b) Inclusion of environmental considerations in the TEMP that directly affect testing;

(c) Evaluation of NEPA/E.O. 12114 compliance schedule and decision results;

(d) Inclusion of the integration of environmental considerations into the systems engineering process as described in the SEP;

(e) Evaluation of environmental risk;

(f) Evaluation of HAZMAT and waste management; and

(g) Evaluation of plan for end of life-cycle demilitarization and disposal.

d. PSR

(1) Policy and guidance for the PSRs are found in enclosure 2 of reference (c) and reference (nn). The PSRs provide insight into current and future ACAT ID and ACAT IAM program execution through a detailed analysis. The review determines whether appropriate engineering and management processes are in place and sufficient resources are available for the program to achieve its goals in balancing cost, schedule, and performance, while managing risk in production and core capabilities installation.

(2) Assessing the environmental readiness of an acquisition program is part of the PSR. As required, Navy environmental SMEs may support the PSR process for Navy acquisition programs selected for PSRs. Environmental SMEs assess program compliance with references (c) and (w) and focus
on the requirements and integration of the PESHE in the program, including the strategy and execution of integrating environmental considerations into the systems engineering process, identification and reporting of high and serious environmental risks and technology requirements (hazard tracking system), and the completeness of the NEPA/E.O. 12114 compliance schedule.

(3) This independent review is intended as a cooperative effort between the review team and the program office to: (1) document findings, maturity, and adequacy of system performance to date; (2) document strengths and risks of system; (3) provide actionable recommendations to mitigate those risks for the program management office; and (4) assess readiness for MS decisions. PSRs are conducted by the Director of Defense Research and Engineering and performed by cross-functional and cross-organizational teams to support defense acquisition reviews, requests by Under Secretary of Defense for Acquisition, Technology, and Logistics, and requests from PMs.

11-4 Responsibilities

11-4.1. OPNAV (N45) shall:

a. Coordinate the overall implementation of Navy environmental readiness in acquisition requirements;

b. Serve as the CNO lead for all environmental readiness requirements relative to Navy acquisition;

c. Advise and issue guidance to budget submitting offices pertaining to the integration of environmental readiness requirements and considerations into Navy acquisition;

d. Coordinate the review of proposed policy with potential impact to environmental acquisition requirements;

e. As appropriate, elevate environmental readiness in acquisition matters that involve controversial issues or that may affect environmental policies or their implementation to the attention of ASN(EI&E);

f. Conduct annual reviews of acquisition program ILA and SETR – environmental reviews leading to recommendations for improving efficacy of the reviews and potential feedback loops to acquisition programs;
g. Coordinate the overall execution of PSRs upon request of ASN(EI&E) on a case-by-case basis;

h. Chair the Navy's environmental readiness in acquisition IPT to support improving the Navy's efforts to integrate environmental readiness across the weapon system life-cycle; and

i. Support the annual CNO Environmental Awards Program to identify and evaluate Navy programs and personnel supporting Navy weapons systems acquisition.

11-4.2. OPNAV special assistant for safety matters, per references (a), (g), and (oo), supports development of safety and health program requirements; assists in safety policy implementation; identifies safety and occupational health risk factors; and acts as executive secretary for the Navy System Safety Advisory Board which coordinates review of ESOH issues of common concern to SYSCOMs within Navy acquisition.

11-4.3. SYSCOMs shall:

a. Promote the use of best management practices for the development, tracking, and update of Navy acquisition documentation relevant to environmental requirements and considerations integration;

b. Provide all necessary products, tools, reporting mechanisms, and environmental professional services to PEOs to assist in complying with environmental laws, regulations, and statutes;

c. Provide environmental readiness advocacy and support to Navy acquisition programs throughout the life-cycle of Navy weapons systems;

d. Engage in the ILA reviews of selected programs annually for an ILA, maintain record(s) of the ILA environmental review, and provide an annual status report summarizing ILAs conducted in a given fiscal year, highlight positive reviews, and identify trends requiring program office attention;

e. Identify and submit Environmental Readiness Program Requirements Web (EPRWeb) projects, which identify resource requirements for supporting the integration of environmental requirements and considerations into affiliate PEO or program offices. EPRWeb projects for this purpose will be submitted under a separate manpower project category;
f. Prepare annually a program execution briefing for OPNAV (N45) that summarizes efforts taken to assist affiliated PEO or program office acquisition programs to achieve environmental readiness per this chapter and references (h) and (i). The briefing shall include an explanation of how CNO (N4)-sponsored funding was executed including identification of acquisition programs supported and the outcomes of that support. In addition, reviews shall include lessons learned and best practices to be considered in improving the effectiveness of future efforts; and

g. Participate in Navy's ACQ-ER IPT, providing permanent and alternative members to the IPT, to support improving Navy's efforts to integrate environmental readiness across the weapon system life-cycle.

11-4.4. Fleets shall:

a. Support OPNAV and SYSCOM environmental staffs on environmental readiness in acquisition integration for MDAPs;

b. Coordinate with OPNAV and SYSCOMs as needed to support fleet capabilities and acquisition requirements officers to support fleet environmental readiness inputs into the concept development all the way through the system delivery processes;

c. Support the identification and integration of fleet environmental issues into acquisition documentation at Navy acquisition program gate reviews, in particular, pre MS B program decision meetings; and

d. Support OPNAV and SYSCOM engagement and feedback to the acquisition program office regarding integration of environmental readiness requirements into acquisition program T&E planning and execution.

11-4.5. The acquisition PM, per references (a) through (g) and (pp), shall be cognizant of and support the requirements below. The PM shall (1) establish an environmental readiness function and responsibilities within the acquisition program's organizational structure, and (2) obtain the services needed to address environmental readiness considerations. In doing this, the PM, through the environmental readiness function, shall address the following requirements:
a. Integrate environmental readiness considerations in their respective acquisition documents and processes;

b. Conduct a PESHE (including the NEPA/E.O. 12114 compliance schedule) which documents a program's approach for integrating environmental considerations throughout the program's life-cycle and incorporate the PESHE contents into other acquisition documents as required or appropriate. Prior to IOC, the PESHE should be reviewed and updated to include the full consideration of fleet representative input associated with environmental issues relative to post-IOC operations at Navy training ranges and operating areas. The PESHE shall be coordinated with affiliated SYSCOM ESOH SMEs before being approved;

c. Ensure the T&E strategy and the TEMP address the program's analysis of ESOH risks and mitigation measures, to include environmental planning (i.e., NEPA and E.O. 12114) and safety releases, for the system or item. This will require engaging, communicating, and coordinating prior to any live fire, developmental, or operational test decision to ensure potential impacts to the natural environment are properly addressed. The PM, per references (a) through (e) and (y), shall ensure all applicable NEPA and E.O. 12114 requirements are satisfied;

d. Coordinate with SYSCOM and fleet environmental staffs supporting ranges and fleet end-users to verify the review of potential environmental planning requirements for the system (e.g., T&E, deployment and fielding, military construction). This includes (1) verifying system requirements can be executed within the scope of existing environmental documentation, permits, and environmental operating procedures; (2) outlining how environmental requirements will be fully satisfied (i.e., through existing or new environmental documents or procedures); and (3) assuring resources are budgeted to execute the plan;

e. Incorporate environmental requirements and considerations into the LCSP to support planning, resourcing, and execution of program life-cycle sustainment per reference (t);

f. Ensure identification of HAZMAT used in the system and required during operations, sustainment, and disposal using proven HAZMAT management procedures and processes;
g. Plan for and integrate environmental requirements and considerations into end of life-cycle demilitarization and disposal including the disposition of munitions per references (a), (b), (c), (ff), and (gg); and

h. Promote energy efficiency, water efficiency, recycled content, and use of environmentally preferable products; reduce the quantity of toxic chemicals and HAZMAT used in and for maintenance of the system; and reduce GHG emissions pursuant to reference (j) and (k). This will include ensuring compliance with the DoD Green Procurement Program to the maximum extent practicable.

11-5 Definitions

11-5.1. **Environmental Readiness in Acquisition.** Environmental readiness in acquisition is to ensure the capability of a unit or formation, ship, weapon system, or equipment performs the missions and functions for which it is organized or designed, in full compliance with all applicable environmental laws and regulations.
CHAPTER 12
NATURAL RESOURCES CONSERVATION

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12-1 Scope. This chapter establishes Navy policy guidance and requirements to ensure sustainable military readiness through compliance with all applicable laws and regulations related to the conservation of natural resources in the United States, its territories and possessions, and on the high seas.

12-1.1. Related Chapters. Due to the interdisciplinary nature of the Natural Resources Conservation (NRC) Program, personnel should also refer to other chapters in this manual, specifically chapter 2 (Funding), chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) policies and requirements, chapter 13 (Cultural Resources
Compliance and Management), chapter 14 (Coastal Zone Management), chapter 34 (Overseas Environmental Compliance Ashore), chapter 41 (Natural Resource Damage), and chapter 42 (Environmental Restoration).

12-1.2. References

(a) SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs

(b) 16 U.S.C. §670a-f

(c) DoD Initial Guidance for BRAC 2005 Joint Basing Implementation of 22 January 2008

(d) DoD Instruction 4715.03 of 18 March 2011

(e) OUSD(ESOH) Memorandum of 10 Oct 2002, Implementation of Sikes Act Improvement Act: Updated Guidance and supplement guidance


(g) 65 FR 62566

(h) E.O. 13352, Facilitation of Cooperative Conservation


(k) DON OGC Memorandum of 28 Jul 2010

(l) DoD Directive 3210.6-R of 15 April 1998

(m) 10 U.S.C. §1588

(n) DoD Instruction 1100.21 of 3 March 2002

(o) OPNAVINST 5380.1B, Voluntary Services in Department of the Navy
(p) OUSD (ATL) Memorandum of 14 Apr 2009, Installation Geospatial Information and Services Guidance

(q) 16 U.S.C. §703

(r) SECNAV Memorandum of 19 Jan 2001, Implementation Guidance for Executive Order on Protection of Migratory Birds

(s) E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds

(t) Memorandum of Understanding (MOU) Between the U.S. Department Of Defense and the U.S. Fish and Wildlife Service to Promote the Conservation of Migratory Birds, 7 Jul 2006

(u) 50 CFR 10.13

(v) 50 CFR 13

(w) 50 CFR 21

(x) 16 U.S.C. §1531 et seq.

(y) 16 U.S.C. §668a-c

(z) 16 U.S.C. §1361

(aa) SECNAV Memorandum of 28 Dec 2000, Compliance with Environmental Requirements in the Conduct of Naval Exercise or Training At Sea

(bb) CNO Memorandum of 9 Apr 2012, Naval Undersea Warfare Center, Division Newport Roles and Responsibilities as the Center of Excellence for Navy Acoustic Modeling

(cc) 50 CFR 216.1-47

(dd) E.O. 13089, Coral Reef Protection

(ee) Department of Defense Coral Reef Protection Implementation Plan, November 2000

(ff) CNO Memorandum of 4 Dec 1998, Coral Reef Protection Policy

(gg) 50 CFR 600.905-930
(hh) OPNAV ltr 5090 Ser N456M/11U1588080 of 22 Mar 11

(ii) E.O. 13158, Marine Protected Areas

(jj) 16 U.S.C. §3501-3510

(kk) 50 CFR 402

(ll) CNO Memorandum of 25 Jul 2003, Section 7 Consultation Procedures Under the Endangered Species Act

(mm) SECNAV Memorandum of 25 Nov 2002, Policy Guidance for Endangered Species Actions

(nn) 16 U.S.C. §661

(oo) 33 CFR 320-330

(pp) 40 CFR 230 and 33 CFR 325 and 332

(qq) E.O. 11990, Protection of Wetlands, as amended by E.O. 12608, Elimination of Unnecessary Executive Orders and Technical Amendments to Others

(rr) E.O. 11988, Floodplain Management

(ss) E.O. 13423, Greening the Government Through Leadership in Environmental Management

(tt) 7 U.S.C. §136

 uu) COMNAVFAENGCOM Memorandum of 2 Jul 1996, Guidelines for Establishment of Ecological Areas

(vv) 10 U.S.C. §2665 et seq.

ww) COMNAVFAENGCOM, Real Estate Operations and Natural Resources Management Procedural Manual NAVFAC P-73 Volume II

(xx) 7 U.S.C. §4201 et seq.


(zz) Navy Comptroller (NAVCOMPT) Manual Volume 3 (NOTAL)
(aaa) P.L. 108-198, Forest Resources Conservation and Shortage Relief Act of 1990


(ccc) E.O. 13112, Invasive Species

(ddd) P.L. 104-332, National Invasive Species Act of 1996

(eee) DoD Instruction 6055.06 of 21 December 2006


(ggg) USFWS Memorandum of 2 May 2003, Guidance for the Establishment, Use, and Operation of Conservation Banks

(hhh) 73 FR 44761

(iii) Clean Water Act Section 404

(jjj) 7 U.S.C. §7701-7786

(kkk) SECNAVINST 6401.1B, Veterinary Health Services

(lll) CNO Memorandum of 10 Jan 2002, Policy Letter Preventing Feral Cat and Dog Populations on Navy Property

(mmm) SECNAV Memorandum of 15 Aug 2002, Access to Outdoor Recreation Programs on Military Installations for Persons with Disabilities


(ooo) Presidential Memorandum of 16 Apr 2010, A 21st Strategy for America's Great Outdoors

(ppp) DoD 6055.09-M, DoD Ammunition and Explosives Safety Standards, February 2008
(qqq) E.O. 11644, Use of Off-Road Vehicles on Public Lands, as amended by E.O. 11989, Off-Road Vehicles on Public Lands

(rrr) E.O. 13443, Facilitation of Hunting Heritage and Wildlife Conservation

(sss) E.O. 12962, Recreational Fisheries, as amended by E.O. 13474, Amendments to Executive Order 12962

(ttt) OPNAVINST 11010.40, Encroachment Management Program

(uuu) 10 U.S.C. §2684a

(vvv) P.L. 111-11, Omnibus Public Land Management Act

(www) 50 CFR 600.10


(yyy) 16 U.S.C. §1362

12-2 Legislation

a. The following legislation contains provisions that pertain to the protection, conservation, management, and rehabilitation of natural resources:

(1) Bald and Golden Eagle Protection Act;

(2) Clean Water Act (CWA);

(3) Coastal Barrier Resources Act;

(4) Endangered Species Act (ESA);

(5) Fish and Wildlife Coordination Act;

(6) Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA);

(7) Marine Mammal Protection Act (MMPA);

(8) Migratory Bird Treaty Act (MBTA); and

(9) Sikes Act.
b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, several laws including the Anti-Deficiency Act, Coastal Zone Management Act, Defense Appropriations Act of 1991 Legacy Program, Forest Resources Conservation and Shortage Relief Act, Migratory Bird Treaty Reform Act, and Soil Conservation and Domestic Allotment Act all contain provisions that affect NRC practices. Additional information on title 16, United States Code (U.S.C.) can be found at the United States Code: Main Page Web site (refer to appendix E (Web Sites) for Web site address).

12-3 Requirements

a. Navy's mission is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. This chapter establishes the requirements for maintaining the health and long-term ecological integrity of the environment while ensuring the continued availability of the land, air, and sea space necessary for the readiness of the operating forces and the shore support of Navy.

b. Navy has responsibilities for the stewardship of natural resources on land and at sea (reference (a)). In addition to compliance with all appropriate environmental laws and regulations, Navy has a mandate to implement a program for the conservation of natural resources (reference (b)) on lands and in near shore areas that are either titled to Navy or are under Navy access control. For activities at sea, Navy is committed to ensuring compliance with all appropriate laws and regulations and being a responsible steward of marine resources.

c. Professionally trained natural resources managers shall be assigned the responsibility of implementing these requirements.

12-3.1 Joint Bases. NRC shall be conducted by the supporting or supported command per the joint base agreement (reference (c)).

12-3.2 Program Goals. The following shall be accomplished to ensure the success of the NRC Program:

a. Integrate NRC responsibilities with military activities, installation planning and programming, and other activities as appropriate to ensure no net loss to the Navy mission;
b. Ensure sustainable multipurpose use of the resources and public access when consistent with the mission, and safety and security requirements; and

c. Interact with the surrounding community to develop positive and productive community involvement, participation, and educational opportunities.

12-3.3. Ecosystem Management and Climate Change. Ecosystems are functioning units of nature consisting of complex networks of relationships between land, water, and living resources. Ecosystems are subjected to various stressors ranging from human impacts to climate change, and as such, need to be managed in a way that allows for mitigation, adaptation, and long-term sustainability on a regional basis.

a. Ecosystem-Based Management. Ecosystem principles shall be applied per reference (d). Ecosystem-based management includes, but is not limited to, the following main principles:

(1) A shift from single species to multiple species conservation;

(2) Formation of partnerships necessary to consider and manage ecosystems that cross installation boundaries; and

(3) Use of the best available scientific information and scientifically sound strategies for adaptive management.

b. Climate Change. Assessing the impacts of climate change is best approached by identifying an environmental baseline for the future that considers the differences in landscape form and function caused by climate change and other stressors on the landscape. Conducting a climate change vulnerability assessment may guide essential monitoring requirements, as well as develop appropriate adaptive management strategies. However, the abundance and distribution of species and habitats on Navy properties may be too small in scale to address comprehensive climate change vulnerabilities. Therefore, regional partnerships may be the most appropriate means to conduct such assessments and in developing and implementing adaptation strategies. In general, natural resources managers should identify and implement NRC strategies that provide benefits to the ecosystem, regardless of whether climate changes occur.

12-3.4. Integrated Natural Resources Management Plans (INRMP). References (b) and (d) require all Military Departments to
prepare and implement comprehensive INRMPs for each military
installation with significant natural resources.

a. Evaluation of Need

(1) Commander, Navy Installations Command (CNIC) and any
other budget submitting offices (BSO) responsible for Navy Class
property shall determine if an INRMP is required for any
property for which Navy has authority for or control of NRC.
This includes all sites, special areas, and properties assigned
to an installation in the Internet Naval Facilities Assets Data
Store (iNFADS), and all other lands assigned to an installation
by lease (including lands used by tenants), withdrawal, permit,
or otherwise in the control of the Navy (references (d), (e),
and (f) or most current guidance). The determination should be
based upon the presence of significant natural resources such as
fish and wildlife and their habitats, threatened and endangered
species, wetlands, etc., or if funding is required to manage any
such resources (reference (d)).

(2) An INRMP shall be prepared for an installation when
one or more of its assigned properties have significant natural
resources. When an INRMP is prepared for an installation, all
properties assigned to that installation shall be described,
including those assigned properties that may not have
significant natural resources. The latter requirement is to
obviate any future need to cover such property by revising an
INRMP, should the status of natural resources change at those
assigned properties. If a specific installation’s sites, special
areas, or properties have unique resources or special
circumstances a separate INRMP can be developed, but that INRMP
should be referenced in the INRMP of the main installation.

(3) An INRMP is not required if it is determined that
none of an installation's assigned properties have significant
natural resources (references (e) and (f)). The BSO must
provide documentation of this determination to the Office of the
Chief of Naval Operations, Energy and Environmental Readiness
Division (OPNAV (N45)) for review and approval. The BSO must
re-evaluate these determinations every 5 years.

b. Near Shore Areas

(1) Reference (b) requires INRMPs for military
installations. However, most Navy installations abut
significant bodies of water and the status of natural resources
in near shore areas can become an encumbrance to shore support
missions if not adequately managed. Therefore, Navy INRMPs shall provide for the conservation of installation watersheds, shorelines, and near shore areas such that benefits are provided to aquatic species and habitats in waters adjacent to Navy installations (reference (g)).

(2) INRMPs shall also address federal regulatory requirements (e.g., ESA, MSFCMA) in near shore areas and should include actions developed in support of cooperative conservation initiatives and other partnerships (reference (h)) with local natural resources agencies and or stakeholders.

c. INRMP Preparation and Implementation. Professionally trained installation natural resources managers will ensure Navy INRMPs are prepared, maintained, and implemented.

(1) INRMPs and Critical Habitat Designations. Natural resources managers must ensure INMRPs are prepared and implemented using the ecosystem management approach, and in a manner consistent with the military mission to preclude designations of critical habitat under ESA. Natural Resource managers must detail in their INRMPs the conservation practices being implemented to provide “Special Management and Protection” to listed species and specifically articulate how INRMPs provide a conservation benefit to the species, provide certainty that INRMP actions will be implemented (pursuant to the Antideficiency Act), and provide certainty that the conservation effort will be effective.

(2) Format and Required Plan Elements. Navy INRMPs should be formatted per reference (i), or the most current guidance, to the extent practicable. References (b), (e), (f), and (i) identify INRMP elements and development and implementation processes.

(3) Cooperative Preparation. Reference (b) requires preparation of an INRMP in cooperation with USFWS and the appropriate state fish and wildlife agency. The final INRMP shall reflect mutual agreement of the USFWS and state fish and wildlife agencies concerning the conservation of the natural resources under their respective legal authorities (reference (j) or most recent memorandum of understanding (MOU)). Mutual agreement on the INRMP by Navy, USFWS, and state officials shall be documented by signatures of the appropriate official on the title pages of the INRMP which can be accompanied by letters of endorsement attached to the INRMP.

12-10
(4) Coordination and Review

(a) Coordination with internal Navy stakeholders, including installation personnel responsible for military operations is especially critical during preparation, updates, or revision of the INRMP.

(b) Cooperative preparation with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) is not required by reference (b) but coordination with NMFS is appropriate when the near shore environment will benefit from INRMP implementation. NMFS will take INRMPs into consideration when making critical habitat determinations for listed species under their jurisdiction and when critical habitat exclusions in the near shore environment may be necessary to support the installation mission.

(c) Federally recognized Indian tribes, Alaska native entities, and Native Hawaiian organizations shall be given opportunity to consult on the development of INRMPs where treaty rights, sacred sites, burial sites, or other rights to natural resources may be affected by the INRMP (reference (d)).

(d) Natural resources managers also are encouraged to work with other organizations, agencies, and individuals both on and off the installation throughout the planning and development process. Building partnerships with the right organization(s) is essential for ecosystem management.

(e) Draft INRMPs must be provided to CNIC for review and approval.

(5) Public Involvement. Each installation shall provide 30 days for the public to comment on the initial draft final INRMP, or on that of a significant revision that requires National Environmental Policy Act (NEPA) analysis. This may be accomplished through the NEPA process. Specific funding information in the INRMP’s implementation table shall be removed prior to public release. This process should be coordinated with the installation public affairs office. Each installation shall allow USFWS and the appropriate state fish and wildlife agency officials to review all public comments to ensure proper consideration of public concerns during INRMP development (reference (e) or most current guidance).

(6) National Environmental Policy Act
(a) NEPA analyses are required before approval of all new INRMPs. INRMPs generally provide for beneficial effects on the environment and, in such cases, an environmental assessment (EA) will suffice (refer to table 10-8 in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114)). Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) provides general NEPA guidance for INRMPs. References (e) and (i) (or most current guidance) also contain guidelines for preparing NEPA documents for INRMPs.

(b) In most cases the original INRMP NEPA analysis will cover an INRMP's updates. A new NEPA analysis may be necessary if a revision of the plan is required, such as if there are significant changes in land ownership, land uses, installation mission, or status of natural resources. Navy funds may not be used to pay other federal agencies (i.e., USFWS and NMFS) or state fish and game agencies to review NEPA documents (reference (k)).

(7) Navy Endorsement

(a) At a minimum, the INRMP title page shall include a signature block for the installation commanding officer (CO) and the natural resources manager assigned to implement the INRMP to reflect concurrence and acceptance of the plan.

(b) INRMPs shall be signed by Navy officials after obtaining (a) CNIC concurrence, (b) mutual agreement from the USFWS and appropriate state fish and wildlife agency and (c) a finding of no significant impacts or a record of decision on the INRMP's NEPA analysis. Documentation of all the above shall be uploaded to the Navy Conservation Web site (refer to section 12-3.13 and appendix E (Web Sites) for Web site address).

(c) INRMPS are considered compliant with all Navy endorsements and documentation of cooperative preparation with the USFWS and appropriate state fish and wildlife agency. Mutual agreement by NMFS is not required to complete an INRMP but shall be sought when appropriate; however, failing to obtain mutual agreement by NMFS shall not be considered an impediment to finalizing or implementing an INRMP.

An electronic copy of each completed INRMP shall be submitted on a CD and via the chain of command to CNIC. Electronic copies of all INRMPs also shall be uploaded into the Navy Conservation Web site and the OPNAV (N45) Environmental Planning Library (refer
to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and appendix E (Web Sites) for Web site address).

(8) Implementation

(a) All INRMPs must be implemented per guidance in references (d) and (e). Accordingly, all INRMP projects must be entered into the Environmental Readiness Program Requirements Web (EPRWeb) for review and approval by the BSO and OPNAV (N45).

(b) Sikes Act cooperative agreements (developed with federal and state agencies, universities, non-governmental organizations, and individuals) typically provide a suitable vehicle to accomplish work addressed in the INRMP and should be administered per reference (l). Other options include, but are not limited to, interagency agreements, Economy Act orders (usually executed by issuance of DD Form 448 Military Interdepartmental Purchase Request), cooperative ecosystem study unit agreements, contracts, and in-house and self-help processes. Voluntary services may be provided for a natural resources program under the authority of references (m), (n), and (o).

(9) Recordkeeping and Data Management

(a) Installation natural resources managers shall develop a centralized and organized method of data management and tracking INRMP implementation.

(b) All data collected as part of the natural resources program should be incorporated into an installation data management system to support adaptive management of natural resources, INRMP updates and revisions, data calls, and environmental planning efforts. Natural resources managers are encouraged to use a geographic information system (GIS) (reference (p)) and electronic data to the maximum extent practicable. All data shall be collected in the most current and approved scientific formats.

(10) Annual NRC Program and INRMP Metrics

(a) Per Department of Defense (DoD) and Navy policy, natural resources managers shall review the NRC program and INRMPs annually (references (d), (e), and (i), or most current guidance) and complete the NRC Metrics (formerly known as INRMP Conservation Metrics, Annual Reviews or INRMP Metrics) using the
Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address).

(b) Installation COs shall participate in the annual NRC program and INRMP metrics review because INRMPs are prepared to assist the installation commander with his or her natural resources responsibilities and to ensure adequate and appropriate conservation support for operational requirements (reference (e)). Also, this review should be done with the cooperation of USFWS (and NMFS when appropriate) and appropriate state fish and game agency when possible (reference (d)), as this review serves to ensure ongoing coordination with natural resources regulatory agencies.

(c) INRMPs shall be updated by incorporating findings and recommendations developed during the annual reviews required in (a).

(11) Annual Reporting. The installation CO shall send a written report to USFWS (and NMFS, when appropriate), and the appropriate state fish and wildlife agency following the annual INRMP metric review and no later than 31 January of each year. This report shall include the following:

(a) A copy of the invitation to the annual INRMP metric meeting, including a list of participants.

(b) An explanation and summary of INRMP metric results for the previous fiscal year.

(c) Description of INRMP actions implemented in the previous fiscal year.

(d) Description of benefits INRMP implementation provided to federally threatened and endangered species and/or benefits provided by the INRMPs Ecosystem Management for species that are proposed for listing or are candidates for listing under the ESA.

(e) Description of changes to be made to the INRMP as a result of the annual review, if any.

(f) Whether agreement was obtained with the USFWS to recognize the annual meeting as a review of the INRMP
for operation and effect, as required no less than every 5 years by ref (b).

This report shall be uploaded into the Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address) for EOY reporting purposes.

(12) Review for Operation and Effect. Installation natural resources managers must review INRMPs for operation and effect with the cooperation of USFWS and the appropriate state fish and wildlife agency, at least once every 5 years (references (b), (d), (f), and (i)). This review is the statutory responsibility of these agencies and Navy funds may not be used to pay for their participation in this requirement (reference (k)). It is recommended that the review for operation and effect be conducted during an annual INRMP metrics review. Mutual agreement on operation and effect must be documented in writing from the parties in the form of a new signature page for the INRMP. The new signature page shall be appended to the INRMP and uploaded to the Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address). NMFS is not required to review INRMPs for operation and effect but their participation is recommended when appropriate.

12-3.5. Fish and Wildlife Resources. Fish and wildlife resources include all vertebrate and invertebrate species and their habitats. Only those species that are not found in the marine environment are considered here. Marine resources are addressed separately in 12-3.6.

a. Surveys and Monitoring

(1) Each installation shall conduct surveys to develop an inventory of fish and wildlife species and their habitats that may be present on the installation. These surveys should be conducted as necessary to keep inventories and INRMPs updated.

(2) Once identified, these resources should be monitored as necessary to determine their condition, abundance, and distribution and to document changes over time. Surveys and monitoring shall be conducted to a level sufficient to serve as a foundation for the integrated ecosystem management of those resources with the Navy mission.

b. Management. Installations shall identify and implement effective conservation and management programs for all fish and
wildlife resources on their installation in compliance with all applicable laws and regulations. Specific requirements are identified below.

(1) Migratory Birds

(a) Migratory birds are protected by reference (q). Reference (r) requires that installations promote the goals of reference (s) which are detailed in reference (t). Reference (t) identifies specific measures designed to promote conservation of migratory birds and their habitats as affected by non-military readiness activities (i.e., NRC actions, shore support activities, operation of industrial activities, facility construction or demolition, hazardous waste cleanup).

(b) The species of birds protected under reference (p) are listed in reference (u). Installation natural resources managers should use the USFWS' Migratory Bird Program Web site (refer to appendix E (Web Sites) for Web site address) to find lists of Birds of Conservation Concern and Birds of Management Concern and address those species in INRMPs on installations where they occur. Additionally, lists of migratory birds found on DoD installations, as well as recommendations for the conservation of migratory birds in INRMPs, can be found on the DoD Partners in Flight Web site (refer to appendix E (Web Sites) for Web site address).

1. Taking of Migratory Birds. Reference (q) prohibits take or possession of migratory birds unless permitted by regulation. Specific permits must be obtained for takes to accomplish scientific collecting, taxidermy, Canada goose control, depredation control, and several other actions. Installation natural resources managers must ensure any intentional takes of migratory birds occurring on the installation are covered by a permit obtained from the USFWS Regional Bird Permit Office (references (v) and (w)).

2. Military Readiness Rule. Part 21.15 of reference (w) authorizes incidental take of migratory birds for military readiness activities provided the Navy action proponent confers with USFWS to develop and implement appropriate conservation measures to minimize or mitigate negative effects of the proposed action if the action will have a significant negative effect on the sustainability of a population of a migratory bird species. Potential impacts to migratory bird populations and MBTA compliance shall be addressed in NEPA analysis using information from the appropriate INRMP where
applicable, and the best scientific data available.

(2) Bald Eagles and Golden Eagles. Bald eagles are no longer protected under reference (x), but are protected under references (q) and (y), which contain prohibitions on incidental takes similar to reference (x). Installations must ensure bald eagles are managed according to the USFWS National Bald Eagle Management Guidelines to minimize or avoid adverse effects. Permits for incidental takes of both bald and golden eagles under reference (y) must be obtained according to an application process promulgated by USFWS. Environmental planning analyses must address potential impacts of a proposed action to bald and golden eagles, pursuant to reference (y).

12-3.6. Marine Resources. This section describes Navy policy or how to address sound in the marine environment (both underwater and in air) for environmental compliance, as well as policies for specific types of marine resources. Marine resources include all vertebrate and invertebrate species and their habitats in the marine environment and special marine landscapes.

a. Sound. Training, testing, and construction activities produce sound in the water and in the air that may have effects on marine resources, including marine mammals, seabird, fish, etc.

(1) Marine Mammals. The Navy is required to assess potential impacts to marine mammals from training and testing (reference (aa)), construction and other in-water activities. Compliance with the MMPA (reference (z)) requires the development of specific exposure criteria and thresholds for certain naval activities using low, mid, and high frequency active sonar, underwater explosives, pile driving, and air guns, etcetera. These criteria may evolve with the best available scientific and commercial information. OPNAV N45 should be contacted early in the environmental planning process (i.e., notice of intent (NOI) package or notification letter (refer to chapter 10 (Environmental Planning under the National Environmental Policy Act and Executive Order 12114))) for current exposure criteria and thresholds.

An effects analysis must be conducted in cases where naval activities may introduce high levels of sound or explosive energy into the marine environment. To this end, the Navy has developed a single model for estimating exposures of marine species to acoustic stimuli (reference (bb)) using the exposure criteria and
thresholds mentioned above. This model is known as the Navy Acoustic Effects Model (NAEMO). NAEMO shall be used to estimate potential acoustic and explosive effects to marine mammals in all environmental planning analyses, consultations, and permitting applications.

(2) Other Marine Species. For species other than marine mammals, (e.g., sea turtles, seabirds, fish), action proponents shall contact OPNAV (N45) early in the environmental planning process (i.e., NOI package or notification letter (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114)) for guidance on appropriate analyses of acoustic effects. Action proponents also must consult with OPNAV (N45) prior to agreeing to any natural resource agency suggestions to modify existing criteria or establish new criteria for assessing acoustic effects to marine species. These requirements are meant to ensure the best available science is being utilized and to ensure consistency of similar actions throughout the Navy.

b. Marine Mammals

(1) Marine mammals are protected by reference (z); some marine mammals are also protected by ESA (reference (x)). NMFS has jurisdiction over most species of marine mammals (i.e., whales, dolphins, porpoises, seals, and sea lions) while USFWS has jurisdiction over polar bears, sea otters, walruses, manatees, and dugong.

(2) Authorization under reference (z) may be obtained by NMFS or USFWS to "take" marine mammals incidental to Navy activities if it is determined Navy action will: 1) have a negligible impact on the species or stock(s), and 2) include measures to mitigate adverse impacts on the availability of the species or stock(s) for subsistence uses. If any of those marine mammals are also federally listed as threatened or endangered, an ESA section 7 consultation will be required as discussed below.

(a) Adverse Effects. Navy will continue to avoid or minimize adverse effects to marine mammals from underwater sound and all other potential stressors. Chapter 35 (Environmental Compliance Afloat) provides guidance on environmental compliance by Navy vessels during routine training, testing, and minor exercises at sea, including the requirements for reporting marine mammals strikes. Navy commands will evaluate their proposed actions and determine whether it is likely marine
mammals will be affected in ways requiring an MMPA permit and or ESA section 7 consultation (reference (aa)).

(b) Release of Information. In addition, prior to release to any outside agency or the public of any documents containing analysis of effects on marine mammals (e.g., biological assessments or biological evaluations, MMPA take authorization applications, NEPA or Executive Order (E.O.) 12114 documents), hard and electronic copies of pre-final documents shall be submitted to OPNAV (N45) via the chain of command for review and concurrence after appropriate classification, legal, and technical review by the BSO. To ensure timely review and comment, the BSO point of contact must verify with OPNAV (N45) the receipt of the documents to be reviewed. Comments must be resolved by the BSO before information is released.

(c) Authorizations

1. If an action proponent determines incidental takes are likely due to Navy-generated effects of the action on land or in the water, the action proponent must notify and receive concurrence from OPNAV (N45) via the chain of command prior to notifying the regulatory agencies. The action proponent must also notify the appropriate region commander and or the Navy area environmental coordinator staff.

2. Permitting procedures under reference (z) are contained in reference (cc) and the incidental take authorization Web page on the NOAA Web site (refer to appendix E (Web Sites) for Web site address).

3. When the proposed action might affect marine mammals that are also listed under ESA, Navy must consult with NMFS or USFWS under ESA section 7. NMFS or USFWS must conclude the action is not likely to jeopardize the continued existence of the species before issuing an MMPA permit. Subsequently, NMFS or USFWS cannot issue an incidental take statement under ESA until an MMPA incidental take authorization has been issued. Action proponents must ensure adequate review time for both MMPA permitting and ESA consultation process completion.

a. Incidental Harassment Authorization and Letter of Authorization. An incidental harassment authorization (IHA) is appropriate if a proposed action has no potential for serious injury or mortality or the potential for serious injury or mortality can be negated through mitigation, and if the action is not likely to exceed 1 year in duration. A letter of
authorization (LOA) may be appropriate instead of an IHA if the proposed action is likely to exceed 1 year in duration. If it is reasonably foreseeable that there is potential for serious injury, the applicant must request an LOA, regardless of project duration.

b. NEPA and E.O. 12114 Documentation. In general, if an action proponent determines that a proposed action has the potential to cause serious injury, and a request for an LOA is warranted, an EIS or overseas EIS (OEIS) is usually warranted. Action proponents should request cooperating agency status from NMFS or USFWS to facilitate the environmental review process required to issue MMPA permits. Refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) for requirements of an EIS or OEIS and EA.

c. Uploading Documents. Per section 10-3.7.b, action proponents are required to upload the environmental planning and related environmental compliance documents to the OPNAV (N45) Environmental Planning Library (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and appendix E (Web Sites) for Web site address) not later than 30 working days after the document is signed. These documents include MMPA permit applications (with transmittal letters), rules, and letters of authorization, ESA consultation packages (with transmittal letters) and biological opinions (BO).

c. Coral Reefs

(1) Coral reefs are biologically diverse and complex ecosystems that are afforded special protection (references (dd) and (ee)). Installation near shore areas shall be surveyed for the presence of coral reefs and their associated resources, where appropriate. Coral reefs in installation near shore environments must be addressed in the installation INRMP where found. Information about coral reefs can be obtained by contacting NMFS regional offices.

(2) Adverse impacts to coral reefs shall be avoided to the maximum extent feasible. Coral reefs should be identified in areas where testing and training activities occur and action proponents must ensure coral reefs and associated resources are given special consideration in environmental planning analysis (reference (ff)). Any action likely to adversely affect a U.S. coral reef system or that may qualify as an exception under
(3) Avoidance or minimization of impacts to corals attached to man-made structures not intended as artificial reefs (e.g., pier pilings, sea walls) may be required by regulatory policies or regulations. Potential compensatory mitigation requirements for such corals should be coordinated through the chain of command to OPNAV N45 during the environmental planning process.

d. Essential Fish Habitat

(1) Navy must consult with NMFS prior to undertaking any actions that may reduce the quality and or quantity of an essential fish habitat (EFH), as required by references (gg) and (hh). As part of the consultation, Navy must provide NMFS with an EFH assessment (i.e., a written evaluation of the effect of that action on EFH). EFH assessments must be commensurate with anticipated effects (i.e., complexity and magnitude) and contain the requirements (e.g., elements, level of detail, maps) outlined in part 920, paragraphs (e)(3) and (e)(4) of reference (gg) and reference (hh).

(2) Upon completion of the EFH assessment, Navy personnel professionally trained in natural resources management shall make a determination of effect (i.e., no adverse effect or may adversely affect) per reference (hh). A draft environmental planning document (with all EFH assessment information clearly identified) may be submitted to NMFS for consultation if an action is likely to result in minimal adverse effects on EFH. A stand-alone EFH assessment should be prepared if an action is likely to have more than minimal adverse effects on EFH and when a more detailed analysis than that provided in the environmental planning document is warranted. Conservation recommendations provided by NMFS shall be reviewed for consistency with regulatory requirements (reference (gg)) prior to implementation.

(3) Per section 10-3.7.b, action proponents are required to upload EFH assessments to the OPNAV (N45) Environmental Planning Library (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and appendix E (Web Sites) for Web site address) not later than 30 working days after the document is finalized.

(4) Identification of EFH in installation INRMPs may support EFH consultations. Where appropriate, INRMPs should
identify ways in which wetlands, rivers, streams, and coastal areas may be enhanced to improve the quality and quantity of EFH adjacent to installations.

e. Marine Protected Areas

(1) Marine protected areas (MPA) are defined in reference (ii), as "...any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein."

(2) The Department of Commerce established a national system of MPAs and maintains a current inventory of all MPAs. Natural resources managers and environmental planners should become acquainted with the National System of MPAs Web site (refer to appendix E (Web Sites) for Web site address) as a comprehensive resource tool to ensure compliance with all appropriate statutes that regulate MPAs. Adverse impacts to MPAs should be avoided to the maximum extent practicable.

(3) Installations shall address adjacent MPAs in INRMPs, where appropriate, to ensure proper management of watersheds and other linkages to MPAs.

f. Coastal Barriers. Coastal barriers in the J.H. Chaffe Coastal Barrier Resources System should be identified in INRMPs, where appropriate, and conservation of these systems by means of appropriate management actions should be addressed. Before construction, maintenance, military activities, or other federal expenditures may take place in designated coastal barrier resources, Navy is required to consult with USFWS. Navy installations may expend funds in areas designated as coastal barriers in the J.H. Chaffe Coastal Barrier Resources System 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 (reference (jj)).

g. Coastal Zone Management. INRMPs should address management of all marine resources in installation coastal and near shore environments. Chapter 14 (Coastal Zone Management) discusses all policies and requirements related to the coastal zone.
12-3.7. Federally Threatened and Endangered Species. Navy shall consult with USFWS and NMFS when any action authorized, funded, or to be carried out by Navy may affect any federally threatened or endangered species or primary constituent elements of designated critical habitat (section 7(a), paragraph (2) of reference (x)). Some species (e.g., sea turtles, anadromous fishes) are jointly managed by both USFWS and NMFS so it is important to identify the life stage of the species potentially affected by a proposed action, as this will determine the agency with which to consult.

a. Conservation

(1) All Navy properties shall be surveyed as frequently as necessary for the presence of federally threatened and endangered species and their habitats. These species and habitats shall be described in INRMPs if present. Navy shall use its authority to further the conservation of those species (section 7(a), paragraph (1) of reference (x)) by including management actions for these species and their habitats in INRMPs.

(2) All commands conducting activities on land and at sea should be aware of the presence or absence of federally listed threatened or endangered species, and species proposed for listing, and any designated or proposed for designation of critical habitat. Impacts to these species and critical habitat areas should be avoided to the extent practicable. Species and critical habitat information can be obtained from USFWS and NMFS.

b. ESA Section 7 Consultations and Conferences

(1) If a proposed action may affect federally listed species or designated critical habitat, the action proponent must request ESA section 7 consultations with USFWS and or NMFS per reference (x). There is no statutory obligation to consult with USFWS or NMFS if a proposed action does not affect federally listed species or designated critical habitat. Informal and formal consultation procedures are found in parts 402.13 and 402.14 of reference (kk), respectively. Reference (ll) outlines specific ESA section 7 consultation procedures with NMFS for all Navy organizations conducting research, development, testing, training, and other activities in the marine environment.

(2) The trigger for conferences for species proposed for
listing is a potential jeopardy situation, and the trigger for conferences for proposed designated critical habitat is a potential destruction or adverse modification (reference (x)). However, it is unlikely that Navy action proponents have all the information necessary to make those determinations. Instead, it is Navy policy to request conferences when the action proponent determines that species proposed for listing, or critical habitat proposed for designation, may be affected by the proposed action. This proactive step will also allow any conference opinion issued by USFWS or NMFS to serve as a BO, without the necessity to initiate consultation, should the species become listed or the critical habitat become designated.

(3) Consultations and conferences shall be conducted by Navy staff (i.e., both natural resources and action proponent subject matter experts (SME)) representing the CO of the Navy installation or other class I property authority, or the appropriate echelon 2 authority. Exceptions must be approved in advance by OPNAV (N45). Action proponents shall coordinate consultation requests of national or regional scope with OPNAV (N45) via the chain of command.

(4) A draft NEPA analysis may be used to make the initial determination as to whether a proposed action may affect federally listed species or designated critical habitat and for informal consultation.

c. Biological Assessments and Biological Evaluations. A BA or BE shall be funded and prepared by action proponents, and assistance with BA or BE development shall be provided by natural resources managers. A BA is required for evaluating the effects of a proposed major construction action (or other actions having similar physical impacts) (part 402.12 of reference (kk)). A BE incorporates the requirements of part 402.14, paragraph (c) of reference (kk). BAs and BEs evaluate the effects of proposed actions on federally listed species and species proposed for federal listing, designated critical habitat, and critical habitat proposed for designation. The BA or BE, along with a letter requesting formal consultation, shall constitute the Navy's formal consultation package. Per section 10-3.7.b, action proponents are required to upload ESA consultation packages to the OPNAV (N45) Environmental Planning Library (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and appendix E (Web Sites) for Web site address) not later than 30 working days after the document is finalized.
(1) **Content.** A BA or BE shall be developed as a separate document with information more detailed and specific than that provided in a NEPA analysis unless otherwise approved in advance by OPNAV (N45). It is Navy policy that BAs and BEs contain the information described in part 402.14, paragraph (c) of reference (kk). The recommended format for BAs and BEs is available in the OPNAV (N45) Environmental Planning Library described in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).

(2) **Conservation Measures.** Conservation measures are those actions meant to reduce the amount or extent of incidental takes. Only those actions that minimize or avoid adverse effects within the action area should be incorporated into the proposed action as conservation measures.

(3) **Review.** All BAs and BEs shall be reviewed and approved by natural resources and action proponent SMEs and the CO of the Navy installation or other class I property authority or, in the case of at sea requirements, per reference (ll), prior to submittal to USFWS and or NMFS. This is to ensure potential impacts to federally listed species and designated critical habitat are appropriately assessed, and proposed conservation measures are consistent with the Navy mission; are reasonable in relation to cost and scope of the action and its effects on federally listed species or designated critical habitat; and can be implemented in a cost-effective manner within Navy's authority.

d. **Biological Opinions.** Action proponents, in coordination with natural resources managers, are responsible for the planning, budgeting, and implementation of all elements of the proposed action as well as the requirements of incidental take statements. Terms and conditions of incidental take statements in draft BOs shall be reviewed as required in section 12-3.7.c.3. Action proponents are required to upload BOs, conference opinions, and letters of concurrence to the OPNAV (N45) Environmental Planning Library (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and appendix E (Web Sites) for Web site address) not later than 30 working days after the document is received.

e. **Coordination with Chain of Command on Threatened and Endangered Species Actions.** The following shall be observed to ensure Navy lands remain available to support the military mission with proper planning and budgeting of natural resources.
efforts (reference (mm)).

(1) Threatened and Endangered Species Conservation Actions. Installations shall review and coordinate requests for approval by the chain of command, including the class I property authority, the BSO, and OPNAV (N45), any action to introduce or commit to introduce species to a Navy installation or lands controlled by Navy that are, by federal law or regulation, protected as endangered or threatened, or are proposed, or are candidates for protection (reference (mm)). Coordination and approval by the chain of command are also required prior to commencing, or committing to commence, habitat enhancement designed to actively promote the introduction of federally listed endangered, threatened, proposed, or candidate species on a Navy installation or lands controlled by Navy. Availability of funds, required 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 NEPA. The approval process described above in no way alters the Navy commitment to use its authority to enhance the recovery of federally listed threatened and endangered species and their habitats.

(2) Developing or Proposed Federal ESA Actions by Regulatory Agencies

(a) Installations and commands shall advise their chain of command of proposed ESA actions that have the potential to affect mission readiness. Installations, region commands, or echelon 2 authorities shall engage with USFWS or NMFS in a coordinated fashion to ensure ESA proposals under development have minimal or no impact to the Navy mission.

(b) Official responses to regulatory agency proposals must be coordinated with all Navy stakeholders that are likely to be affected by a developing ESA action. Comments in response to any proposal published in the Federal Register to designate critical habitat or to list species for protection under ESA that occur on Navy installations or lands controlled by Navy shall be prepared by echelon 2 authorities and coordinated with OPNAV (N45) for review and approval.

(c) Guidance for responding to ESA developments is available in the OPNAV (N45) Environmental Planning Library described in Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).
f. Candidate Species and Species of Concern

(1) All Navy properties shall be surveyed for the presence of candidate species (USFWS) and or species of concern (NMFS) and their habitats. If the species or their habitats are found, conservation actions that benefit those species and their habitats, and that may obviate the need for listing under the federal ESA, shall be included in INRMPs. Potential effects to these species shall be afforded separate discussion in environmental planning analysis.

(2) Navy may enter into candidate conservation agreements (CCA) with USFWS or NMFS for species that are candidates for listing or for other species whose status may cause USFWS or NMFS to take a listing action. OPNAV (N45) must be notified in advance through the chain of command of proposed CCAs for review and approval.

(3) Action proponents may include candidate species in ESA Section 7 consultations when there is some certainty that the species will be proposed for listing during the environmental planning process or sometime during the conduct of the proposed action. Reinitiation of consultation and resulting delays in proposed actions may thus be avoided when species listings are proposed and/or finalized. Listing certainty may be ascertained by requesting informal listing updates from the USFWS and NMFS, reviewing candidate species priority numbers, and monitoring Federal Register notices.

g. State and Territory Listed Species. State or territory listed species shall not be included in federal ESA BAs or BEs and consultations as described above, unless they are also on the federal list of threatened and endangered species are proposed for federal listing, or are federal candidates whose listing is certain. Potential effects to state or territory listed species and their habitats shall be evaluated and mitigations proposed in environmental planning documents, as appropriate. Conservation of these species and any other species at risk, and their habitats shall be addressed in INRMPs and per state wildlife action plans to the extent practicable.

12-3.8. Land and Watershed Management. Land and watershed management coordinates land use and water management decisions to protect water resources. The requirements below are consistent with reference (d).
a. Water Development Projects. Any action that modifies a stream or body of water requires consultation with USFWS and the appropriate state fish and wildlife agency concerning the conservation of fish and wildlife resources possibly affected by the proposed action (reference (nn)).

b. Wetlands. Wetlands are protected by CWA. Reference (oo) prohibits discharges of pollutants, including dredged or filled material into waters of the United States, without first obtaining all necessary permits, which may include state regulatory agencies as well as the U.S. Army Corps of Engineers (USACE). Any action significantly affecting wetlands shall be addressed by the environmental planning process described in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114). Navy commands with natural resources responsibilities shall comply with the national goal of "No Net Loss of Wetlands Policy" established in 1989, and as required by reference (pp).

(1) Surveys and Mapping. All Navy properties shall be surveyed for wetlands. Wetlands shall be mapped with sufficient accuracy to protect them from potential unplanned impacts, using GIS data that are maintained and kept current. Wetland maps shall be included in an installation INRMP and maps and or GIS data shall be made available upon request to all potential users, including facilities planners, operational units, and tenant commands.

(2) Waters of the United States. Jurisdictional determinations of wetlands or other waters of the United States may be required prior to construction or a military activity if wetlands or other waters are within or adjacent to the action area. Jurisdictional determinations are made by USACE or, in cases where the state has assumed CWA section 404 authority, by the appropriate state agency. Action proponents shall plan and budget for jurisdictional determinations, when necessary, if wetlands or other waters of the United States may be impacted by a proposed action.

(3) Avoiding Adverse Impacts. All Navy commands should avoid adverse impacts to or destruction of (e.g., loss of size, function, and value) wetlands in carrying out construction and military activities (reference (qq)). Any requirement that cannot be sited to avoid wetlands shall be designed (in all phases of the project's planning, programming, and budgeting process) to minimize wetlands degradation and shall include compensatory mitigation as required by reference (pp). All
requirements for compensatory mitigation shall be budgeted for by the action proponent. Compensatory mitigation options are discussed separately in this chapter.

c. Floodplain Management. Direct or indirect development of floodplains shall be avoided, and the natural and beneficial values served by floodplains shall be preserved to the extent possible per reference (rr). All potential effects of actions in floodplains must be evaluated in all environmental planning documents.

d. Soil Conservation. Surveys, mapping, and soil conservation measures shall be conducted to control and prevent soil erosion in undeveloped natural areas for the preservation of natural resources in support of the military mission.

e. Environmentally and Economically Beneficial Landscaping. Navy installations shall comply with the goals of section 207 of reference (ss) on all new or extended landscaped areas and shall use native plants to the maximum extent practicable, when replacement or rejuvenation of existing landscaping is required.

f. Non-Point Source Pollution. Development and implementation of non-point source pollution management programs must ensure water quality protection and place special emphasis on preventing non-point source pollution from naturally-occurring or ground-disturbing actions (e.g., construction, farming, timber harvesting activities) in shoreline and streamside and near shore areas. Non-point source problem areas in undeveloped areas of installations should be identified, and INRMPs should be used to specify corrective measures, ensuring proper coordination with state coastal and non-point source programs.

g. Pesticide Use. All land management activities, including habitat enhancement activities, involving the use of pesticides will be accomplished in compliance with reference (tt) and applicable state laws, and be consistent with the requirements of chapter 24 (Pesticide Compliance Ashore).

h. Ecological Reserves or Conservation Areas. Natural areas on mission compatible Navy lands that warrant special conservation efforts may be identified as ecological reserves or conservation areas and should include characteristic or outstanding botanical, ecological, geological, and scenic features or processes. Reference (uu) provides guidance for selection and establishment of ecological reserve or
conservation areas. Any proposal to designate an ecological reserve area on Navy installations shall be approved in advance through the chain of command to OPNAV (N45). Availability of funds, required stewardship efforts, and consistency with Navy mission (including proposed period of time for designation) 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 NEPA and other environmental laws such as ESA.

i. Agriculture. Lands suitable for agricultural uses that are compatible with the installation mission may be identified for agricultural outleasing. Each agricultural outlease must include a conservation plan which details the best management practices (BMP) to protect the natural resources and government interests under the lease. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) provides the technical and administrative functions of this program per section 2667 of reference (vv). Chapter 19 of reference (ww) 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 per reference (xx). Revenues from agricultural outleases are available for:

(1) Administrative expenses of agricultural leases. Funding natural resources professionals directly responsible for the administration of agricultural programs shall be given priority;

(2) Initiation, improvement, and perpetuation of agricultural outleases; and

(3) Implementation of related INRMP projects.

j. Forest Management. It is Navy policy to manage forestlands by restoration, enhancement, and improvement of forest resources and related ecosystems 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. Such management actions shall produce financial returns to the government, contribute commercial forest products to the economy, and maintain and improve the economic and ecological value, health,
and diversity of the forest resources and related ecosystems.

(1) **Sustainable Yield and Improvement of Resources.** 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.

(2) **Use of a Professional Forester.** 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. COMNAVFACENGCOM provides the technical, administrative, and management functions of this program per reference (ww).

(3) **Use of Clear Cutting.** Installations shall use clear cutting 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, and wildfires. Alternative harvest methods shall be used whenever possible.

(4) **Late Successional Forests.** It is Navy policy to maintain old-growth forests in their natural state to preserve their unique biological, scientific, and aesthetic benefits. The harvest of mature or late successional forests shall be based on balanced economic, social, and environmental values identified during the management and planning process.

(5) **Forest Product Sales.** Navy contracts for sale of forest products will include requirements for orderly harvesting, operational procedures, and payment for sold products. Navy will not give away, abandon, or carelessly destroy forest products; 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. Records will be kept to show
sales proceeds generated by FY for determining payments to states, as required by section 2665 of reference (vv). Criteria and procedures for administering timber sale contracts are contained in chapter 3 of reference (ww).

(6) 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 references (yy) and (zz) and chapter 3 of reference (ww).

(7) Export Lumber. Reference (aaa) 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.

(8) Forest Pest Suppression. Installations 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 reference (bbb) and or whenever it is determined to be necessary by either the regional U.S. Forest Service (USFS) supervisor or cooperating state forestry department or commission. Forestry management objectives should also include control and prevention of invasive species (references (d), (ccc), and (ddd)).

k. Wildland Fire Management

(1) Uncontrolled fires have the capacity to effect the
developed environment as well as the undeveloped environment in ways that degrade the value of natural resources and capability of lands to support military readiness activities. INRMPs shall address the need for management of fuel loads, including the use of prescribed burns, for habitat enhancement purposes and to reduce the potential for wildfires. A wildland fire management plan shall be developed for installations with vegetation in undeveloped areas capable of sustaining fire and per habitat management objectives.

(2) Wildland fire management activities may not be implemented by natural resources managers without coordination with and approval of the installation fire department and other installation authorities, or as appointed by the installation CO. All wildfire management activities shall comply with all appropriate federal laws and regulations and be consistent with reference (eee).

12-3.9. Compensatory Mitigation for Adverse Impacts to Natural Resources. Compensatory mitigation should be considered whenever a Navy action has unavoidable impacts to natural resources. Many laws governing the conservation and protection of natural resources have requirements for compensatory mitigation, and under some statutes, compensatory mitigation is discretionary. Compensatory mitigation shall be conducted in compliance with federal laws and regulations as required.

a. Navy Criteria. Compensatory mitigation measures considered by natural resources managers and action proponents must be, at the very least:

(1) Compatible with the Navy mission and avoid future encumbrances to the mission;

(2) Within the authority of Navy to implement;

(3) Reasonable in terms of the scope of the impact;

(4) Reasonable in terms of cost;

(5) Not the mandated responsibility of another agency;

(6) Conducted off-site (i.e., off-installation) if practicable and as allowed (references (b) and (d)); and

(7) Have some reasonable expectation of success based on prior practice or best available commercial or scientific
information.

b. Planning

(1) Chain of command approval is required for all compensatory mitigation proposals, which shall be accomplished via the environmental planning process per chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).

(2) Action proponents shall be responsible for funding and implementing one-time or other such non-recurring natural resources compensatory mitigation requirement (i.e., there is a clear start and finish). These actions shall be coordinated in advance with class I property authorities and natural resources managers. Natural resources compensatory mitigation actions that will have recurring requirements (i.e., maintenance in perpetuity) shall be funded and implemented by the action proponent for the first 5 years to allow for future programming into the NRC Program. Thereafter, the responsibility for the requirement shall be relinquished to the NRC Program and natural resources managers shall address the recurring requirements in the installation INRMP.

c. Tools. The most common compensatory mitigation tools and processes are available through, or are required by, federal laws and regulations. These tools are described below. In other cases where compensatory mitigation is voluntary, action proponents and natural resources managers are encouraged to be creative and forward thinking.

(1) Endangered Species Act

(a) Compensatory mitigation is not required by ESA section 7(a)(2) (part 402.14, paragraph (i)(1)(ii and iv) and part 402.14, paragraph (i)(2) of reference (kk); and reference (fff)) to minimize the amount or extent of incidental take. However, any action taken outside of the action area to minimize the overall impact of such take on a federally threatened or endangered species may be considered compensatory mitigation.

(b) USFWS or NMFS may include compensatory mitigation as advisory conservation recommendations in the last section of the BO. When appropriate, conservation recommendations and other measures that may benefit species affected by an action should be identified and incorporated into INRMPs as actions to be taken to fulfill the Navy's ESA section
7(a)(1) responsibilities. Tools available for compensatory mitigation under ESA include, but are not limited to:

1. **Conservation Banking.** Conservation banks are among the tools available to offset the potential adverse impacts to species listed as federally threatened or endangered (reference (ggg)). The USFWS evaluates and approves the use of conservation banks.

2. **Recovery Credit System (RCS).** An RCS is also for federally threatened and endangered species, but is different from a conservation bank in that it may not necessarily be managed in perpetuity. However, an RCS must provide a net conservation benefit to a species and it must be approved by USFWS (reference (hhh)). All recovery credit proposals must be reviewed and approved on a case-by-case basis in advance by OPNAV (N45).

3. **Population and Habitat Enhancements.** See section 12-3.7.e.1.

(2) **CWA Section 404.** Compensatory mitigation is required when there are unavoidable impacts to wetlands, streams, and other aquatic resources areas. Action proponents must coordinate with natural resources managers and class I property authorities when selecting the most appropriate tool for the action under consideration. Detailed information on these requirements is provided in reference (iii).

(a) **Permittee-Responsible Compensatory Mitigation**

1. This is any action taken by Navy either on-site or off-site (i.e., off-installation) for which the Navy action proponent is responsible for implementing and monitoring.

2. Implementation of wetlands creation or enhancement projects may be considered on the installation where compatible with the Navy mission but must first be coordinated with the installation CO. Potential wetland mitigation sites on the installation should be identified and included in INRMPs. However, off-site mitigation should be considered whenever possible so on-site mitigation does not foreclose any future option for future mission requirements. In either case, the area selected for mitigation should be within the same watershed as the affected wetland or aquatic site (reference (d)).

(b) **Mitigation Banks.** Mitigation banks differ from
conservation banks in several ways (reference (ggg)), primarily
in that mitigation banks specifically compensate for unavoidable
impacts to wetlands, streams, or other aquatic resources areas
regulated under reference (iii). The responsibility for
implementing the mitigation resides with the bank sponsor, which
typically is a for-profit private enterprise. Mitigation banks
must be already established and credits must be available (i.e.,
mitigation projects have been completed or are underway) for
this type of compensatory mitigation to be used by a Navy action
proponent. The mitigation bank sponsor assumes liability for
mitigation performance and management.

(c) In-Lieu Fee Mitigation. An in-lieu fee is a
payment to a pre-established fund, organization, or program
typically administered by state or local governments, or non-
profit organizations. The in-lieu fee sponsor is responsible
for performing and managing the compensatory mitigation, but
unlike mitigation banks, projects under this program are not
initiated until enough fees are collected and sponsors are not
required to provide financial assurances. As a result, in the
past, there was more risk of the mitigation not being
accomplished. Action proponents must be aware there are caps on
the number of advanced credits available through an in-lieu fee
program, and a hierarchal process has been established for the
selection of type and location of compensatory mitigation via
the in-lieu fee program (reference (iii)).

d. DoD Readiness and Environmental Protection Initiative
(REPI)

(1) The REPI Program is administered by DoD for the
purpose of preventing encroachment on military installations and
ranges. REPI projects are submitted to the Office of the
Secretary of Defense for matching funds and are implemented by
the individual Military Services. Navy's REPI Program is
administered by COMNAVFACENGCOM.

(2) Justification for REPI projects can be incompatible
land use development adjacent to the installation or range, or
for habitat preservation. The latter use allows the REPI
Program to be used when acquisition of a buffer area can serve
multiple purposes, including off-site compensatory mitigation
for impacts to natural resources. Action proponents and natural
resources managers should coordinate with community planning
liaison officers to identify opportunities to achieve off-site
compensatory mitigation requirements through the REPI Program.
12-3.10 **Invasive Species.** Invasive species cause a loss of biodiversity, pose increased wildland fire hazards and habitat degradation, and cause other environmental problems. Prevention and rapid response reduces costs and impacts to the mission, while enhancing native ecosystems (reference (d)).

a. **Prevention and Control**

(1) Invasive species shall be addressed in INRMPs per references (d), (jjj), and section 2 of reference (ccc). The National Invasive Species Management Plan should be used as guidance, and is available on the National Invasive Species Council Web site (refer to appendix E (Web Sites) for Web site address). Refer to chapter 24 (Pesticide Compliance Ashore) and ensure sound integrated and environmentally safe application of any pesticides used to control invasive species.

   (a) Natural resources managers shall conduct surveys and manage natural resources in a way that prevents introductions of, reduces the spread of, or eradicates invasive species.

   (b) Native species shall be planted in bare or erodible soils and used in all restoration and mitigation projects.

(2) The potential to introduce or spread invasive species shall be addressed in all environmental planning analyses along with means for prevention and control.

(3) Navy installations will cooperate with states that maintain programs for controlling noxious plants and provide access for that control, provided access is consistent with installation security procedures. Only proven control measures that have been used on adjacent lands should be used.

(4) Navy installations shall ensure aquatic invasive species are not introduced into near shore environments or bodies of water on or adjacent to the installation. Measures to prevent introductions of aquatic nuisance species through ballast water or hull fouling, as mandated by reference (ddd), are provided in chapter 35 (Environmental Compliance Afloat).

b. **Feral Cat and Dog Control**

(1) Feral or free-ranging domestic cats and dogs are considered by the professional wildlife management community to
be one of the most widespread and serious threats to the integrity of native wildlife populations (e.g., birds, bats) and natural ecosystems in North America. Navy commands must prevent feral cat and dog populations (references (kkk) and (lll)), and ensure their humane removal from Navy lands through close coordination and cooperation between natural resources, pest management, security, veterinary, and housing personnel.

(2) Navy commands shall not allow trap-neuter-release (reference (lll)) or the release of unwanted house pets 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.

12-3.11. Outdoor Recreation. The INRMP will address the appropriate level of public access (references (b), (d), (e), (f), and (i)) including disabled veterans, military dependents with disabilities, and other persons with disabilities (references (mmm) and (nnn)) for natural resources-based recreational opportunities consistent with installation security, military mission, and sustainable NRC objectives. Installations are encouraged to develop their own programs and cooperate with federal, state, and private organizations as outlined in reference (ooo).

a. Prohibitions to Access. Installation COs must prohibit public access for recreational purposes in areas known or suspected of containing unexploded ordnance or other munitions (reference (ppp)). The installation CO has discretion to allow hunting and or fishing in explosive storage and operations areas under carefully controlled conditions that do not endanger life, property, or hazardous materials. Limits to public access for recreational purposes and any controlling conditions must be specifically addressed in the installation INRMP.

b. Off-Road or Off-Highway Vehicles. Off-road or off-highway vehicle use on Navy land is permissible only on designated areas and trails (reference (qqq)). Refer to chapter 5 of reference (ww) for policies, procedures, and criteria for establishing designated off-road or off-highway areas and trails.

c. Recreational Hunting and Fishing. Reference (vv) established general requirements for hunting, fishing, and trapping on a military installation or facility under the jurisdiction of any military department in a state. Reference (rrr) requires management of game species and their habitats.
Installations shall incorporate these requirements in INRMPs. In keeping with reference (sss), INRMPs shall address improvement of the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities.

d. Fees and Proceeds

(1) Fees and proceeds collected from hunting, fishing, aquaculture, mariculture, and trapping shall be used only for funding or supplementing wildlife management programs, including funding of partnerships and cooperative or research agreements with appropriate agencies. User fees collected for the privilege of hunting, fishing, or trapping will be collected, deposited, and used per reference (b). Further, collections will be used exclusively for fish and wildlife conservation and management on the installation where collected.

(2) The same fee schedule will be used for all participants with the exception of senior citizens, children, and the handicapped. Membership in an installation conservation organization will not give members priority in participating in hunting, fishing, and trapping programs. Efforts should be made to use the services of the installation morale, welfare, and recreation (MWR) function to collect and administer these funds locally per Sikes Act authorization.

12-3.12. Integrating Natural Resources Conservation with the Other Navy Mission Activities. References (b) and (d) require NRC be conducted for the no net loss to the military mission. In addition to the requirements described above, natural resources managers shall, to the maximum extent possible, participate in or otherwise support other activities essential to the Navy mission.

a. Encroachment Management

(1) Reference (ttt) describes Navy's Encroachment Management Program. Navy natural resources managers shall coordinate with mission component commands, COs of Navy installations, range COs, range complex coordinators, enhanced readiness teams, community plans and liaison officers and others with roles and responsibilities for encroachment identification, quantification, mitigation, and prevention.

(2) Navy may acquire real property interests through encroachment partnering (reference (uuu)) and, in some cases,
assume the responsibility for managing natural resources on conservation easements or buffer. For this reason and to facilitate the identification of interests that will benefit installation and training missions, natural resources managers should participate in the interdisciplinary development of encroachment action plans. NRC responsibilities accrued through encroachment management must be addressed in INRMPs.

b. **Bird/Animal Aircraft Strike Hazard (BASH)**. BASH is not the responsibility of OPNAV (N45), and as such, BASH management actions are not eligible for OPNAV (N45) funding. However, due to the potential impact on natural resources by a command’s BASH Program, natural resources managers shall provide biological expertise to assist naval air installations, air operations, and aviation safety officers in preparing and implementing BASH plans where necessary. BASH plans should be reviewed to ensure consistency and compliance with installation INRMPs and applicable natural resources laws and regulations. In support of BASH efforts, NRC actions that affect the abundance and distribution of wildlife and their habitats around active air fields are eligible for OPNAV (N45) funding, and should be identified and addressed in INRMPs. Airfield mowing and clear zone establishment and maintenance are not considered OPNAV (N45) NRC actions or military readiness activities under reference (w).

c. **Environmental Planning**. Natural resources managers shall review all environmental planning documents to ensure action proponents are in compliance with this manual and serve in an advisory capacity for any action that may necessitate consideration of natural resources conservation requirements.

d. **Facilities Management**. Climate change adaptation strategies will likely result in infrastructure and facility modifications. It will be necessary to minimize impacts to natural resources due to changes in the man-made environment in response to a changing climate.

12-3.13. **Miscellaneous**

a. **Navy Conservation Web Site**. The Navy Conservation Web site is the Navy's official repository of natural resources information to track INRMP status and implementation measures for regulatory review; generate official reports; record Department of the Navy measures of merit and metrics; and centralize and track other documentation described in this chapter. It is a Web-based tool used to submit, compile, and
retrieve information about the NRC Program to obtain and maintain the most current information possible to track the status of various natural resources programs, have current data to respond to various program inquiries, and generate accurate reports. BSOs and or regions must assign a specific installation point of contact to keep the system up-to-date. A common access card and U.S. Navy Environmental Portal account are required to access the Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address).

b. Environmental Damage. Chapter 41 (Natural Resource Damage) describes polices, requirements, and all pertinent legislation, references, and information related to the release of oil or hazardous substances that injure or threaten to injure natural resources within Navy control or management.

c. Natural Resources Awards. Navy installations are encouraged to participate fully in DoD, Navy, and other awards programs to promote conservation and demonstrate a leadership role in protecting the environment. Guidance on military awards programs is included in chapter 6 (Chief of Naval Operations Environmental Awards Program).

d. Partnerships and Volunteers. Per reference (h), partnerships (e.g., Coastal America, Partners in Flight, Student Conservation Association, Chesapeake Bay Initiative) shall be used, to the extent practicable. Volunteers may be used to augment the NRC Program following procedures and guidelines described in references (n) and (o). Programs that foster pride in accomplishment among volunteers, partners, and Navy are encouraged.

e. Conservation Law Enforcement. Reference (b) requires enforcement of laws primarily aimed at protecting natural resources (and recreation activities that depend on natural resources). Conservation law enforcement shall be an integral part of a natural resources program (reference (d)) and requirements shall be coordinated with installation security forces and appropriate conservation law enforcement agencies. Commanders shall permit federal and state conservation officers access to enforce natural resources laws after taking proper safety and security measures.

f. Paleontological Resources

(1) The Navy has general responsibility to protect paleontological resources, consistent with its role as a steward
of federal lands and resources that may have scientific value.

(2) Paleontological resources are not subject to direct legal protection on DoD lands not administered or controlled by the Department of Interior (DOI) or USFS national forests (reference (vvv)) except, when found in association with cultural resources, they may be subject to laws and regulations that protect cultural resources.

(3) Where indicated by local geology, the potential presence of paleontological resources may be addressed in conjunction with natural or cultural resources surveys. Natural resources managers shall coordinate with the installation or regional cultural resources manager to ensure proper management of paleontological resources with cultural associations discovered on any land used or controlled by Navy.

(a) Finds on Withdrawn or Special Use Permit Lands. Natural and cultural resources managers shall coordinate notification of the proper authority if the resources are discovered on lands withdrawn from DOI or used by special permit within a national forest system. No paleontological resources shall be disturbed until these notifications are made and legal requirements for collection or study are determined.

(b) Promote Cooperative Partnerships with Federal, State, and Local Organizations on Other Navy Lands

1. Natural resources managers shall coordinate with cultural resources managers to notify the nearest office within DOI (e.g., Bureau of Land Management, USFWS, National Park), USFS, National Forest Office, or natural history museum permitted for possession of such resources. These agencies may be given access to the find before or after collection - the former being at the discretion of the installation CO.

2. If there is no scientific interest in, or cultural associations with paleontological resources found on DoD property upon review by proper authorities, the resource may be collected and used for educational or other such purposes by Navy natural resources managers. No person shall take personal possession of such finds.

12-3.14. Funding

a. Chapter 2 (Funding) describes policies and guidance for the planning, programming, budgeting, and execution of resources
to comply with environmental laws, regulations, E.O.s, and DoD instructions and directives. NRC is identified in the conservation pillar of Navy's environmental quality program.

b. All NRC requirements identified through the implementation of this manual shall be included in the program objective memorandum (POM) and submitted to OPNAV (N45) through the chain of command using the EPRWeb (refer to appendix E (Web Sites) for Web site address).

c. All requirements shall be submitted for operations and maintenance, Navy funding. Funds may be available from other sources such as agricultural outleasing, forestry programs, Sikes Act user fees, MWR, and the Legacy Resources Management Program to supplement portions of these programs, but the funding requirement for natural resource projects should be reflected in environmental program requirement POM requirements.

12-3.15. Training Requirements. Personnel with NRC responsibilities shall receive the appropriate job-specific education and training to perform their assigned tasks.

a. Natural resources managers shall receive, at a minimum, the following education and training:

(1) Basic environmental law (completion of Naval Civil Engineer Corps Officers School (CECOS) Basic Environmental Law (A-4A-0058) will satisfy this requirement);

(2) Natural resources compliance (completion of CECOS Natural Resources Compliance (A-4A-0087) will satisfy this requirement);

(3) Environmental protection (completion of CECOS Environmental Protection (A-4A-0036) will satisfy this requirement);

(4) Introduction to NEPA (completion of CECOS National Environmental Protection Act (NEPA) Application (A-4A-0077) will satisfy this requirement);

(5) Environmental negotiation (completion of CECOS Environmental Negotiation Workshop (A-4A-0067) will satisfy this requirement); and

(6) Program funding (EPRWeb online training will satisfy this requirement).
b. Personnel responsible for federally listed species management shall also receive additional, specialized training, as applicable to their responsibilities.

c. Personnel responsible for wetlands shall also receive additional, specialized training, as applicable to their responsibilities.

d. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

12-4 Responsibilities

12-4.1. OPNAV (N45) shall:

   a. Serve as principal leader, overall Navy program manager, and advisor for Navy in all matters related to natural resources per reference (a);

   b. Ensure adequate resourcing and policy to meet Deputy Under Secretary of Defense, Installations and Environment (DUSD(I&E)) and legislative requirements for conservation of natural resources and the establishment of an NRC Program on Navy installations;

   c. Regularly update policy guidance and issue-specific implementing guidance based on new or changing laws, regulations, and DUSD(I&E) policies governing conservation of natural resources;

   d. Address and coordinate resolution of natural resources issues affecting the Navy mission;

   e. Coordinate natural resources policy and program matters with Assistant Secretary of the Navy (Energy, Installations, and Environment) (ASN(EI&E)), DUSD(I&E), other Military Services, and other federal agencies; and

   f. Support as needed, DUSD(I&E) programs, initiatives, and partnerships involving natural resources.

12-4.2. BSOs shall:

   a. Ensure effective natural resources compliance is an identifiable function of the command;
b. Ensure all appropriate personnel in subordinate commands are aware of and familiar with major natural resources protection laws and implement the requirements of this chapter;

c. Identify, program, and budget for all mission-related natural resources conservation and management requirements; and

d. Ensure any issue that needs resolution, or any action related to natural resources that may be of national scope, controversial, or precedent setting, is coordinated in advance with OPNAV (N45).

12-4.3. Area Environmental Coordinators, in addition to section 12-4.2, shall:

a. Identify all developing critical habitat proposals that may affect the Navy mission through effective and positive communications with local USFWS and NMFS staffs, and by monitoring daily publications of the Federal Register. Engage in early coordination at the local level to achieve desired outcomes before proposed rules are published. Desired outcomes include critical habitat exclusions based national security impacts when such impacts are identified. Draft responses to proposed rules for critical habitat designations published in the Federal Register for OPNAV (N45) review and signature; and

b. Ensure responses to critical habitat proposals are coordinated with other stakeholder responses when such proposals overlap areas of responsibility.

c. Consider the expertise and services provided by NAVFACENGCOM in fulfilling the requirements of this chapter.

12-4.4. CNIC and other Class I property authorities, in addition to section 12-4.2, shall:

a. Ensure all lands owned, leased, withdrawn, permitted, or otherwise under the control of Navy and under the purview of their command are evaluated for significant natural resources;

b. Re-evaluate lands under the purview of their command without significant natural resources at least once every 5 years and provide findings to OPNAV (N45) for coordination with Secretary of the Navy;
c. Ensure installations under their command with significant natural resources prepare, maintain, and implement an NRC program which includes development, implementation, review, and necessary updates and revisions of INRMPs;

d. Provide oversight of installation NRC programs:

1. Require, ensure, and assist subordinate commands and installations with NRC planning and implementation;

2. Ensure all NRC requirements are in EPRWeb and evaluate and validate POM submittals and other requests for funds for natural resources requirements;

3. Ensure professionally trained natural resources managers have been assigned to implement installation NRC programs;

4. Ensure all installation NRC programs are implemented per this manual, and in compliance with all appropriate laws and regulations;

5. Ensure installation NRC program implementation and effectiveness is evaluated by natural resources professionals as part of environmental quality assessments (refer to chapter 18 (Environmental Compliance Audits Ashore)); and

6. Ensure natural resources on government-owned, contractor-operated installations are managed in compliance with this chapter.

e. Program and budget resources to establish, maintain, and upgrade as necessary a Web-based Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address) to be used as a central repository for information gathered from installations, COMNAVFACENGCOM field offices, and other BSOs to satisfy reporting requirements, legislative information requests, and other data call purposes;

f. Ensure adequate NRC programs are in place at installations scheduled for closure to ensure continued management and protection of resources until the land has been officially transferred to base realignment and closure program management office or another owner;

g. Consider the expertise and services of COMNAVFACENGCOM in fulfilling the requirements of this chapter;
h. Assist OPNAV (N45), as needed, in addressing natural resources issues that may affect the Navy shore support mission;

i. Assist OPNAV (N45), as requested, with DUSD(I&E) reporting requirements, programs, initiatives, and partnerships involving natural resources; and

j. Assist OPNAV (N45), as requested, with coordination of natural resources policy and program matters with ASN(EI&E), DUSD(I&E), other Military Services, and other Federal agencies.

12-4.5. COMNAVFACENGCOM, in addition to section 12-4.2, shall:

a. Provide natural resources technical expertise and services to assist CNIC and other BSOs with their roles and responsibilities for the execution of the requirements of this chapter;

b. Maintain, as requested, the Navy Conservation Web site (refer to appendix E (Web Sites) for Web site address) and establish scientific standards for data compiled, stored, and analyzed therein;

c. Provide overall management and oversight of Navy forestry agricultural outlease programs and the fees and permits program, and submit an expenditure report for the preceding FY for each program, to CNIC N45 by 15 November of each year;

d. Ensure natural resources managers are professionally trained and receive all required supplemental training;

e. Ensure lower NAVFAC echelon commands identify all developing critical habitat proposals that may affect the Navy mission through effective and positive communications with local USFWS and NMFS staffs, and by monitoring daily publications of the Federal Register. Engage in early coordination at the local level to achieve desired outcomes before proposed rules are published. Desired outcomes include critical habitat exclusions based on INRMPs where applicable. Draft responses to proposed rules for critical habitat designations published in the Federal Register for OPNAV (N45) review and signature. Ensure responses to critical habitat proposals are coordinated with fleets, system commands, and CNIC when such proposals overlap areas of responsibility;
f. Assist OPNAV (N45), as needed, in addressing natural resources issues that may affect the Navy shore support and at sea missions;

g. Assist OPNAV (N45), as requested, with DUSD(I&E) reporting requirements, programs, initiatives, and partnerships involving natural resources; and

h. Assist OPNAV (N45), as requested, with coordination of natural resources policy and program matters with ASN(EI&E), DUSD(I&E), other Military Services, and other Federal agencies.

12-4.6. Region commanders shall:

a. Ensure stewardship of natural resources on Navy lands and at sea, in compliance with natural resources laws and regulations, DUSD(I&E), ASN(EI&E), and OPNAV (N45) policies as required by this chapter;

b. Ensure the programming and budgeting of resources necessary to implement the requirements of this chapter;

c. Establish positive, productive relationships with local and regional authorities responsible for natural resource conservation for the benefit of subordinate command functions;

d. Advise OPNAV (N45), via the chain of command, of situations involving natural resources that require national-level coordination with other Federal agencies;

e. Coordinate with COMNAVFACENGCOM component commands to promote and ensure regional efficiencies in implementing the requirements of this chapter;

f. Ensure installations comply with DUSD(I&E), ASN(EI&E), and OPNAV (N45) policies on INRMP preparation, implementation, review, updates, and revision;

g. Ensure installations under their command with INRMPs complete the annual INRMP metric review and endorse the results prior to submittal to CNIC via the chain of command;

h. Approve budgets and plans for management of Navy forestry and agricultural outlease programs;

i. Consider the expertise and services of NAVFACENGCOM in fulfilling the requirements of this chapter.
j. Assist OPNAV (N45) and BSOs, as needed, in addressing natural resources issues that may affect the Navy mission;

k. Assist OPNAV (N45) and BSOs, as requested, with DUSD(I&E) reporting requirements, programs, initiatives, and partnerships involving natural resources; and

l. Assist OPNAV (N45) and BSOs, as requested, with coordination of natural resources policy and program matters with ASN(EI&E), DUSD(I&E), other Military Services, and other federal Agencies.

12-4.7. COs of shore commands holding Class 1 property shall:

a. Ensure all assigned properties have been evaluated for significant natural resources:

   (1) Where found, develop and maintain an effective NRC program as outlined in this chapter;

   (2) Use technical assistance from COMNAVFACENGCOM field offices as necessary to maintain INRMPs and ensure their implementation; and

   (3) Notify CNIC via the chain of command when an INRMP is not necessary as required by this chapter.

b. Coordinate with the region commander and COMNAVFACENGCOM component commands to appoint, by letter, a professionally trained installation natural resources manager whose duties include ensuring the installation CO is informed of natural resources issues, conditions of natural resources, preparation and implementation of the INRMP, and potential or actual conflicts between mission requirements and natural resources mandates. The letter of appointment shall be forwarded to CNIC;

c. Integrate NRC requirements into the day-to-day decision-making process;

d. Sign the final version of the installation INRMP and the new signature page after each required review for operation and effect. Ensure the appointed natural resources manager also signs each signature page;

e. Ensure implementation of the installation INRMP and systematically apply the requirements and conservation practices
set forth in the plan;

(1) Identify a team of mutual partners or regulatory entities to conduct annual reviews of the installation's INRMP projects and implementation as required by this chapter;

(2) Personally evaluate INRMP implementation through the annual completion of the natural resources annual metrics review;

(3) Complete the "Mission" section of the annual INRMP metrics; and

(4) Send a written report to USFWS and the state wildlife agency summarizing INRMP implementation over the past FY, and the status of any prior mutually agreed upon goals and updates.

f. Ensure BASH management requirements are coordinated with the NRC program to ensure consistency with INRMP goals;

g. Ensure current and planned mission activities are effectively coordinated in a timely manner with appropriate natural resources managers;

h. Review all non-excess land to identify areas that may be suitable and available for agricultural outleasing or commercial forestry and document the results of this review as described in chapter 19 of reference (xx);

i. Ensure tenant commands and activities comply with all statutory and regulatory requirements governing the protection of natural resources and the requirements of this chapter;

j. Establish positive, productive relationships with local authorities responsible for the conservation of natural resources for the benefit of installation functions;

k. Promote cooperative partnerships with federal, state, and local organizations;

l. Properly consider any action affecting natural resources in the environmental planning process (refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114));
m. Provide access to local, state, or federal conservation law enforcement officials as described in this chapter; and

n. Determine, on a case-by-case basis, whether access by proper authorities responsible for the protection of paleontological resources is reasonable, as described in this chapter.

o. Consider the expertise and services of NAVFACENGCOM in fulfilling the requirements of this chapter.

12-5 Definitions

12-5.1. Adaptive Management. Adaptive management is the process of implementing policy decisions as scientifically driven management experiments that test predictions and assumptions in management plans and use the resulting information to improve policy and management decisions.

12-5.2. Agricultural Outleasing. Agricultural outleasing is the 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.

12-5.3. Best Management Practices. BMPs are resources management decisions based on the latest professional and technical standards for the protection, enhancement, and rehabilitation of natural resources. BMPs include schedules of activities, prohibitions of practices, maintenance procedures, treatment requirements, operating procedures, control practices, and other management practices to prevent or reduce pollution.

12-5.4. Biodiversity. Biodiversity is the variety of life forms and the ecological processes that sustain it, including living organisms; the genetic differences among them; the communities and ecosystems in which they occur; and the ecological and evolutionary processes which keep them functioning, yet ever changing and adapting, for a given geographic area.
12-5.5. Biological Assessment. Per part 402.2 of reference (kk), BA "refers to the information prepared by or under the direction of the Federal agency concerning federally listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation of potential effect of the action on such species and habitat." A BE is often prepared for actions not considered major construction activities.

12-5.6. Biological Opinion. Per part 402.2 of reference (kk), BO is "the document that states the opinion of the service as to whether or not the federal action is likely to jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of critical habitat."

12-5.7. Candidate Species (USFWS) and Species of Concern (NMFS). Candidate species and species of concern are those species considered for possible addition to the federal list of threatened and endangered species. These are plant and animal taxa for which the USFWS and NMFS have on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list under the federal ESA, but issuance of a proposed rule is currently precluded by higher priorities.

12-5.8. Climate Change. Climate change is referred to by the National Academy of Sciences as any significant change in measures of climate (e.g., temperature, precipitation, wind) lasting for an extended period (decades or longer). Global warming is one aspect of climate change.

12-5.9. Coastal Barriers. Coastal barriers are unique landforms such as islands, sandbars, tombolos, spits, dunes, and fringing mangroves that protect the mainland and landward aquatic habitats against severe coastal storms and erosion. The J.H. Chaffe Coastal Barrier Resources System is a collection of undeveloped coastal barriers and their associated aquatic habitats mapped by the USFWS that protect the Atlantic, Gulf, and Great Lakes coasts.

12-5.10. Compensatory Mitigation. Compensatory mitigation is the term of art for the restoration, establishment, enhancement, or in certain circumstances, preservation of wetlands, streams, or other resources or habitat for the purposes of offsetting unavoidable adverse impact.
12-5.11. **Conservation.** Conservation is the planned management, use, and protection of natural resources that best reflect sustainable use and continued benefit for present and future generations, and the prevention of exploitation, destruction, waste, and neglect.

12-5.12. **Conservation Bank.** A conservation bank is a parcel of land containing natural resources values that are conserved and managed in perpetuity, through a conservation easement held by an entity responsible for enforcing the terms of the easement, for specified federally listed threatened or endangered species and used to offset impacts occurring elsewhere. Conservation banks are market enterprises whereby landowners can buy and sell credits to compensate for impacts to protected natural resources.

12-5.13. **Cooperative Agreement.** A cooperative agreement is an assistance vehicle 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. They 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, or to benefit natural resources research on DoD installations.

12-5.14. **Cooperative Conservation.** Cooperative conservation relates to the use, enhancement, and enjoyment of natural resources, protection of the environment, or both, and involves collaborative activity among federal, state, local, and tribal governments; private for-profit and nonprofit institutions; other nongovernmental entities; and individuals that are compatible with and support the Navy mission.

12-5.15. **Cooperative Ecosystem Study Unit.** A cooperative ecosystem study unit is a national network of government and university partnerships established to provide research, technical assistance, and education to federal land management, environmental, and research agencies and their potential partners. Ecosystem studies include the biological, physical, social, and cultural sciences.

12-5.16. **Critical Habitat.** Per reference (x), critical habitat for federally listed species consists of: "the specific areas within the geographical area occupied by the species, at the time it is listed per the provisions of section 4 of the Act, on
which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection and (c) specific areas outside the geographical area occupied by the species at the time it is listed per the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species."

12-5.17. Ecological Reserve Areas. Ecological reserve areas are areas dedicated primarily or exclusively to preserving examples of ecosystems and genetic diversity and to scientific research and education on ecological and environmental problems.

12-5.18. Economy Act Order. An Economy Act order is an agreement between Federal agencies for goods or services, typically executed by issuance of a DD Form 448, "Military Interdepartmental Purchase Request."

12-5.19. Ecosystem. An ecosystem is a dynamic and natural complex of living organisms interacting with each other and their associated physical environment.

12-5.20. Ecosystem-Based Management. Ecosystem-based management is a process that considers the environment as a complex system functioning as a whole, not as a collection of parts.

12-5.21. Encroachment. Encroachment is any action planned or executed which inhibits, curtails, or potentially impedes on the attainment or sustainment of the Navy’s Title 10 responsibilities.

12-5.22. Environmentally and Economically Beneficial Landscaping. Environmentally and economically beneficial landscaping reduces adverse impacts to the natural environment by implementing cost-effective and environmentally sound landscape practices.

12-5.23. Essential Fish Habitat. Per reference (www), EFH is defined by NMFS for the purposes of fisheries conservation as, "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Waters include aquatic areas and their associated physical, chemical, and biological properties. Substrate includes sediment underlying the waters. Necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a
healthy ecosystem. Spawning, breeding, feeding, or growth to maturity covers all habitat types utilized by a species throughout its life cycle."

12-5.24. **Fish and Wildlife Management.** Fish and wildlife management are actions designed to preserve, enhance and regulate indigenous wildlife (e.g., fish, birds, mammals and all other classes of wild animals) and their habitats, including conservation of protected species and non-game species, and management and harvest of game species.

12-5.25. **Forest Management.** Forest management are actions designed for the production and sale of forest products and for maintaining the health and vigor of forest ecosystems, including timber management, forest administration, timber sales, reforestation, afforestation, timber stand improvement, timber access road construction and maintenance, forest protection, and other directly related functions.

12-5.26. **Forest Products.** Forest products are those items produced from a forest such as sawtimber, veneer logs, poles, piles, posts, pulpwood, pine straw, stumpwood, bark and other mulch, cones, seeds, mistletoe, firewood, and wood chips.

12-5.27. **Game Species.** Game species are fish and wildlife species harvested per applicable federal and state hunting and fishing laws and regulations for recreational or subsistence purposes.

12-5.28. **Geographic Information Systems.** GISs are 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.

12-5.29. **Grounds.** Grounds are 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.

12-5.30. **Habitat.** Habitat is an area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies its life requirements.

12-5.31. **Incidental Take.** Incidental take are takings that result from, but are not the purpose of, carrying out an
otherwise lawful activity conducted by the Federal agency or applicant. Refer to take.

12-5.32. Integrated Natural Resources Management Plan. An INRMP is a plan focused, to the maximum extent practicable, on ecosystem-based management that shows the interrelationships of individual components of NRC (e.g., fish and wildlife, forestry, land management, outdoor recreation) to mission requirements and other land use activities affecting a Navy installation's natural resources. The primary purpose of the INRMP is to ensure natural resources conservation measures and military operations on the installation are integrated and consistent with environmental stewardship, laws and regulations, and the military mission.

12-5.33. Invasive Species. Invasive species, with respect to a particular ecosystem, are any non-native (alien) plant, animal, microbe or their seeds, eggs, spores, or other biological material capable of propagation of that species, and whose introduction into a non-native ecosystem is likely to cause harm to the economy, environment, or human health.

12-5.34. Land Management. Land management are programs and techniques to manage lands, wetlands, and water quality, including soil conservation; erosion control and non-point 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.

12-5.35. Military Readiness Activity. Pursuant to section 315(f) of reference (xxx), military readiness activity includes all training and operations of the Armed Forces that relate to combat, and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use. The term does not include (a) the routine operation of installation operating support functions (e.g., administrative offices, military exchanges, commissaries, water treatment facilities, storage facilities, schools, housing, motor pools, laundries, MWR activities, shops, and mess halls); (b) the operation of industrial activities; or (c) the construction or demolition of facilities used for a purpose described in (a) or (b) above.

12-5.36. Natural Resources. Natural resources are all elements of nature and their environments of soils, sediments, air, and
water. They consist of earth resources (nonliving resources such as minerals and soil components) and biological resources (living resources such as plants and animals).

12-5.37. **Natural Resources Manager.** A natural resources manager is an individual assigned the responsibility of managing installation natural resources on a regular basis and who keeps the chain of command informed of natural resources issues.

12-5.38. **Near Shore Areas.** Near shore areas are waters and submerged lands adjoining the installation from the mean high water mark (i.e., the line on the shore established by the average of all high tides) to the boundaries of installation waterfront activities where Navy controls access, and that are subject to the immediate authority of the installation CO or tenant command.

12-5.39. **Non-Game Species.** Non-game species are fish and wildlife species not classified as game species and not harvested for recreation or subsistence purposes.

12-5.40. **Nonpoint Source Pollution and Polluted Runoff.** Nonpoint source pollution and polluted runoff is pollution caused by diffuse sources not regulated as point sources. It is normally associated with runoff from construction activities; urban, agricultural, and silvicultural runoff; and other land disturbing activities such as military training and operations that disturb lands, soils, and waters. Nonpoint source is pollution from many diffuse sources caused by rainfall, snowmelt, or atmospheric deposition over, above, and through the ground, which picks up and carries natural and human-made pollutants (e.g., fertilizers, oil, salt, sediments, bacteria, pesticides) and deposits them into lakes, rivers, wetlands, coastal waters, and groundwater resources.

12-5.41. **Noxious Weeds.** Noxious weeds are plant species identified by Federal or state agencies as requiring control or eradication.

12-5.42. **Off-Road or Off-Highway Vehicle.** An off-road or off-highway vehicle is a vehicle designed or used for recreational travel on natural terrain. Some off-road and off-highway vehicles are not legal to operate on public roads. 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 official duties.
12-5.43. **Outdoor Recreation.** Outdoor recreation is a program, activity, or opportunity dependent on the natural environment, including picnicking, bird-watching, hiking, wild and scenic river use, hunting, fishing, and primitive camping that will not impair or degrade natural resources.

12-5.44. **Professionally Trained.** Professionally trained pertains to a person who has obtained an undergraduate or graduate degree from an accredited university in a natural resources-related science.

12-5.45. **Proposed Species.** Proposed species are any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under section 4 of reference (x).

12-5.46. **Recovery Credit System.** A recovery credit system is a crediting framework promulgated by USFWS (reference (hhh)) whereby adverse effects to federally listed species may be offset by beneficial effects of actions taken elsewhere for those species. This crediting system relies on advanced actions taken on non-federal lands by federal action agencies to improve the status of species over time, such that the impacts of adverse effects become less important to the recovery of the species.

12-5.47. **Review for Operation and Effect.** Review for operation and effect is a comprehensive review of an installation INRMP by Navy, USFWS, and the appropriate state fish and wildlife agency, at least once every 5 years, to evaluate the extent to which the goals and objectives of the INRMP continue to meet the purposes of the Sikes Act.

12-5.48. **Species of Concern.** Refer to candidate species.

12-5.49. **State or Territory Listed Species.** A state or territory listed species is any species of fish, wildlife, or plant protected by an appropriate state agency as issued in a state's or U.S. territory's endangered species law and other pertinent regulations.

12-5.50. **Stewardship.** Stewardship is the responsibility to inventory, manage, conserve, protect, and enhance the natural resources entrusted to one's care in a way that enhances the resources and their benefits for present and future generations.
12-5.51. **Sustainable Yield.** Sustainable yield is managing renewable natural resources to provide an annual or periodic yield of goods, services, and direct and indirect benefits into perpetuity. This may include, but is not limited to, maintaining economic benefits, ecological processes and functions, and biodiversity.

12-5.52. **Take under the Bald and Golden Eagle Protection Act.** Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Disturb (and disturbance) is further defined as: to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior.

12-5.53. **Take under the Endangered Species Act.** Per section 3, paragraph (19) of reference (x), take means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Per reference (kk), harm is further defined by USFWS to include significant habitat modification or degradation that results in death or injury to species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined by USFWS (but not NMFS) as actions that create the likelihood of injury to federally listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Refer to incidental take.

12-5.54. **Take under the Marine Mammal Protection Act.** Per paragraph (13) of reference (yyy), take means "harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill any marine mammal." Harassment was further defined and subdivided into level A and level B per paragraphs (18)(A), (C), and (D) of reference (yyy). Level A harassment has the potential to injure a marine mammal or marine mammal stock in the wild. Level B harassment has the potential to disturb a marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. Per paragraph (18)(B) of reference (yyy), in the case of a military readiness activity, level A harassment was defined as any act that injures or has the significant potential to injure a marine
mammal or marine mammal stock in the wild and level B harassment was defined as any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered.

12-5.55. Take under the Migratory Bird Treaty Act. Per reference (q), take means to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention...for the protection of migratory birds...or any part, nest, or egg of any such bird."

12-5.56. U.S. Coral Reef Ecosystem. The U.S. coral reef ecosystem pertains to those species, habitats, and other natural resources associated with live coral reefs in all maritime areas and zones subject to the jurisdiction or control of the United States (e.g., federal, state, territorial, or commonwealth waters), including reef systems in the South Atlantic, Caribbean, Gulf of Mexico, and Pacific Ocean.

12-5.57. Watershed. A watershed is a geographic area of land, water, and biota within the confines of a drainage divide.

12-5.58. Wetlands. Wetlands are those areas 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. Jurisdictional wetlands are those that meet criteria established by the U.S. Environmental Protection Agency (EPA) regulations and U.S. EPA and Department of the Army guidance.
CHAPTER 13

CULTURAL RESOURCES COMPLIANCE AND MANAGEMENT

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13-1 Scope. This chapter states Navy cultural resources implementing policy guidance and assigns responsibilities for fulfilling the cultural resources management and historic preservation compliance requirements of references (a) through (ii).

13-1.1. Related Chapters. Broad responsibilities are defined in chapter 1 (Organization and Coordination). Funding is addressed in chapter 2 (Funding). Cultural resources awards are addressed in chapter 6 (Chief of Naval Operations Environmental Awards Program). Guidance on compliance with cultural resources requirements associated with environmental planning is found in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).
Information on planning for paleontological resources is included in chapter 12 (Natural Resources Conservation). Chapter 34 (Overseas Environmental Compliance Ashore) includes information on overseas requirements for cultural resources.

13-1.2. References. Additional summaries and information can be found at the Navy Conservation Web site, the Department of Defense (DoD) Conservation Web site, and the National Park Service (NPS) Web site (refer to appendix E (Web Sites) for Web site addresses).

(a) 16 U.S.C. §470

(b) ASN(I&E) Memorandum, Historic Properties, 16 November 2001

(c) 36 CFR 800

(d) SECNAVINST 4000.35A, Department of the Navy Cultural Resources Program

(e) SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Programs

(f) 63 FR 20496-20508

(g) DoD Instruction 4715.16 of 18 September 2008

(h) E.O. 13287, Preserve America

(i) E.O. 13007, Indian Sacred Sites

(j) 36 CFR 60

(k) E.O. 13327, Federal Real Property Asset Management

(l) E.O. 13006, Locating Federal Facilities on Historic Properties in Our Nation's Central Cities

(m) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance

(n) Department of Defense Strategic Sustainability Performance Plan FY 2010, 26 August 2010

(o) DoD Instruction 4710.02 of 14 September 2006
(p) SECNAVINST 11010.14A, Department of the Navy Policy for Consultation with Federally Recognized Indian Tribes

(q) 43 CFR 10

(r) DoD Instruction 4710.03 of 25 October 2011

(s) 43 CFR 10.11

(t) E.O. 13175, Consultation and Coordination with Indian Tribe Governments

(v) 42 U.S.C. §1996 and §1996a

(v) 25 U.S.C. §3001 et seq.

(w) 16 U.S.C. §470aa-470mm

(x) 42 U.S.C. §4321 and §4331-4335

(y) 36 CFR 65

(z) 32 CFR 229

(aa) 16 U.S.C. §431-433m

(bb) 36 CFR 79

(cc) P.L. 108-375, Sunken Military Craft Act of 2004

(dd) 32 CFR 767

(ee) 36 CFR 61

(ff) ODUSD(I&E) Memorandum, Section 110(g) of the National Historic Preservation Act, 26 October 2010

(gg) DASN(E) Memorandum, Policy Guidance for Navy Department Funding of State Historic Preservation Officers

(ff) Program Comment Pursuant to 36 C.F.R. §800.14(e) Implementing Section 106 of the National Historic Preservation Act for the Evaluation of Vessels for Eligibility for Listing in the National Register of Historic Places and the Treatment of Eligible Vessels to Resolve Adverse Effects that May Result from Certain Methods of Final Disposition, 5 Mar 2010
13-1.3. **Applicability.** Cultural resources management and compliance requirements apply to land and water areas (waters contiguous to land areas may contain archaeological resources and other historic properties) under direct control of Navy; Navy undertakings, regardless of who owns the property at issue; and to real property assets and historic properties owned, leased, or otherwise controlled or managed by Navy. Navy commands in foreign countries are subject to management and compliance for cultural resources, consistent with chapter 34 (Overseas Environmental Compliance Ashore) and section 13-4.9.

13-2 **Legislation**

a. The following legislation contains provisions that pertain to the protection, preservation, conservation, and possession of cultural resources:

1. American Indian Religious Freedom Act (AIRFA);
2. Antiquities Act;
3. Archaeological and Historical Preservation Act;
4. Archaeological Resources Protection Act (ARPA);
5. National Environmental Policy Act (NEPA);
6. National Historic Preservation Act (NHPA);
7. Native American Graves Protection and Repatriation Act (NAGPRA); and

b. A summary of this legislation is included in appendix A (Laws and Regulations).

13-3 **Requirements**

13-3.1. **Preservation Program.** Per references (a), (b), and related requirements, Navy shall maintain a preservation program for the evaluation, maintenance, nomination to the National Register when appropriate, and protection of historic properties in a manner that considers the preservation of their historic, architectural, archaeological, and cultural values. The
Department of the Navy (DON) Federal Preservation Officer (FPO) oversees the program. Consistent with reference (a), Navy considers the effects of its actions on historic properties, per reference (c), in carrying out the Navy mission.

a. Planning and Management. To ensure compliance with references (b), (c), (d), (e), (f), and (g), it is Navy policy to incorporate cultural resources planning and management considerations in all aspects of planning, training, management, and implementation of Navy’s mission. It is Navy policy to give priority to preservation in the management of historic buildings, districts, archaeological sites and collections, historic ships and aircraft, and other cultural resources, and to use professional preservation management and specific techniques to achieve cost-effective cultural resources stewardship.

(1) Cultural Resources Managers (CRM). Navy CRMs are responsible for managing and coordinating all aspects of installation cultural resources requirements. CRMs shall be designated in writing and may be delegated signature authority for routine correspondence by the appropriate commander or commanding officer (CO). CRMs shall perform and or coordinate cultural resources staffing responsibilities for the command. When circumstances require, CRMs shall coordinate the participation of appropriately qualified professionals for the particular resource type(s) involved. Per references (b), (c), (d), (e), (f), and (g), and in support of the Navy mission, Navy CRMs shall participate in planning teams for installation facilities and operations to help ensure cultural resources issues are properly considered early enough in planning processes to manage requirements. The requirement for CRM participation is determined by the character of the action being considered. Whenever Navy actions are of the type that could affect historic properties, CRM participation is part of the planning process, to manage, among other things, identification and evaluation of historic properties; consultation with stakeholders; avoidance, minimization, and mitigation of adverse effects; data recovery and curation of archaeological materials; rehabilitation, adaptive use, and economic analysis studies of built historic properties; and scoping and costing of mitigation.

(2) Historic Inventory Identification and Management

(a) Per references (a), (h), and (i), Navy provides for the timely identification, evaluation, and management of
historic properties under its jurisdiction or control, including properties of traditional, cultural, and religious importance to Indian tribes or Native Hawaiian organizations (NHO). Successful inventory identification and management allows Navy to plan for preservation effectively and take into account the effects of its actions on historic properties. Inventory data supports consultation with stakeholders and interested parties using the most accurate information concerning what properties are historic, what makes them historic, and what the best technical and operational practices are for keeping historic properties in current mission use. Identification of historic properties is conducted in consultation with State Historic Preservation Officers (SHPO) and other appropriate parties (references (c) and (j)). Failure to adequately identify historic properties does not exempt Navy from any of its cultural resources responsibilities.

(b) Data regarding the historic status of Navy's historic buildings and structures must be accurate and up-to-date in Navy's real property inventory known as the Internet Naval Facilities Assets Data Store (iNFADS) (references (h) and (k)). In addition, the historic status (and non-historic status) of Navy's historic buildings, structures, archaeological sites, and sites of religious or cultural significance to tribes or NHOs (subject to appropriate confidentiality provisions) shall be easily accessible in geographical information systems (GIS). Real property inventories and GIS are tools to manage, account, and plan for stewardship of historic properties.

(3) National Register Nomination. Formal nomination of historic properties for listing in the National Register of Historic Places (NRHP) is reserved for special circumstances, as determined by the DON FPO. Navy policy is to afford the full protection of the law to all eligible and unevaluated properties, regardless of NRHP listing status. Fiscal responsibility factors may limit the instances for investing additional resources in the nomination process. The decision to promote nominations for the NRHP begins with the local installation command, and the nomination is routed up the chain of command for review by Commander, Navy Installations Command (CNIC) and the Navy Deputy Federal Preservation Officer (DFPO) for final decision by the DON FPO. Approved nominations are submitted by the DON FPO to the keeper of the NRHP (reference (d)). Nomination of National Historic Landmarks (NHL) must also be approved by the echelon 1 CO.
b. **Surveys and Investigations.** Reference (f) recognizes several techniques, methods, 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, but not limited to, archival research, 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, the CRM shall request and program funding for systematic analysis of Navy lands by qualified professionals, using appropriate survey methods, sufficient to make generalizations about type and distribution of historic properties that may be present for planning purposes. Detailed examinations of National Register eligibility and NHPA section 106 compliance for potential effects shall be completed prior to initiation of any undertaking of the type that could affect historic properties, as determined by the nature of the undertaking, rather than whether historic properties have previously been identified. Undertakings such as demolition, new construction, alteration of existing buildings, ground-disturbing activities, and training exercises are subject to qualified cultural resources review to determine what cultural resources compliance measures may be necessary. The action proponent is responsible for funding measures to avoid, minimize, or mitigate adverse effects to historic properties that may result from the proposed action. Long-term management of adverse effects may be funded by Deputy Chief of Naval Operations for Fleet Readiness and Logistics (CNO (N4)) when the commander or CO determines the actions are core elements of the installation mission. These requirements will be coordinated by the CRM in support of the installation and or action proponent.

c. **Program Alternatives.** Alternatives to case-by-case and step-by-step NHPA section 106 consultation, including programmatic agreements, program comments, and standard treatments, shall be used as appropriate (part 14 of reference (c)).

d. **Historic Structures and Sustainable Design**

(1) It is Navy policy to use, to the maximum extent feasible, historic properties for the purpose of carrying out its responsibilities. Consistent with NHPA section 111, Navy considers alternatives such as adaptive use to maintain usability of historic properties that may no longer be needed for their original purposes, and leases, exchanges, or enters
into contracts for management of any of its historic properties consistent with the requirements of NHPA section 106. When historic structures are involved, the consideration of alternative treatments shall include an economic analysis which evaluates life-cycle maintenance costs, utility costs, demolition costs, replacement costs, mitigation costs, and other pertinent factors for both new construction and rehabilitation or conversion alternatives (references (g) and (l)).

(2) Consistent with reference (m), Navy shall ensure the rehabilitation of its historic buildings utilizes best practices and technologies in retrofitting to promote long-term viability of buildings and adaptive use or rehabilitation of buildings. Per reference (n), Navy will continue to implement adaptive use and rehabilitate historic buildings, reduce landfill demolition and construction waste, and set an example for achieving the goals of reference (m). Potential adaptive uses shall be considered jointly with the CRM before deciding to demolish or dispose of a historic property (reference (l)).

13-3.2. Compliance. All undertakings conducted or authorized by Navy are subject to compliance review for their potential effects on cultural resources, whether the potential resources are Navy-owned or not. Compliance with the requirements of NHPA section 106, including a step-by-step description, is governed by reference (c).

13-3.3. Consultation. Consistent with the scale and specific character of their undertakings, Navy commands shall consult with other Federal agencies, state and local agencies, Indian tribes, NHOs, and the public to coordinate compliance with NHPA, NAGPRA, AIRFA, NEPA, and other requirements, as applicable (references (a), (b), (c), (d), (i), (o), (p), (q), (r), (s), (t), (u), (v), (w), and (x)). The CRM shall coordinate and provide expertise to support the command in consultation, as applicable. If the CRM does not meet the applicable professional qualification standards for the historic properties involved in specific consultations, the CRM shall enlist appropriately qualified professional support.

   a. Consultation with Stakeholders. It is Navy policy to consult with interested parties at the 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 minimizing impact to a historic property. With the support of the CRM, the local command directly responsible shall initiate timely consultation with
stakeholders whenever Navy plans, conducts, or supports undertakings that may affect historic properties. Navy retains ultimate authority and responsibility for decisions regarding the treatment of its historic properties.

b. Consultation with Tribes. References (a), (c), (o), (p), (q), (r), (t), and (w) and the federal trust responsibility require Navy commands to consult with federally-recognized Indian tribes, including Alaskan native groups, on a government-to-government basis about proposed actions with the potential to affect properties of traditional, cultural, and religious importance to the tribe. Consultations with tribes shall be conducted within an established government-to-government framework that is developed and maintained via communication and/or protocol agreements executed between Navy commanders and leaders of tribal governments. Consultation with tribes pursuant to NHPA section 106 shall occur at the staff level between Navy and tribal representatives with formal government-to-government interaction as appropriate (references (a), (i), (o), (p), and (t)).

c. Tribe Consultation Protocol. It is Navy policy to consult with federally-recognized tribes to identify issues of interest to individual tribes and to develop protocol outlining the manner in which consultation will occur at government-to-government and staff levels. Consultation protocol, which may take the form of memoranda of understanding (MOU) or other formal agreement, should be incorporated in the Integrated Cultural Resources Management Plan (ICRMP) as a standard operating procedure. Comprehensive agreements may be executed under reference (v) to address protocol for the unanticipated discovery of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. Development of tribe consultation protocol supports the Navy mission by building and maintaining relationships, and streamlining consultation processes.

d. NHOs. It is Navy policy to consult with NHOs when planning an undertaking that may affect a property or place of traditional, cultural, or religious importance to an NHO (references (a), (c), (d) and (r)). Consistent with requirements in reference (r), Navy will assign NHO liaison responsibilities at the headquarters level and designate a primary point of contact in Hawaii. As with tribes, comprehensive agreements may be executed under reference (v) to address protocol for the unanticipated discovery of Native Hawaiian human remains, funerary objects, sacred objects, and
objects of cultural patrimony. Additionally, Navy will develop installation-specific consultation procedures and provide cultural communications training for civilian and military personnel with consultation responsibilities.

13-3.4. Integrated Cultural Resources Management Plan. An ICRMP is required for compliance with NHPA section 110 and other cultural resources statutes, regulations, and policies. This applies to all Navy installations with cultural resources, per references (d) and (g), to ensure the most time- and cost-efficient methods of integrating preservation requirements with project and operations planning to facilitate the Navy mission. It is Navy policy that installations develop and implement ICRMPs in consultation with SHPOs, affected tribes, and other consulting parties, as appropriate. CNO (N4) promulgates Navy ICRMP guidelines.

a. Development. It is Navy policy for ICRMPs to be utilized in installation planning and referenced in the regional shore installation plans, as well as the integrated natural resources management plan, installation appearance plan, master plan, and similar documents. The ICRMP must:

(1) Address all cultural resources requirements, planning, and management for the area of coverage;

(2) Be signed by the region commander, CO of the Navy installation, or officer in charge as appropriate;

(3) Be reviewed and updated annually and revised when required;

(4) Identify known historic properties and areas or properties requiring assessment based on overviews and surveys performed by cultural resources professionals;

(5) 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;

(6) Identify 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;

(7) Be consistent with federal and state preservation programs, consider the interests of culturally-affiliated Indian tribes or NHOs, and be consistent with other Navy planning documents and processes;

(8) Provide outreach strategies to ensure appropriate information about Navy historic properties is disseminated to Navy members, employees, families, and the general public;

(9) Recommend compliance actions to be taken if Navy undertakings affect historic properties;

(10) Identify appropriate programmatic approaches to cultural resources management; and

b. Installation Outside the United States. In foreign countries, commands will develop ICRMPs consistent with this section and the program requirements, as outlined in section 13-4.9 below and chapter 34 (Overseas Environmental Compliance Ashore).

c. Distribution. Information in the ICRMP shall be made 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 archaeological sites and certain Native American and NHO resources. Electronic copies of the final signed ICRMP shall be provided to the region commander, regional engineer environmental office, Navy DFPO, and CNO (N4).

d. Waiver. The requirement to prepare an ICRMP may be waived, as allowed by section 6b(12) of reference (d), if a qualified survey has shown the installation has no cultural resources. Waivers shall be reviewed at least every 5 years by the CRM to confirm they are still valid.

13-3.5. National Historic Landmarks. Reference (y) outlines procedures for consultation with the SHPO, Advisory Council on Historic Preservation, and NPS on undertakings with the potential to affect NHL properties. It is Navy policy to minimize harm to NHLs, consistent with NHPA section 110(f). Navy cooperates in periodic visits or contacts with SHPOs and other appropriate means utilized by NPS 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.

13-3.6. Archaeology. Reference (w) and section 21 of reference (z) require Navy to develop plans to survey all accessible lands to determine the nature and extent of archaeological resources and prepare schedules to survey lands likely to be affected by the Navy mission.

a. Permitting for Archaeological Study. Per references (w) and (z), Navy ensures any person proposing to study, remove, or excavate archaeological resources from Navy lands shall request a permit under reference (w) or reference (aa). Permit requests must explicitly address and ensure professional curation of all remains, samples, and documentation per reference (bb). Consistent with reference (z), individuals carrying out official duties under Navy direction are not subject to the permit requirements when the Navy CRM ensures all provisions of reference (w) are met.

(1) Non-Navy Archaeological Work. COs of Class I property (Navy lands), in consultation with concerned stakeholders including Indian tribes, have the authority to issue ARPA permits for non-Navy archaeological work on Navy lands. Preparation and review of ARPA permits shall be coordinated by the CRM. All ARPA permits shall be prepared or recommended for approval by a professional Navy archaeologist meeting applicable qualification standards (reference (f)). All non-Navy archaeological work must be reviewed and approved by the CRM.

(2) Contract Work. In cases where Navy contracts with an archaeologist (or a Navy contractor subcontracts with an archaeologist) to perform archaeological work for Navy, commands may include a brief compliance statement in the contract or subcontract as the equivalent of a permit. In cases where Navy employees perform archaeology on Navy lands, legal permitting requirements can be satisfied by ensuring such employees are supervised by professionally qualified archaeologists (as defined by current federal regulations). All contract work must be reviewed and approved by the CRM.

b. Resources Underwater

(1) Archaeological sites and other historic properties underwater are subject to protection under references (a) and
(w). Navy's responsibility for protecting historic properties and considering the effects of its actions includes inundated lands in the near-shore environment and extends to the territorial limits.

(2) Per references (cc) and (dd), any person proposing to engage in an activity that would disturb, remove, or injure a sunken military craft under the jurisdiction of DON shall apply to the Naval History and Heritage Command (NAVHISTHERITAGECOM) for a permit. NAVHISTHERITAGECOM may issue a permit to any qualified person, subject to appropriate terms and conditions.

c. Curation. References (w) and (bb) establish that archaeological collections excavated or removed from lands owned by the United States remain federal property. Navy is required to deposit such collections and all associated documentation in a facility with adequate long-term curatorial capabilities to provide for their maintenance, physical security, research, and interpretive value. Navy policy requires regular monitoring of the care of collections and the capacity of its repositories to continue meeting the standards stipulated under Federal Regulations (reference (bb)).

d. Archaeological Site Location Protection and Management. References (a) and (w) require Navy to protect certain information regarding the nature and location of archaeological sites to protect archaeological resources from potentially destructive actions. The release or distribution of precise or exact site location data and related information must be limited to the individuals who need to know. It is Navy policy to limit access to such information in databases and GIS to CRMs, professionals, and Navy decision-makers with a substantial need to know. NHPA section 304(b) and the Freedom of Information Act Exemption b(3) define processes for the restriction of such information.

13-3.7. Public Outreach and Heritage Tourism

a. References (h), (w), and (z) require Navy to create public awareness and education programs promoting significance and protection of archaeological resources and other historic properties. Per these requirements, it is Navy policy to promote and interpret Navy's cultural resources to encourage public awareness and to make appropriate cultural resources information available, consistent with reference (g), via the installation's Web page, public tours, and information packages to residents, employees, and visitors.
b. Interpretation of Navy cultural resources also supports the NHPA section 106 compliance program by informing internal and external stakeholders of the existence and significance of Navy historic properties. In addition, Navy promotes partnerships for public benefit with communities, agencies, professional and advocacy organizations, tribes, NHOs, and the general public, per reference (g), to promote local economic development and vitality, enhance public awareness of cultural resources, and expand Navy's ability to manage and maintain Navy cultural resources.

13-3.8. Paleontology

a. Protection and management of access to paleontological resources are part of the Navy's responsibility as a Federal landowner. Paleontological resources may have inherent, unique multiple-use values: (1) as the educational foundation of the history of life on earth; (2) for scientific significance and preservation of this non-renewable resource that is part of the public trust; and (3) for recreational opportunities to be enjoyed by all.

b. In cases where Navy is conducting activities on lands owned or administered by other Federal agencies, Navy actions may be subject to additional review and compliance with public lands laws protecting paleontological resources. Analysis of impacts to the environment under reference (x) shall consider paleontological resources. Although paleontological resources are not cultural resources unless they occur in direct physical association with cultural resources, the CRM may be positioned to contribute to the greater awareness of paleontological resources that may occur on Navy lands. Awareness of paleontological resource considerations is a joint responsibility of the cultural and natural resources programs. In coordination with the CO, natural resources managers, and other experts as applicable, Navy CRMs shall participate in the protection of paleontological resources. Where indicated by local geology, the potential presence of paleontological resources may be addressed in conjunction with archaeological and natural resources surveys. Where paleontological resources are present or likely to occur on Navy land, paleontological expertise should be sought to advise policies regarding protection and collection of these resources, to protect rare fossils for their scientific and educational values, and to establish legal parameters for preventing theft or damage.
13-3.9. **National Environmental Policy Act Integration.** The statutory requirements of references (a) and (x), although independent, are interrelated. Although generally not recommended, Navy may use the NEPA process and documentation required for the preparation of NEPA documents to comply with portions of NHPA, in lieu of certain procedures set forth in reference (c). Navy must notify the SHPO or Tribal Historic Preservation Officer (THPO) and the Advisory Council on Historic Preservation in advance that it intends to do so and must conform to the standards stipulated in reference (c). Regional and installation commands must receive approval from the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) prior to using NEPA processes for NHPA section 106 purposes and ensure information and participation provided to the public are appropriate for the review and consistent with the requirements of reference (c).

13-3.10. **Data Calls.** Regional and installation commands are responsible for completion of cultural resources data calls to be forwarded to CNO (N4) for reports to DoD and Congress, as well as trend analysis and funding priority decisions.

13-3.11. **Cultural Resources Awards.** Awards are addressed in chapter 6 (Chief of Naval Operations Environmental Awards Programs).

13-3.12. **Enforcement of Cultural Resources Protection Laws.** References (w) and (z) require enforcement of laws to protect archaeological resources. Conservation law enforcement shall be an integral part of the cultural resources program and shall be coordinated with installation security forces.

13-3.13. **Training Requirements.** Personnel with cultural resources management responsibilities shall receive the appropriate job-specific education and training to perform their assigned tasks.

   a. CRMs shall receive, at a minimum, the following education and training:

      (1) Introduction to historic preservation compliance (completion of Naval Civil Engineer Corps Officers School (CECOS) Intro to Cultural Resource Mgmt Laws & Regulations (A-4A-0070) or by prior training for personnel meeting the Secretary of the Interior's professional qualifications standards (reference (ee)) will satisfy this requirement);
(2) Advanced historic preservation compliance (completion of CECOS Advanced Historic Preservation Law & Section 106 Comp (A-4A-0073) will satisfy this requirement);

(3) Introduction to NEPA (completion of CECOS National Environmental Policy Act (NEPA) Application (A-4A-0077) will satisfy this requirement);

(4) Environmental negotiation (completion of CECOS Environmental Negotiation Workshop (A-4A-0067) will satisfy this requirement); and

(5) Program funding (Environmental Readiness Program Requirements Web (EPRWeb) online training will satisfy this requirement).

b. Personnel responsible for communication and consultation with Indian tribes, NHOS, and Alaska natives shall also receive additional, specialized training, as applicable to their responsibilities.

(1) Native American communication (completion of CECOS Native American Traditions and Cultures: Implementing DoD Native American Policy (A-4A-0085) or the DoD American Indian Cultural Communication Course will satisfy this requirement);

(2) Native Hawaiian communication (completion of the DoD Native Hawaiian Cultural Communication Course will satisfy this requirement); and

(3) Alaska Natives communication (completion of the DoD Alaska Natives Cultural Communication Course will satisfy this requirement).

c. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

13-3.14. Funding. Chapter 2 (Funding) describes policies and guidance for the planning, programming, budgeting, and execution of resources to comply with environmental laws, regulations, executive orders (E.O.s), and DoD instructions and directives.

a. Cultural resources program requirements for Navy shore installations, such as those identified in the ICRMP, shall be included in the program objective memorandum and submitted through the chain of command using EPRWeb (refer to appendix E
(Web Sites) for Web site address). Shore installation requirements are generally programmed for operations and maintenance funding. Exceptions may include military construction and other requirements driven by project proponents, as determined by the CO in coordination with the CRM.

b. Funds for cultural resources projects may also be available from the Legacy Resource Management Program and other programs to supplement portions of cultural resources requirements.

c. NHPA section 110(g) authorizes Navy to procure services from SHPO or THPO to gain assistance in carrying out the Navy's preservation responsibilities. Services such as tailored training, cultural resources surveys, data recovery and recordation, and data management are examples.

d. Consistent with references (ff) and (gg), Navy policy is not to provide funding assistance for NHPA section 106 oversight responsibilities assigned to SHPOs under reference (a).

13-4 Responsibilities. Cultural resources responsibilities are carried out consistent with the broader roles and responsibilities addressed in chapter 1 (Organization and Coordination).

13-4.1. CNO (N4) 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 per reference (d);

b. Ensure a cultural resources management program is appropriately integrated with other planning and management processes to provide the most effective, efficient, and compliant management of Navy historic properties;

c. Designate a qualified cultural resources professional to oversee and coordinate Navy's cultural resources programs per reference (d). This professional shall also serve as the Navy DFPO, if so designated by the DON FPO;

d. Promulgate ICRMP guidance;
e. Identify Navywide priorities for cultural resources surveys and other stewardship actions to achieve compatibility with Navy missions and budgets;

f. Provide guidance on implementation of cultural resources policy and advise all levels of command regarding compliance with cultural resources legislation, regulations, and professional standards;

g. Review interagency cultural resources compliance agreements and National Register nominations, as recommended by subordinate commands;

h. Coordinate interagency consultation concerning cultural resources, Indian tribes, and NHOS at shore installations, in the inactive fleet, underwater, or affected by Navy undertakings;

i. Ensure full coordination with Marine Corps and other Military Services to avoid duplication of effort; and

j. Coordinate response(s) to congressional inquiries and requests for cultural resources information from federal, state, or private interests.

13-4.2. Commander, Naval Facilities Engineering Command shall:

a. Act as the Navy's technical authority and principal advisor to CNO, DON FPO, and CNIC in matters related to historic buildings, structures (except ships, shipwrecks, and aircraft), sites, districts, archaeological sites and collections, traditional cultural properties, Indian sacred sites, and other cultural resources not assigned elsewhere;

b. Serve CNO, the DON FPO, and CNIC as the Navy DFPO, if so designated by the DON FPO;

c. Designate and train cultural resources professional staff as necessary at the echelon 2, 3, and 4 commands to perform cultural resources management functions;

d. Support CNIC by maintaining a list of Navy's historic properties, integrated with Navy's real property inventory system or INFADS;
e. Provide technical assistance to identify, evaluate, inventory, nominate, maintain, and protect cultural resources under Navy control;

f. Cooperate with SHPOs and other preservation officials in their regions to expedite Navy projects and programs affecting cultural resources;

g. Assist installations in negotiating memoranda of agreement (MOA), MOUs, and program alternatives that protect, preserve, and manage cultural resources and facilitate Navy projects and programs;

h. Provide technical and legal support in resolving questions related to cultural resources management legal requirements, as requested;

i. Provide preservation guidance concerning appropriate cultural resources management procedures, techniques, and materials;

j. Participate in DoD's historic preservation working group (HPWG) and similar cultural resources planning groups;

k. Consider the use of historic buildings when available and practical during planning efforts; and

l. Support the development, collection, and review of cultural resources projects for submittal to the DoD Legacy, Program, Strategic Environmental Research and Development Program, and Environmental Security Technology Certification Program.

13-4.3. Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) shall:

a. Plan, program, budget, and implement the program comment for the identification and management of historic ships afloat and historic ships in the inactive fleet under COMNAVSEASYSCOM control and coordinate with other commands (reference (hh)), in coordination with the DON FPO and NAVHISTHERITAGECOM;

b. Comply with reference (a) and other legislation applicable to stewardship of other cultural resources under COMNAVSEASYSCOM control;
c. Designate and train qualified staff responsible for compliance actions regarding cultural resources under their control; and

d. Respond to cultural resources data calls and inquiries.

13-4.4. CNIC shall:

a. Develop cultural resources policy guidance and manage the cultural resources program for CNO (N4);

b. 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;

c. Ensure all real property under CNIC control is either addressed by an ICRMP or is the subject of an ICRMP waiver request to the DON FPO;

d. Revise instructions and other appropriate documents, if necessary, to reflect requirements of this chapter to include integrating cultural resources policies and considerations into CNIC facilities, and operational, maintenance, and other instructions and guidance;

e. Ensure subordinate commands and shore installations, as applicable, designate and train CRMs responsible for compliance with applicable cultural resources laws, regulations, and policy;

f. Coordinate cultural resources program data calls, and cultural resources program metrics;

g. Program, budget, and allocate funding and provide guidance for cultural resources training for Inter-Service Environmental Education Review Board courses and for implementation of Navy cultural resources metrics data collection and management systems;

h. Represent CNO (N4) on the DoD HPWG;

i. Respond to cultural resources data calls and inquiries; and
j. Designate and train qualified staff responsible for compliance actions regarding cultural resources under their control.

13-4.5. Region commanders and COs shall:

a. Coordinate the delegation of the responsibilities below, as deemed appropriate;

b. Coordinate among subordinate and tenant activities to achieve maximum efficiency regarding compliance with cultural resources management requirements within their area of responsibility including development and implementation of regional ICRMPs and compliance agreements, when appropriate;

c. Ensure all cultural resources program requirements as required are addressed in the planning, programming, budgeting, and execution processes and are entered into EPRWeb;

d. Respond to and complete cultural resources data calls and inquiries and forward to CNO (N4) for reports to DoD and Congress, as well as trend analysis and funding priority decisions;

e. Provide for the professional identification, evaluation, inventory, nomination where appropriate, and protection of historic properties under control of the region commander, and ensure the appropriate data management systems, including spatial data systems, accurately reflect the historic status of such resources (reference (f));

f. Ensure compliance with all legally mandated procedures when historic properties under their control may be transferred, leased, sold, demolished, or substantially altered (reference (a));

g. Develop, implement, and integrate ICRMPs with other planning documents and routine procedures applicable to activity projects and programs;

h. Consult with Indian tribes and NHOs on a government-to-government basis, as appropriate (references (a), (c), (i), (o), (p), (q), (t), and (u));

i. Consult with Indian tribes and NHOs prior to any Navy action that may impact tribal interests as defined by applicable laws and regulations, including NAGPRA's planned excavation and
inadvertent discovery provisions (references (c), (i), (o), (p), and (q));

j. Ensure inadvertently discovered archaeological resources are protected at the site of discovery, pending additional investigation, and chain of command is kept informed (references (c), (r), and (s));

k. Use historic buildings when available and practical instead of new acquisition(s), construction, or leasing to satisfy mission requirements per references (h) and (l);

l. Process applications and issue ARPA permits authorizing professional excavation and removal of archaeological resources, as appropriate;

m. Ensure appropriate storage and professional curation of archaeological collections and associated records as may accrue in carrying out legal compliance actions (references (c), (z), and (bb));

n. Determine whether to disclose potentially sensitive cultural resources information that may be protected from release under references (a) and (w);

o. Request a waiver from the requirement to prepare an ICRMP as allowed by section 6b(12) of reference (d) if a survey has shown 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;

p. Complete the annual cultural resources program metrics;

q. Designate and train qualified staff responsible for compliance actions regarding cultural resources under their control; and

r. Designate a CRM in writing.

13-4.6. NAVHISTHERITAGECOM shall:

a. Act as principal advisor for Navy in matters related to historic shipwrecks and aircraft wrecks;

b. Support COMNAVSEASYSCOM in the implementation of the program comment for historic vessels (reference (ii));
c. Designate and train qualified staff responsible for compliance actions regarding cultural resources and for oversight and coordination of Navy's cultural resources programs related to historic shipwrecks and aircraft wrecks;

d. Identify priorities for historic shipwrecks and aircraft surveys, inventories, and other stewardship actions to achieve compatibility with missions and budgets;

e. Advise and oversee, as appropriate, the preservation, conservation, and curation requirements and maintenance of historic shipwrecks, aircraft, and their associated documents, artifacts, and materials;

f. Advise all levels of commands having historic shipwrecks and aircraft wrecks regarding compliance with cultural resources legislation, regulations, and professional standards;

g. Review interagency compliance agreements and National Register nominations of historic shipwrecks and aircraft wrecks as recommended by subordinate commands, and prepare nominations for DON FPO signature;

h. Negotiate MOAs and program alternatives that protect, preserve, and manage naval shipwrecks and aircraft wrecks as historic properties or archaeological resources; and

i. Process applications and issue research permits for the professional study and excavation of Navy shipwrecks and aircraft wrecks in compliance with reference (dd).

13-4.7. Undertaking proponents shall:

a. Coordinate with the chain of command for CNO (N4) prior to making any commitment of Navy resources;

b. Plan, program, and budget for adequate compliance with cultural resources management legislation in project development for undertakings and associated requirements to avoid, minimize, and mitigate adverse effects to historic properties; and

c. Coordinate as required with other commands and organizations to perform particular cultural resources management activities associated with their undertakings.

13-4.8. CRMs shall:
a. Conduct cultural resources management responsibilities in support of the region commander or CO, as applicable;

b. Locate, inventory, evaluate, and protect historic buildings, structures, districts, archaeological sites, ships, aircraft, landscapes, traditional cultural properties, and other cultural resources per NHPA section 110 and Navy policy, or supervise or program for these activities for subordinate commands, as appropriate to the command;

c. Prepare or supervise the preparation of ICRMPs per applicable guidelines and policy;

d. Manage cultural resources consistent with professional standards and provide technical oversight for contractors engaged in cultural resources activities on behalf of Navy;

e. Formulate preservation alternatives for consideration when cultural resources are proposed for demolition, deactivation, reactivation, rehabilitation, transfer, or disposal;

f. Perform timely interagency consultation and compliance with NHPA section 106 whenever a Navy-funded, licensed, permitted, or assisted undertaking is of the type that could affect historic properties;

g. Disseminate technical guidance regarding maintenance, storage, and protection of cultural resources and proper procedures for interagency consultation;

h. Coordinate the maintenance of cultural resources records in the appropriate data management systems to ensure accurate information regarding Navy cultural resources;

i. Ensure the guidance of a cultural resources professional qualified in the appropriate discipline is incorporated in decisions regarding the identification and evaluation of historic properties, determinations of effect, and mitigation of adverse effects. Recommendations concerning the National Register eligibility of Navy properties shall be reviewed by appropriately qualified cultural resources professionals before being submitted to the Navy decision-maker;

j. Respond to cultural resources data calls and inquiries;
k. Prepare and enter into EPRWeb all cultural resources program requirements as required in the planning, programming, budget, and execution processes; and

l. Complete annual cultural resources program metrics.

13-4.9. Outside the United States, Navy commands, activities, and other components under Navy supervision shall:

a. Take into account the effect of any federal undertaking outside the United States that may directly or adversely affect a property on the World Heritage List or the applicable country's equivalent of the National Register (reference (a));

b. Take into account applicable provisions of status of forces agreements, international agreements, final governing standards, and Admiralty law;

c. Manage properties per reference (k); and

d. Respond to cultural resources data calls and inquiries.

13-5 Definitions. The following abbreviated definitions are provided for illustrative purposes. Please refer to the reference materials for complete definitions.

13-5.1. Adaptive Use. Adaptive use is utilization of a historic property for a purpose that differs from what the property was originally designed to support. Adaptive use requires a professionally qualified review to evaluate its potential effect to character-defining features, consistent with reference (c).

13-5.2. Adverse Effect. An adverse effect results in the alteration, directly or indirectly, of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. In determining whether the effect of an undertaking is adverse, all qualifying characteristics of a historic property are considered, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative (reference (c)).
13-5.3. **Advisory Council on Historic Preservation.** The Advisory Council on Historic Preservation is an independent Federal agency charged with advising the President, Congress, and Federal agencies regarding the protection of historic properties. It prepares and oversees reference (b), which implements reference (a).

13-5.4. **Archaeological Resources.** Archeological resources are material remains of past human life 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. Non-fossilized and fossilized paleontological specimens, or any portion or piece thereof, shall not be considered archaeological resources unless found in archaeological context.

13-5.5. **Archaeological Survey.** An archeological survey is a systematic analysis by a qualified professional designed to identify archaeological resources. Archaeological surveys can employ numerous methods to develop information necessary to allow a federal land manager to make decisions about property use, consistent with the legislated intent of protecting important archaeological properties. Methods may include archival research, pedestrian surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing.

13-5.6. **Consultation.** Consultation is the process of sharing information and gathering the views of agencies and other parties in relation to historic preservation responsibilities.

13-5.7. **Cultural Resources.** Cultural resources may include a range of historic properties and associated responsibilities, such as buildings and structures, historic and prehistoric districts, cultural landscapes, archaeological sites and collections, traditional cultural properties, Indian sacred sites, and objects (references (c) and (f)).

13-5.8. **Cultural Resources Manager.** A CRM manages cultural resources compliance and coordinates and engages support from appropriately qualified professionals, as needed for specific projects. Individuals in this role must receive appropriate training to perform the CRM duties.
13-5.9. **Cultural Resources Professional.** A cultural resources professional is an individual meeting the professional standards and qualifications established by the Secretary of the Interior in the discipline appropriate to the type of resource, per reference (dd). Cultural resources professionals must complete appropriate training to perform Navy CRM duties.

13-5.10. **Curation.** Curation is the management and preservation of archaeological collections and associated documentation. Curation is subject to compliance with reference (bb) regulations intended to ensure appropriate handling of these resources.

13-5.11. **Federal Trust Responsibility.** Federal trust responsibility is a special trust relationship between the Federal government and Indian tribes resulting from treaties, statutes, E.O.s, judicial decisions, and other legal instruments. The federal trust responsibility is discussed in reference (o).

13-5.12. **Historic Property.** Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register, including artifacts, records, and material remains related to such a property or resource (reference (a) and (j)).

13-5.13. **Indian Tribe.** An Indian tribe is 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 in 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," available on the Library of Congress Web site (refer to appendix E (Web Sites) for Web site address).

13-5.14. **Integrated Cultural Resources Management Plan.** An ICRMP is a tool used by DoD components to manage planning and compliance with cultural resources requirements (references (d) and (g)). The ICRMP provides guidance and requirements for effective, efficient cultural resources compliance processes.

13-5.15. **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.

13-5.16. Memorandum of Agreement. An MOA is a formal agreement normally associated with the resolution of adverse effects under NHPA section 106 consultation. An MOA specifies measures to avoid, minimize, and mitigate adverse effects. It is usually signed by the CO of the Navy installation or region commander, an authorized representative of the state historic preservation office or tribal historic preservation office, federally recognized Indian tribes, or other interested groups and individuals, as applicable. The Advisory Council on Historic Preservation must be notified of adverse effect and provided the opportunity to participate in development and execution of the MOA (reference (c)).

13-5.17. Mitigation. Mitigation refers to measures to resolve adverse effects to historic properties which may include specific forms of documentation, data recovery, and measures to protect historic properties (reference (ii)).

13-5.18. National Historic Landmark. An NHL is a historic property designated by the Secretary of the Interior as having significance of a very high level and which is subject to additional consultation requirements. NHL eligibility criteria and requirements are published under references (j) and (y).

13-5.19. National Register of Historic Places. The NRHP is a formal list of sites, districts, buildings, structures, and objects maintained by the keeper of the National Register within the Department of Interior. The NRHP lists properties of significance in history and prehistory, architecture, archaeology, engineering, and culture. The criteria of eligibility are published in reference (j).

13-5.20. Paleontology. Paleontology refers to the study of fossilized remains or organisms to interpret the evolution of life from past geologic periods. On federal lands, fossils may constitute important stewardship resources of inherent scientific, educational, and recreational value. Management of these resources includes preservation and protection of fossils and possibly provisions for collection, as applicable and appropriate. Such collection and permitting processes may be modeled after other Federal agency guidelines. While
identification and analysis of fossils requires paleontological expertise, managing paleontological resources on Navy lands will often involve a multidisciplinary effort in which the CRM should be involved.

13-5.21. **Paleontological Resource.** A paleontological resource is any fossilized remains, traces, or imprints of organisms preserved in or on the earth's crust of paleontological interest which provides information about the history of life on earth.

13-5.22. **Program Alternative.** A program alternative is a broad category of measures to address responsibilities under reference (a), including programmatic agreements, program comments, standard treatments, exemptions, and alternate procedures. Procedures are set forth in reference (c). Adopting a program alternative requires consultation with the chain of command, Advisory Council on Historic Preservation, SHPO(s), and other relevant stakeholders; and coordination with the chain of command. Implementation and use of program alternatives generally require up-to-date inventories and a comprehensive management approach.

13-5.23. **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 historic properties that may be present. A reconnaissance survey will usually include archival research and may include predictive modeling, remote sensing, surface inspection, and subsurface testing to determine presence or absence of archaeological properties. It is often referred to as a Phase I survey.

13-5.24. **State Historic Preservation Officer.** An SHPO is the official appointed by the governor of each state and territory responsible for administering cultural resources programs within the state or territory. The SHPO plays a key role in the review processes conducted under references (a) and (c). The SHPO may also assist with related responsibilities under NHPA section 110(g).

13-5.25. **Tribal Historic Preservation Officer.** The THPO is the individual officially designated by a federally recognized Indian tribe to direct a program approved by National Park Service NPS under the authority of NHPA section 101(d)(2). The THPO must have assumed some or all of the functions of SHPOs on tribal lands.
13-5.26. **Undertaking.** An undertaking is 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 (reference (c)).

13-5.27. **Undertaking Proponent.** An undertaking proponent is the commander, CO, or civilian director of a unit, activity, or organization who has the legal and financial authority to commit Navy to agreements undertaken in compliance with cultural resources laws and regulations regarding a particular undertaking.
CHAPTER 14

COASTAL ZONE MANAGEMENT

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14-1  Scope.  This chapter describes policy and guidance to
        ensure Navy action proponents proposing actions or activities
        that could potentially affect coastal uses or resources are in
        full compliance with the federal consistency provisions of the
        Coastal Zone Management Act (CZMA).

14-1.1.  References

    (a) 16 U.S.C. §1451 to 1464

    (b) 15 CFR 930

    (c) 15 CFR 923

    (d) 40 CFR 1508.7
14-1.2. Related Chapters. Personnel should also refer to chapter 11 (Environmental Readiness in the Acquisition Process) for acquisition environmental guidance, chapter 12 (Natural Resources Conservation) for management of natural resources, and chapter 13 (Cultural Resources Compliance and Management) for cultural resources, including paleontology.

14-2 Legislation. Through reference (a), Congress established national policy to preserve, protect, develop, restore, or enhance resources in the coastal zone. This Act encourages coastal states to properly manage use of their coasts and coastal resources, prepare and implement coastal management programs (CMP), and provide for public and governmental participation in decisions affecting the coastal zone. To this end, CZMA imparts an obligation upon Federal agencies whose actions or activities affect any land or water use or natural resource of the coastal zone to be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state CMPs.

14-3 Requirements


a. Consistency Review. References (a) and (b) require Navy and other Federal agencies proposing an action 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 the coastal zone. A consistency review should result in one of the following:

(1) Preparation of a consistency determination;

(2) Preparation of a negative determination; or

(3) Determination that no further action is necessary.

b. Flowchart. Figure 14-1 provides a flowchart for determining documentation requirements for Navy actions under this manual. A guidance factsheet is available in the reference materials module of the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) Environmental Planning Library Web site.

c. Effects Test
(1) To decide whether consistency applies, the Navy action proponent must first factually determine if reasonably foreseeable coastal effects will result from the proposed action. Direct, indirect, and cumulative effects must be considered.

(2) Moreover, application of the effects test to an action is not limited by the geographic location of the action. Consistency applies whenever an action may result in reasonably foreseeable coastal effects on the coastal uses or resources within a state's coastal zone, even if the action is occurring outside the state's coastal zone. In carrying out its effects test, the Navy action proponent shall:

(a) Review the federally approved state CMP's relevant enforceable policies for compliance, keeping in mind the definitions of coastal uses and resources;

(b) Consider the definition of effects as identified in section 14-5.10;

(c) Assess whether an action taking place outside of a state's coastal zone will affect the coastal uses or resources within the state's coastal zone, provided the uses or resources being affected are, in fact, uses or resources of the state's coastal zone. Merely showing effects from an action outside of the coastal zone is not sufficient by itself to demonstrate that reasonably foreseeable effects extend to uses or resources within the coastal zone. For example, it is possible a federal action could temporarily affect a coastal resource while that resource is outside of the coastal zone such that resource impacts are not felt within the coastal zone (e.g., temporary harassment of a marine mammal); and

(d) Determine whether the proposed action is consistent to the maximum extent practicable with the enforceable policies of the state's approved CMP.

(3) 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 presidential exemption described in CZMA is the only circumstance in which the Navy action proponent may rely on a lack of funding as a limitation on full consistency with an enforceable policy.
d. Thorough Consistency Assessment. A Navy action proponent may assess the effects of its action on coastal uses and resources (for which there are enforceable policies under the state's CMP) as part of its preparation of an environmental assessment (EA) or environmental impact statement (EIS) pursuant to the requirements of National Environmental Policy Act (NEPA). By Navy policy, an EA or EIS constitutes a "thorough consistency assessment" within the context of CZMA compliance.

e. Consistency Determination - When an Action May Have Reasonably Foreseeable Direct, Indirect, or Cumulative Effects on Coastal Uses or Resources. A consistency determination shall be submitted for each affected coastal state when a Navy action may have a reasonably foreseeable direct, indirect, or
cumulative effect(s) on any coastal use or resource, regardless of the location of the action. 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.

(1) The level of detail and information provided in a consistency determination shall be commensurate with the expected effects of the action on the coastal zone. Some states or territories (e.g., Puerto Rico) require consistency determinations and negative determinations to be documented using specific state forms. Federal regulations do not require consistency determinations and negative determinations be provided on the state form as long as such determinations comply with the requirements of CZMA regulations. However, using such forms, where practical, is recommended to avoid unnecessary conflict.

(2) The consistency determination must include comprehensive data and information sufficient to support Navy's determination. Where practicable, language contained in related documentation prepared pursuant to NEPA may be directly incorporated into the consistency determination. At a minimum, the consistency determination shall include the elements identified in Table 14-1.

Table 14-1. Elements of a Consistency Determination

<table>
<thead>
<tr>
<th>Element</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Introductory Statement</td>
<td>Indicate whether or not the proposed action will be undertaken, to the maximum extent practicable, in a manner consistent with the enforceable policies of the relevant federally approved state CMP.</td>
</tr>
<tr>
<td>Description of the Action</td>
<td>Provide a detailed description of the action and its associated facilities and reasonably foreseeable coastal effects.</td>
</tr>
</tbody>
</table>
| Evaluation of Relevant State Enforceable Policies | • The evaluation should review each relevant state enforceable policy and explain how the Navy action is fully consistent or consistent to the maximum extent practicable.  
• Consideration should be given to state CMP provisions that are in the nature of recommendations.  
• If full consistency with the enforceable policies of the state CMP is prohibited, the Navy action proponent must clearly describe the statutory provisions, legislative history, or other legal authority that limits the Navy action proponent's discretion to be fully consistent (refer to note). |

Note: OPNAV (N45) must be notified regarding assertions that full consistency with the enforceable policies of a state CMP is prohibited.
(3) A consistency determination must be submitted by the Navy action proponent 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. Action proponents should also consider delivering the consistency determination as early as analysis and circumstances permit. Some proposed actions may require time beyond the regulatory 90 days to address and resolve issues that may arise, particularly for potentially controversial actions. In some cases, the action proponent may need time to consider and integrate issues that arise during the consistency determination process into NEPA documentation or other regulatory processes or authorizations. 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. The Navy action proponent shall approve one state agency request for an extension period of 15 days or less.

f. Negative Determination - When an Action Does Not Have Coastal Effects

(1) 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 one or more of the following apply:

(a) The action is identified as a "listed activity or action" by a state agency;

(b) The state has notified the Navy action proponent that, as a result of its case-by-case monitoring of unlisted activities or actions, a Navy action may have reasonably foreseeable coastal effects and the federal consistency provisions of section 307 of reference (a) apply;

(c) The action is the same as, or similar to, actions for which consistency determinations have been prepared in the past; or

(d) The action was the subject of a "thorough consistency assessment" undertaken by the Navy action proponent which resulted in initial findings that the action had no coastal effects.
(2) At a minimum, negative determinations shall contain the information identified in table 14-2.

<table>
<thead>
<tr>
<th>Element</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the Action</td>
<td>Provide a brief description of the action and its associated facilities and its location.</td>
</tr>
<tr>
<td>Basis for Negative Determination</td>
<td>Discuss the basis for determining the action that will not affect any coastal use or resource.</td>
</tr>
<tr>
<td>Evaluation of Relevant State Enforceable Policies</td>
<td>The evaluation should review each relevant state enforceable policy and explain how the Navy action proponent determined the Navy action would not result in effects on coastal uses or resources.</td>
</tr>
</tbody>
</table>

(3) A negative determination must be submitted by the Navy action proponent 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. 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 Navy determination. However, state agency concurrence shall not be presumed when an extension of time is requested to review the matter. The Navy action proponent shall approve one state agency request for an extension period of 15 days or less.

g. Classified Action. In the case of a classified action, the Navy action proponent is only required to provide the state with a description of the action and effects that will not breach the classified nature of the action. However, the Navy action proponent must conduct the classified 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 the action proponent is legally permitted to release and which do not otherwise breach the classified nature of the action.

h. No Documentation Required. No documentation is required pursuant to section 307 of reference (a) if there are no effects on any coastal use or resource and none of the provisions of section 14-3.1.c are triggered.

14-3.2. Other Types of Consistency Determinations

a. General Consistency Determinations. A Navy action proponent may prepare a general consistency determination in
cases where a repeated action will be performed (other than a development project) that would have cumulative effects on any coastal use or resource. Examples of repetitive actions include ongoing maintenance or waste disposal. Issuance of a general consistency determination avoids the need to issue separate consistency determinations for each repetitive action. 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. Navy and state agencies may mutually agree on a general consistency determination for de minimis activities or any other repetitive action or category of actions or activities. Navy shall document its decision to proceed with an action listed as a de minimis activity in a memorandum for the record.

b. General Negative Determinations. A general negative determination may be prepared in cases where the Navy action proponent will be performing a repeated action that will not have reasonably foreseeable cumulative coastal effects, whether performed separately or cumulatively. A general negative determination must describe in detail the action and repetitive action covered by the general negative determination and the expected number of occurrences of the activity over a specific period of time. If a general negative determination is issued, the Navy action proponent shall thereafter periodically assess whether the general negative determination is still applicable.

c. Phased Consistency Determinations. A phased consistency determination 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 separate consistency determination will be required for each major decision.

d. National or Regional Consistency Determinations. The Navy action proponent may provide coastal states with consistency determinations for actions of national or regional scope 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 OPNAV (N45). Regional consistency determinations shall also be approved by and coordinated with the area environmental coordinators and regional environmental coordinators (REC).

e. 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.

14-3.3. Relationship Between Consistency Determinations and Negative Determinations and NEPA Documentation. Consistency determinations and negative determinations shall be prepared as stand-alone documents. States may not require submission of a draft or final NEPA analysis as a condition for a consistency determination application being complete. Stand-alone consistency determinations should be incorporated, at a minimum, in the correspondence appendix of a NEPA analysis.

14-3.4. State Agency Conditional Concurrences and Objections

a. Development of Conditions. When applicable, action proponents should cooperate with state agencies to develop conditions that, if agreed to during the state agency's consistency review period and included in the consistency determination, would allow the state agency to concur with the proposed action.

b. Proceeding with an Action

(1) If a state agency issues a conditional concurrence, the action proponent shall use the remainder of the 90-day period to resolve any disagreements. The action proponent shall also review the conditions to ascertain whether the proposed action remains consistent to the maximum extent practicable, by determining, at a minimum, the following:

(a) Whether the conditions accurately represent the state's approved CMP, and
(b) Whether the conditions violate principles of federalism including whether sovereign immunity has been waived or the conditions are preempted by federal laws.

(2) If, after review, the action proponent concludes there are no legal or factual bases to justify proceeding over the state's objection, the action proponent should work with the state agency to:

   (a) Remove conditions not acceptable to Navy;

   (b) Modify the conditions to those that can be implemented by the action proponent; and

   (c) Implement the conditions.

(3) A conditional concurrence differs from a concurrence in that a concurrence may merely forward 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 them. Notification via the chain of command to OPNAV (N45) is required if any recommendation is not 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 OPNAV (N45). In the event these conditions remain a condition of state agency concurrence and they are unacceptable to Navy, Navy shall treat the conditional concurrence as an objection by the state agency.

c. State Agency Objections

(1) 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 OPNAV (N45) requesting its participation in the review of the action and coordination with the state agency objecting to the action.

(2) In the case of a state agency's objection to a Navy consistency determination, such notification shall state the:

   (a) 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. The notification shall clearly describe the legal impediments to full consistency; or

(b) Navy action proponent has concluded that its action is fully consistent with the enforceable policies of the state CMP.

(3) In the case of a state agency's objection to a Navy negative determination, the notification shall state the Navy action proponent's rationale for asserting that coastal effects are not reasonably foreseeable.

d. **Serious Disagreements.** Mediation is an option 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. Should the action proponent believe the disagreement can be resolved through mediation, it shall notify OPNAV (N45) and provide reasons. OPNAV (N45) will coordinate within OPNAV, and if necessary, with the Secretariat on whether to approve the use of mediation.

14-3.5. **State Coastal Non-Point Pollution Control Programs.** Navy shall support the development and implementation of state coastal non-point pollution control programs on Navy lands consistent with applicable laws and regulations. These may include identifying non-point sources, specifying corrective measures, and coordinating non-point source compliance efforts with state programs. Consistent with Federal laws and regulations, 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. Navy shall encourage research and development efforts to address non-point sources of pollution to identify and understand Navy impacts on the coastal and marine environment.

14-3.6. **Supplemental Coordination for Proposed Activities**

a. A Navy action proponent shall prepare a supplemental consistency determination for any proposed Navy action that was previously determined to be consistent with a state's CMP (i.e., state concurred with Navy's determination), that has not yet begun, but that the action proponent has subsequently determined that the proposed action will affect a coastal use or resource substantially different than originally described.
Substantially different coastal effects are reasonably foreseeable if:

(1) The Federal agency makes substantial changes in the proposed activity that are relevant to management program enforceable policies; and

(2) There are significant new circumstances or information relevant to the proposed activity and the proposed activity's effect on any coastal use or resource.

b. Furthermore, the Navy action proponent should prepare a supplemental consistency determination if substantial changes were made to a proposed action during the period of the state agency's initial review that were relevant to CMP enforceable policies or affect coastal uses or resources, and the action proponent did not notify the state agency of those substantial changes prior to state concurrence with the determination.

14-4 Responsibilities

14-4.1. OPNAV (N45) shall:

a. Develop and implement OPNAV policy guidance regarding CZMA compliance;

b. Advise commands of the requirement for submitting consistency determinations or negative determinations;

c. Coordinate with National Oceanic and Atmospheric Administration (NOAA), Office of the Secretary of Defense, Assistant Secretary of the Navy, Energy, Installations, and Environment (ASN(EI&E)), and other Department of Defense components and Federal agencies concerned with coastal zone matters;

d. Provide Navy representation, along with the budget submitting office (BSO), when NOAA has been asked to mediate differences between the Navy action proponent and state CMP agencies;

e. Coordinate with ASN(EI&E) should the action proponent elect to proceed over the state's objection to ensure the current ASN(EI&E) position is reflected; and

f. Coordinate with ASN(EI&E) for notification of the NOAA Office of Ocean and Coastal Resource Management.
14-4.2. BSOs, region commanders, commanding officers (CO) of shore installations, training and operations planners, weapons systems acquisition program managers, and science and technology program managers shall:

a. Ensure all appropriate instructions (including those requiring written justification for actions, collectively or separately); research, development, test, and evaluation; military construction; operations and maintenance; Navy working capital fund; urgent minor construction; land acquisitions; natural resources management; weapons and support system procurement; and special projects include the requirements for funding and scheduling for CZMA documentation, as necessary;

b. Participate in the formulation of, and ensure commitment to, any mitigation and monitoring requirements established in consistency determination or negative determination; and

c. Comply with the requirements outlined in section 14-4.4 if acting as an action proponent.

14-4.3. RECs shall:

a. Participate in the preparation of consistency determinations and negative determinations for proposed activities within the geographic boundaries of their regions and review these determinations prior to their submittal to the state agency;

b. Provide Navy representation, along with the action proponent, at any formal hearings or meetings of state CMP agencies where the proposed Navy action is on the agenda for discussion or approval;

c. Actively participate in the review process of proposed changes to state CMPs to ensure Navy's interests are protected; and

d. Identify and negotiate de minimis and general consistency determinations for Navy activities with state CMP agencies.

14-4.4. Action proponents shall:
a. Prepare and submit consistency determinations and negative determinations for Navy actions as provided in sections 14-3.1.b and 14-3.1.c;

b. Provide Navy representation, along with the AEC or REC, at any formal hearings or meetings of state CMP agencies where the proposed Navy action is on the agenda for discussion or approval; and

c. Provide notification to OPNAV (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.

14-5 Definitions

14-5.1. Action Proponent. An action proponent is the commander, CO, or civilian director of a unit, activity, or organization responsible for initiating 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.

14-5.2. Any Coastal Use or Resource. Any coastal use or resource pertains to 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 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.

14-5.3. Associated Facilities. Associated facilities are all proposed facilities 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, assistance recipient)
and without which the action, as proposed, could not be conducted.

14-5.4. **Classified Action.** A classified action is any action for which a Navy action proponent is required to protect from disclosure. This includes national security information concerning national defense or foreign policy, provided it has been properly classified per the substantive and procedural requirements of an executive order.

14-5.5. **Coastal Management Program.** A CMP is the program of a coastal state or territory, which has been approved by NOAA pursuant to reference (c), 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.

14-5.6. **Coastal States.** Coastal states are states of the United States 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 U.S. Virgin Islands; Guam; Commonwealth of the Northern Mariana Islands; Trust Territories of the Pacific Islands; and American Samoa.

14-5.7. **Coastal Zone.** The coastal zone is the coastal waters (including lands lying in coastal waters and submerged there under and adjacent shore lands) within the meaning of section 304(1) of reference (a) 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 used by Navy in performance of its mission.

14-5.8. **Consistent to the Maximum Extent Practicable.** Navy is required by CZMA to ensure its activities affecting any coastal use or resource are consistent to the "maximum extent practicable," as defined in paragraph (a)(1) of section 32 of reference (b) as "fully consistent" with the enforceable policies of the CMP unless Navy compliance is prohibited by law.

14-5.9. **De minimis Activities.** De minimis activities are those activities expected to have insignificant direct or indirect (cumulative and secondary) effects and for which a mutual agreement exists between Navy and a state agency that the action is not subject to further state agency review.
14-5.10. **Effect on any Coastal Use or Resource.** An effect on any coastal use or resource is 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:

a. Direct effects - Effects that occur at the same time or place as Navy action; or

b. Indirect and cumulative 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 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 Council on Environmental Quality's definition of cumulative effects per reference (d).

14-5.11. **Effects Test.** An effects test is the test by which the Navy action proponent factually determines compliance with the federal consistency requirements of section 307 of reference (a) and the implementing regulations set forth at reference (b).

14-5.12. **Enforceable Policies of a State Coastal Management Program.** Enforceable policies of a state CMP are state policies 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 a proposed action without interaction with the state agency.

14-5.13. **Land Use.** Land use is a use or activity conducted in, or on, the shore lands within the coastal zone.

14-5.14. **Listed Activities.** Listed activities are activities or actions listed by state agencies in their CMPs that, in the opinion of the state agency, will have reasonably foreseeable coastal effects.
14-5.15. **Navy Action or Activity.** A Navy action or activity is any function performed by or on behalf of the Navy action proponent in the exercise of its statutory responsibilities (e.g., facilities development, tests, exercises). The term "action" is used interchangeably with the term "activity."

14-5.16. **Navy Development Project.** A Navy development project is a Navy action that: (a) involves 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.

14-5.17. **Thorough Consistency Assessment.** A thorough consistency assessment is an assessment of coastal effects fully meeting the requirements of section 307 of reference (a) and the implementing regulations set forth in reference (b). Navy policy states 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 on coastal uses or resources for which there are enforceable policies under the state's CMP.

14-5.18. **Unlisted Activities.** Unlisted activities are those 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.

14-5.19. **Water Use.** Water use is a use or activity conducted in or on waters within the coastal zone.
CHAPTER 15
OPERATIONAL RANGE ASSESSMENTS

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15-1  Scope.  This chapter outlines Department of Defense (DoD)
       policy requirements for the Operational Range Assessment Program
       (ORAP).  Navy meets the requirements of ORAP by implementing the
       Range Sustainability Environmental Program Assessment (RSEPA)
       and Water Range Sustainability Environmental Program Assessment
       (WRSEPA) Programs.  RSEPA is conducted to:  (1) ensure range
       operations comply with existing environmental laws and
       regulations; and (2) ensure if munitions constituents (MC) are
       migrating off-range, the MC do not present an unacceptable risk
       to human health or the environment.  WRSEPA is conducted to:
       (1) ensure range operations comply with existing environmental
       laws and regulations; and (2) ensure MC and military expended
       material constituents (MEMC) do not present an unacceptable risk
       to human health or the environment.  WRSEPA modifies RSEPA for
       the water environment and ensures Navy land and water
       operational ranges and operating areas (OPAREA) are assessed in
       a consistent manner.

15-1.1.  Related Chapters.  Only operational ranges are included
        in ORAP.  Refer to chapter 42 (Environmental Restoration) for
        other than operational ranges.  Also, small arms ranges should
be considered during environmental management system (EMS) implementation (refer to chapter 17 (Environmental Management Systems) for EMS requirements).

15-1.2. References

(a) DoD Instruction 4715.14 of 30 November 2005
(b) DoD Directive 4715.11 of 10 May 2004
(c) DoD Directive 4715.12 of 12 July 2004
(d) DoD Directive 3200.15 of 10 January 2003
(e) OPNAV (N45) ltr 5090/N45C/cU838228 dtd 6 November 2005, U.S. Navy Range Sustainability Environmental Program Assessment Policy Implementation Manual
(g) DoD Instruction 3200.16 of 13 June 2005
(h) OPNAVINST 3571.4, Operational Range Clearance Policy for Navy Ranges
(i) 40 CFR 266
(j) Navy Military Munitions Rule Implementation Policy of 1 July 1998
(k) 42 U.S.C. §2011 et seq.

15-1.3. Applicability. RSEPA applies to all Navy land operational ranges within the United States and territories where military munitions are used. WRSEPA applies to all Navy water-based operational ranges and operational areas where military munitions and military expended materials (MEMs) are used.

15-2 Legislation

a. The following legislation contains provisions that pertain to the management and release of military munitions:

(1) Executive Order 12580, Superfund Implementation; and

b. A summary of this legislation is included in appendix A (Laws and Regulations).

15-3 Requirements

15-3.1. Range Sustainability Environmental Program Assessment. To meet the requirements of references (a), (b), (c), and (d), Navy implements the RSEPA process (reference (e)), which systematically assesses the operational land ranges for environmental compliance conditions and potential for MC migration. This management practice is in place to ensure MCs from operational ranges do not pose an unacceptable risk to human health or the environment in off-range areas.

a. Range Condition Assessment. The range condition assessment (RCA) is the first phase of the RSEPA process. The RCA is conducted to determine environmental compliance and to assess the risk of an off-range release of MC.

b. Comprehensive Range Evaluation. If further analysis is required after the RCA or a specific concern remains, a comprehensive range evaluation (CRE) is conducted to assess the risk of an off-range release of MCs or resolve the specific concern. CREs are conducted on a case-by-case basis and require approval from the applicable echelon 2 command and the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)).

c. Sustainable Range Oversight. In the event an off-range release has been confirmed, additional internal and external coordination is necessary. The sustainable range oversight (SRO) process is initiated to ensure range sustainability is maintained while proceeding through the Comprehensive Environmental Response, Compensation, and Liability Act process for off-range releases. SRO is conducted on a case-by-case basis and requires approval from the applicable echelon 2 command and OPNAV (N45).

d. Protective Measures. Protective measures can be implemented at any point in the RSEPA process. Protective measures are actions or best management practices implemented on-range to sustain range operations; maintain environmental compliance; and abate, prevent, minimize, stabilize, or
eliminate a release or threat of release of MCs to off-range areas.

e. Range Data Folder. Recommendations and decisions made for each operational range being assessed through the RSEPA process will be documented in reports. Reports generated through RSEPA are maintained in a range data folder (RDF). Echelon 2 commands will maintain the RDFs. A copy will be provided to OPNAV (N45), as requested.

15-3.2. Water Range Sustainability Environmental Program Assessment. To meet the requirements of references (a), (b), (c), and (d), Navy implements the WRSEPA process (reference (f)). For programmatic consistency, WRSEPA policy defers to reference (e) wherever possible. The WRSEPA process systematically assesses water ranges and OPAREAs for present environmental compliance conditions and unacceptable risks from MCs and MEMCs. The WRSEPA process is outlined below:

a. Water Range Condition Assessment. The water range condition assessment (WRCA) is the first phase of the WRSEPA process. A WRCA is conducted to determine environmental compliance and to assess environmental risks from MCs and MEMCs.

b. Water Comprehensive Range Evaluation. If further analysis is required after the WRCA, a water comprehensive range evaluation (WCRE) is executed only where sufficient evidence indicates a source-pathway-receptor exists and the effects of MCs or MEMCs pose potential risk to human health and the environment. WCRE requires prior approval from the applicable echelon 2 command and OPNAV (N45).

c. Protective Measures. Protective measures can be implemented at any point in the assessment to maintain range sustainability and address specific environmental concerns.

d. RDF. Recommendations and decisions made for each water range and OPAREA being assessed through the WRSEPA process will be documented in reports. Final reports generated through WRSEPA will be placed in an RDF. Echelon 2 commands will maintain the RDFs. A copy will be provided to OPNAV (N45), as requested.

15-3.3. Periodic Review and Updates. Land and water ranges shall be assessed every 5 years or if there is significant change in the operational range mission after the previous
assessment. Land and water ranges may be assessed together, where appropriate, with OPNAV (N45) concurrence.

15-3.4. Operational Range Clearance (ORC). Navy's ORC policy (reference (g)) is administered by the Office of the Chief of Naval Operations, Fleet Readiness Division (OPNAV (N43)) and is required by references (a), (b), and (h). While ORCs are conducted to ensure range safety and target fidelity, the byproduct of clearing range debris is reducing the potential for off-range migration of MCs. Range clearance operations conducted on operational ranges do not impact the intended use of munitions and are exempt from Resource Conservation and Recovery Act regulation, per references (i) and (j). In general, ORC is not conducted for water ranges; however, Navy does use and recover some targets and simulators from the water.

15-3.5. Training Requirements

a. Personnel involved in operational range assessments shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks.

b. Assessment managers shall receive, at a minimum, the following training:

   (1) Environmental laws and regulations (completion of Naval Civil Engineer Corps Officers School Basic Environmental Law (A-4A-0058) will satisfy this requirement); and

   (2) Military Munitions Rule.

c. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

15-4 Responsibilities

15-4.1. OPNAV (N45) shall:

   a. Serve as principal leader, Navy program manager, and approval authority for RSEPA and WRSEPA;

   b. Act as the resource and assessment sponsor to implement requirements of RSEPA and WRSEPA for all fleet range assessments;

15-5
c. Advise Navy in matters related to environmental range sustainment;

d. Coordinate with other Service headquarters, the Office of the Secretary of the Navy, and the Office of the Secretary of Defense with respect to environmental issues on operational ranges; and

e. Provide additional guidance and support to echelon 2 commands, Navy regions, regional environmental coordinators, fleet commanders, and installation personnel as requested.

15-4.2. OPNAV (N43) shall:

a. Coordinate with OPNAV (N45) on environmental range sustainment efforts and initiatives;

b. Provide guidance and support and monitor implementation of Navy’s ORC policy; and

c. Act as the resource and assessment sponsor to implement requirements of Navy's ORC policy.

15-4.3. The Office of the Chief of Naval Operations, Shore Readiness Division shall:

a. Program, budget, and allocate funds to implement improvement in operational range real property; and

b. Provide support to OPNAV (N45) in monitoring implementation of environmental range management initiatives.

15-4.4. Commander, Navy Installations Command shall:

a. Act as the resource and assessment sponsor to implement improvements in operational range real property; and

b. Provide support to OPNAV (N45) in monitoring implementation of environmental range management initiatives.

15-4.5. Echelon 2 commands with cognizance for operational ranges shall:

a. Execute the RSEPA and WRSEPA programs and serve on command-specific RSEPA and WRSEPA management and executive teams;
b. Assign technical team leaders and ensure activities and responsibilities delegated for conducting RSEPA and WRSEPA assessments comply with the requirements of this chapter;

c. Program, plan, budget, and allocate sufficient resources to ensure range operations maintain compliance with applicable federal, state, and local environmental laws and regulations;

d. Respond to any release or substantial threat of release of MCs from an operational range to an off-range area when such a release poses an imminent and substantial threat to human health and the environment;

e. Ensure commands responsible for the environmental management of operational ranges comply with the requirements of this chapter including all recordkeeping documentation and notification requirements; and

f. Ensure activities responsible for the environmental management of operational ranges comply with applicable federal, state, and local environmental laws and regulations.

15-4.6. Commander, Naval Facilities Engineering Command shall provide technical support, as requested, in development and implementation of environmental range sustainment initiatives.

15-4.7. Naval Ordnance Safety and Security Activity shall:

a. Provide explosives safety and ordnance environmental support to OPNAV (N45) and echelon 2 commands, as requested, during implementation of environmental range sustainment initiatives; and

b. Evaluate environmental compliance with this chapter during the conduct of explosives safety inspections.

15-4.8. Commanding officers with operational range management responsibilities shall implement relevant requirements as described in this chapter.

15-5  Definitions

15-5.1. Military Expended Material. For the purpose of WRESPA policy, MEMs are those munitions, items, devices, equipment, and materials that are uniquely military in nature and used and expended in the conduct of the military training and testing mission, such as: sonobuoys, flares, chaff, drones, targets,
bathymetry measuring devices, communications devices, items used as training substitutes, and other instrumentation. This includes materials expended (e.g., propellants, weights, guidance wires) from items typically recovered (e.g., aerial target drones, practice torpedoes).

15-5.2. Military Expended Material Constituents. MEMCs are any materials originating or released into the environment from the use of MEMs. This also includes constituents from explosives and non-explosive materials and the emission, degradation, or breakdown products from such MEMs.

15-5.3. Military Munitions

a. Military munitions are all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products under the control of DoD, Coast Guard, Department of Energy (DOE), and National Guard. The term includes:

(1) Confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical, and riot control agents; and smokes and incendiaries, including bulk explosives and chemical warfare agents;

(2) 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, and demolition charges; and

(3) Devices and components of any item specified above.

b. Military munitions do not include wholly inert items, improvised explosive devices, nuclear weapons, nuclear devices and nuclear components, other than non-nuclear components of nuclear devices which are managed under the nuclear weapons program of the DOE after all required sanitization operations under reference (k) have been completed.

15-5.4. Military Range. A military range is a designated land or water area set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with
restricted access and exclusionary areas. This definition does not include airspace, water, or land areas underlying airspace used for training, testing, or research and development where military munitions have not been used.

15-5.5. Munitions Constituents. MCs are any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown products of such ordnance and munitions.

15-5.6. OPERATING AREA. An OPAREA is the land, airspace, sea space, or undersea space used by military personnel or equipment for military testing and training that are not part of a range. OPAREAs are typically used to maneuver equipment to appropriate range areas. Examples could include aircraft ingress and egress areas, missile flight areas, riverine training areas, and amphibious landing areas.

15-5.7. Operational Range. An operational range is a military range that is used for range activities; or is not currently being used but is still considered by the Secretary of Defense or the secretary of a Military Department to be a range, is under the jurisdiction, custody, or control of DoD, and has not been put to a new use that is incompatible with range activities.

15-5.8. Range Activities. Range activities include research, development, testing, and evaluation of military munitions, other ordnance, or weapons systems and the training of members of the armed forces in the use and handling of military munitions, other ordnance, weapons systems, and warfare tactics.

15-5.9. Small Arms Ammunition. Small arms ammunition is used for small arms (i.e., all ammunition up to and including .50 caliber).

15-5.10. Small Arms Range. A small arms range is a designated land or water area utilized for training or recreational use of small arms weapons (excluding high explosive filled or loaded projectiles) including pistols, rifles, shotguns, and machine guns. This definition also includes skeet and trap ranges.

15-5.11. Water Range. A water range is a designated water or water and land area set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train
military personnel in their use and handling. This definition does not include water or land areas underlying airspace used for training, testing, or research and development where military munitions have not been used.
CHAPTER 17
ENVIRONMENTAL MANAGEMENT SYSTEMS

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17-1 Scope. This chapter provides policy guidance on environmental management systems (EMS) requirements and responsibilities as outlined in references (a), (b), and (c). EMS provides the Navy's framework for day-to-day decision-making and long-term planning processes to support mission readiness, regulatory compliance, and effective use of resources to prevent pollution, reduce energy consumption, conserve resources, and reduce hazardous waste (HW) and solid waste (SW) generation.

17-1.1. Related Chapters. EMS is an overarching subject related to all other chapters in this manual. Additional policy guidance on environmental compliance audits can be found in chapter 18 (Environmental Compliance Audits Ashore). Additional policy guidance and information on pollution prevention (P2) and green procurement are found in chapter 11 (Environmental Readiness in the Acquisition Process), chapter 22 (Clean Air Ashore), chapter 23 (Hazardous Materials Management Ashore), chapter 27 (Hazardous Waste Management Ashore), and chapter 28 (Solid Waste Management and Resource Recovery Ashore).

17-1.2. References. References (d), (e), and (f) are copyrighted documents and cannot be accessed without an
appropriate license. As of the date of this manual, the Naval Civil Engineer Corps Officers School (CECOS) has the license for the Navy. Navy personnel can access references (d), (e), and (f) by enrolling in one of the CECOS EMS courses discussed in section 17-3.2.g.

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management

(b) Council on Environmental Quality, Instructions for Implementing Executive Order 13423

(c) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance


(f) ISO 19011:2011, Guidelines for Auditing Management Systems [Copyrighted]

(g) DoD Instruction 4715.17 of 15 April 2009

(h) DoD Strategic Sustainability Performance Plan FY 2010, 2 June 2010

(i) Department of Navy, Green Procurement Program Implementation Guide, February 2009


(k) SECNAVINST 5820.8A, Release of Official Information for Litigation Purposes and Testimony by Department of the Navy (DON) Personnel

17-1.3. Applicability. Implementation, maintenance, and continual improvement of an EMS are required for all Navy appropriate facilities worldwide, unless specifically exempted. Additionally, installation EMS requirements apply to all ship and vessel personnel when at Navy installations.

a. EMSs for Operational Deployments. EMS requirements do not apply to operational deployments (e.g., cases of
hostilities, contingency operations in hazardous areas and expeditionary bases, when U.S. forces are operating as part of a multinational force not under full control of the United States). Such excepted operations and deployments shall be conducted per applicable international agreements, other Department of Defense (DoD) directives and instructions, and environmental annexes incorporated into operation plans or operation orders.

b. EMSs at Closed and Closing Bases. Closed and closing bases are in the process of bringing closure to environmental permits and other requirements. These bases remain subject to environmental compliance requirements and shall maintain an EMS, if currently classified as an EMS appropriate facility, until final property transfer has occurred.

c. Exemptions. Budget submitting offices (BSOs) with commands that serve only administrative functions (which typically have minimal environmental requirements and therefore pose little risk to the environment) may elect to exempt these commands from EMS audit and compliance audit requirements. The BSO shall document the exemptions in the external EMS audit schedule.

17-2 Legislation

a. The following legislation contains provisions that pertain to P2, use of biobased products, and products containing recovered materials, which are discussed under Element 5: Objectives, Targets, and Plan of Action and Milestones (POA&Ms) in section 17-3.2.e:

(1) Energy Policy Act,

(2) Farm Security and Rural Investment Act,

(3) Pollution Prevention Act, and


b. A summary of this legislation is included in appendix A (Laws and Regulations).

17-3 Requirements. All federal agencies shall conduct their mission in an environmentally sound manner per references (a), (b), and (c).
17-3.1. **Navy Environmental Management Systems Appropriate Facility.** A Navy EMS appropriate facility is any facility that conducts activities that can have a significant impact on the environment, either directly or indirectly. Examples of environmental aspects include, but are not limited to, air, water, wastewater, stormwater, and HW permits or HW generation. A Navy EMS appropriate facility is typically a host command and its tenants within the installation's fenceline. It also includes any satellite properties under direct control of the commanding officer (CO) of the host command or the CO of a tenant command. Alternatively, a Navy EMS appropriate facility may:

- In Navy concentrated areas, encompass multiple non-contiguous fencelines under direct control of a naval complex CO or even the entire area of responsibility of the region commander; or

- Be defined as a major mission tenant such as a naval shipyard or naval hospital where the BSO elects to define its component commands' EMSs separate from, but in coordination with, its respective host command’s EMS. An environmental memorandum of agreement should be in place clearly defining environmental roles and responsibilities (refer to chapter 1 (Organization and Coordination)).

17-3.2. **Elements of an Environmental Management System.** To satisfy the requirements of references (a), (b), (c), (g), and (h), Navy EMS appropriate facilities shall continue to implement, maintain, and continually improve upon an EMS that conforms to reference (d) or BSO-approved equivalent, and the requirements of this chapter. Environmental management procedures shall be developed and documented for each element (refer to table 17-1 for a list of required elements and the corresponding OPNAV M-5090.1 chapter(s)). This manual and associated Navy policy and oversight shall function in lieu of an overall Navy organizational EMS.

- **Element 1: General Requirements**
  
  (1) **Scope of the EMS.** Each Navy EMS appropriate facility shall define and document the scope of its EMS. In addition to the Navy EMS appropriate facility's operations, reference (b) requires tenants, vendors, contractors, and suppliers to be included when their actions potentially affect environmental, transportation, or energy issues. Requirements shall be included in contracts to ensure the contractor's roles
and responsibilities under the EMS are properly addressed. Where Navy EMS appropriate facilities manage DoD real property on which private activities are permitted, licensed, authorized, or regulated, the Navy EMS appropriate facilities shall consider the environmental impacts of such activities in their EMS.

Table 17-1. Required Elements of an EMS and Corresponding 5090.1D Chapters

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<th>Corresponding OPNAV M-5090.1 Chapter</th>
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<td>Section 17-3.2.a and chapter 1 (Organization and Coordination).</td>
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<td>Element 2: Environmental Policy</td>
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<td>Element 3: Environmental Aspects</td>
<td>Sections 17-3.2.c, d, and e. In addition, each chapter (e.g., chapter 20 (Clean Water Ashore), chapter 22 (Clean Air Ashore), chapter 23 (Hazardous Materials Management Ashore) covers environmental aspects; legal requirements; and objectives, targets, and POA&amp;Ms.</td>
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<tr>
<td>Element 4: Legal and Other Requirements</td>
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<td>Element 5: Objectives, Targets, and POA&amp;Ms</td>
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<td>Element 6: Resources, Roles, Responsibilities, and Authority</td>
<td>Section 17-3.2.g, chapter 3 (Environmental Readiness Training), and the training requirements in the applicable chapters.</td>
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<td>Element 7: Competence, Training, and Awareness</td>
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(2) Other Management Systems. As described in reference (b), where programs to support the sustainable practices related to environmental, transportation, or energy-related activities already exist, they are not replaced or overtaken by the EMS, but rather, contribute to and are enhanced by the system. For example, leadership, management, and operations addressing a specific program can remain, however the EMS now recognizes that program as one contributing towards meeting the organizational goals and as a source of information for overall reporting.

b. Element 2: Environmental Policy. Navy environmental policy guidance is set forth in chapter 1 (Organization and Coordination) and located in the Requirements section of each chapter. In addition, the CO of each Navy EMS appropriate facility shall issue an environmental policy statement that commits the facility to achieve continual improvement, P2, and compliance with relevant environmental laws, E.O.s, regulations and DoD and DON policy. The environmental policy statement must be reviewed at least annually and updated, as needed, to ensure it remains relevant to the facility's mission.

c. Element 3: Environmental Aspects. Navy EMS appropriate facilities shall identify the environmental aspects of all operational practices that have the potential to impact the environment. Aspects identification should include contractors and tenants. Navy EMS appropriate facilities shall further identify key environmental resources and assess their vulnerability to the aspects of existing and planned operations and activities.

d. Element 4: Legal and Other Requirements. Each Navy EMS appropriate facility shall establish and implement documented procedures to identify federal, state, local, DoD, Department of the Navy, Navy, regional, and installation-level environmental requirements applicable to its environmental aspects.

e. Element 5: Objectives, Targets, and POA&M.

(1) General. Each Navy EMS appropriate facility shall establish and document environmental objectives, targets and POA&Ms and communicate them to employees at all levels and functions. Navy EMS appropriate facilities shall ensure objectives and targets:
(a) Take into account risks to mission determined through prioritization of aspects, operations, and activities;

(b) Are consistent with and supportive of the Navy EMS appropriate facility's environmental policy statement and environmental requirements;

(c) Are achievable within economic and technological restraints;

(d) Are measurable; and

(e) Are reviewed and revised at least annually, according to a schedule established by the Navy EMS appropriate facility.

(2) Pollution Prevention. Every Navy EMS appropriate facility environmental policy statement must include a commitment to P2. P2 is an objective of EMS and shall be incorporated into the objectives, targets, and POA&Ms to improve environmental management, achieve cost avoidance, and protect natural resources. P2 should be incorporated into EMS objectives, targets, and POA&Ms unless a separate P2 plan is required by state or local regulations.

(3) Green Procurement

(a) A requirement of P2 is to increase procurement of environmentally preferable items. The DoD Green Procurement Program (GPP) is applicable to all procurement actions by Navy commands, operations, and systems Navywide except military tactical vehicles and equipment per reference (i). It requires that Navy considers green products and services as the first choice in all procurement actions and uses green products and services to the maximum extent practicable, consistent with federal procurement preference programs.

(b) Navy's goal is to achieve 100 percent compliance with all mandatory DoD GPP elements as described in reference (i).

f. Element 6: Resources, Roles, Responsibilities, and Authority. The most significant resource for every organization is their senior leadership's commitment to EMS implementation and sustainability. General Navy environmental roles,
responsibilities, and authority are outlined in chapter 1 (Organization and Coordination). Funding resources and requirements are included in chapter 2 (Funding). Program and media-specific environmental roles and responsibilities are located in the Requirements section of each chapter. Each EMS should document the specific EMS roles and responsibilities for all personnel including practice owners, all system commands, departments, tenant commands, and contractors.

g. Element 7: Competence, Training, and Awareness. Navy environmental training requirements and approved Navy training resources are discussed in chapter 3 (Environmental Readiness Training). Additional training requirements may be included in program- and media-specific chapters. The following are EMS-related training:

(1) Awareness-Level EMS Training. All Navy military, civilian, and contractor personnel working on a Navy EMS appropriate facility shall receive EMS awareness training. Completion of training must be documented.

(2) Task-Specific Training. Training requirements associated with significant environmental aspects shall be identified and training (or other informational materials such as brochures or briefs) shall be provided and documented per legal requirements and this manual. Practice owners, including contractors, performing tasks that could have the potential to cause a significant environmental impact shall be competent based on education, training, or experience and shall retain documentation to demonstrate compliance with this requirement.

(3) EMS Management Training. EMS management representatives and environmental staff responsible for implementation and maintenance of an EMS shall receive EMS implementation, management, and sustainment training (completion of the CECOS Advancing an Effective EMS webinar will satisfy this requirement). EMS implementation and management personnel shall be familiar with the provisions of this chapter.

(4) EMS Auditor Training. Lead auditors and team members performing internal and external EMS audits, EMS management representatives, and environmental staff responsible for implementation and maintenance of the EMS shall complete the CECOS Integrated EMS and Compliance Auditing Class (A-4A-0079) and shall be familiar with the provisions of this chapter.

h. Element 8: Communications. Navy outreach and
communications guidance is included in chapter 5 (Outreach and Communications).

(1) Internal Communication. Each Navy EMS appropriate facility shall implement documented procedures for internal communication among the Navy EMS appropriate facility CO, EMS management representative, EMS cross functional team, environmental office, other program managers (e.g., facilities, safety, medical), all units and departments which own operations with environmental aspects, and others that may have an impact on the Navy EMS appropriate facility's environmental affairs.

(2) External Communication. Each Navy EMS appropriate facility shall implement documented procedures for tracking and responding to communications from regulatory agencies, the public, and others outside Navy who are interested in the Navy EMS appropriate facility's environmental programs.

(3) Release of Reports and Information. BSOs and Navy commands will consult legal counsel for advice on releasability and exemptions under the Freedom of Information Act. If the request is made by a third-party involved in litigation, references (j) and (k) also apply.

i. Element 9: EMS Documentation. Each Navy EMS appropriate facility shall create, implement, and maintain an EMS document which includes the environmental policy statement, a description of the scope of the EMS, and procedures for each EMS element, including how the elements relate to each other and where other documents and records relevant to the EMS are maintained.

j. Element 10: Control of Documents. Each Navy EMS appropriate facility shall inventory all documents appropriate to its environmental programs and practices and identify other documents essential to the efficient operation of its EMS. Each Navy EMS appropriate facility shall implement a procedure to issue and maintain essential documents so they:

(1) Can be located;

(2) Are reviewed and updated as necessary; and

(3) Are available when and where needed in their current versions, with older versions removed from circulation and destroyed or archived as appropriate.
k. **Element 11: Operational Control.** Navy EMS appropriate facilities shall ensure each practice with significant aspects are controlled to minimize risk to mission and impacts to the environment, and to comply with all applicable regulations and policy. Navy EMS appropriate facilities shall ensure the owners and operators, including contractors, of practices with significant aspects shall have documented procedures for the proper control of their practices.

l. **Element 12: Emergency Preparedness and Response.** Emergency preparedness and response procedures are located in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) and in individual program- and media-specific chapters.

m. **Element 13: Monitoring and Measurement.** Navy EMS appropriate facilities shall monitor overall environmental performance. Program- and media-specific monitoring and measurement requirements are located in chapter 4 (Environmental Performance Reporting) and in the individual program and media-specific chapters. Reporting requirements for EMS include, but are not limited to:

   (1) **DoD EMS Metrics.** Navy EMS appropriate facilities worldwide shall report the status of the DoD EMS metrics on a fiscal year basis by 1 November of each year.

   (2) **Fully Conforming EMS In-Place Indicator.** BSOs shall maintain a roster of conforming Navy EMS appropriate facilities and report updates to the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)).

n. **Element 14: Evaluation of Compliance.** Procedures for evaluation of environmental compliance are located in chapter 18 (Environmental Compliance Audits Ashore).

o. **Element 15: Nonconformity, Corrective Action, and Preventive Action.** Each Navy EMS appropriate facility shall follow a structured problem solving process that identifies and defines problems with environmental compliance or the EMS, analyzes root causes and alternative solutions, plans and tracks implementation, and follows up to ensure problems are solved. Problems are often identified through EMS and compliance audits, monitoring of EMS objectives and targets, and inspection of practices (refer to section 17-3.3 and chapter 18 (Environmental Compliance Audits Ashore)). Corrective and preventive actions
(CAPAs) are typically the responsibility of the practice owner to resource and implement. The nonconformity, corrective action, and preventive action process shall also include updating EMS documentation, such as instructions or training requirements and materials, to prevent recurrence.

p. **Element 16: Control of Records**

(1) Each Navy EMS appropriate facility shall inventory all records appropriate to its EMS, including, but not limited to, records necessary to demonstrate compliance with applicable legal and other requirements, the monitoring of practices and tracking of objectives and targets, compliance evaluations (refer to chapter 18 (Environmental Compliance Audits Ashore)), internal and external EMS audits (refer to sections 17-3.2.q and 17-3.3.a), and management reviews (refer to section 17-3.2.r).

(2) Each Navy EMS appropriate facility shall implement a system to maintain records so they:

(a) Can be located;

(b) Are protected from alterations or damage;

(c) Are available when and where needed; and

(d) Are removed from circulation when obsolete and destroyed or archived as appropriate.

(3) The policy on retention and disposition of records is located in chapter 1 (Organization and Coordination) and in individual program- and media-specific chapters.

q. **Element 17: Internal EMS Audit.** Navy EMS appropriate facilities shall complete a comprehensive internal EMS audit of all processes, facilities, and practices within the scope of the EMS and document the findings at least once within a 12-month period.

r. **Element 18: Management Review.** The CO and senior leadership of each Navy EMS appropriate facility shall conduct a management review of the EMS status of conformance at least annually. Management reviews shall be documented.

17-3.3. **Navy Environmental Management Systems Declaration of Conformance Protocol.** This protocol provides Navy's procedure for declaring the continued conformance to ISO 14001 or BSO-
approved equivalent, and ensures continual improvement in environmental performance. Navy EMS appropriate facilities shall verify the continuing conformance and environmental regulatory compliance status on a 1-year internal and 3-year external cycle. Guidelines for EMS auditing are provided in reference (f) which is available through the CECOS Integrated EMS and Compliance Auditing (A-4A-0079) training course. Navy EMS appropriate facilities with an externally-registered EMS may use registration documents to meet the EMS conformance requirement. However, they will still be required to verify environmental compliance through the audit process. EMS conformance at all Navy EMS appropriate facilities shall be formally re-declared at least once every 3 years. Mission-funded commands will not seek or fund third-party certification.

a. External EMS Audits. An external EMS audit is required prior to declaration of conformance to ISO 14001 or equivalent. Compliance audits (refer to chapter 18 (Environmental Compliance Audits Ashore)) may be conducted in combination with the EMS audits or separately, depending on the complexity, needs, and demonstrated compliance posture of the Navy EMS appropriate facility.

   (1) Scope of the EMS Audit. The external EMS audit scope will consist of evaluating conformance to ISO 14001 or BSO-approved equivalent. The Navy EMS appropriate facility CO and EMS management representative, in coordination with the external EMS audit team, shall identify the audit scope that demonstrates implementation of the EMS elements facility-wide. The Navy appropriate facility CO shall ensure pertinent records, procedures, and documentation are available for the external EMS audit team.

   (2) Navy Qualified EMS Auditors. External EMS audit teams shall be led by a Navy qualified EMS auditor with all members of the audit team being independent of the Navy EMS appropriate facility being audited. Navy qualified EMS auditors may be staff, other DoD component personnel, other federal agency (outside of DoD) personnel, or private consultants. Personnel conducting external EMS audits must have received, at a minimum, approved EMS implementation and auditing training comparable to the courses provided by CECOS.

   (3) External EMS Out-Brief. The audit team shall present their findings in an out-brief to the Navy EMS appropriate facility CO and EMS management representative, and provide a working draft report at the end of the site visit.
(4) **External EMS Audit Report and Follow-Up**

(a) Results of the external EMS audit shall be documented in the external EMS audit report which shall include the effectiveness of the EMS and its role in supporting environmental performance with respect to:

1. Conformance to ISO 14001 or BSO-approved equivalent,
2. Compliance with environmental requirements,
3. Review of environmental aspects,
4. Status in meeting EMS objectives and targets,
5. Strengths and weaknesses of EMS elements,
6. Potential underlying root causes of EMS nonconformities and environmental compliance deficiencies that correlate with weaknesses in the EMS, and
7. Recommendations for improvements to the EMS.

(b) The BSO should release the final report to the Navy EMS appropriate facility within 60 days of completion of the external audit site visit. The EMS management representative will brief findings of the external EMS audit at the next EMS management review.

(5) **POA&M and Follow-Up.** Within 30 calendar days of the audit out-brief, or sooner at the discretion of the BSO, the Navy EMS appropriate facility shall provide a POA&M to the BSO and audit team lead, identifying the root cause of each nonconformity, and detailing how each has been or will be resolved. The command will need to provide evidence the conformance deficiency has been adequately resolved before it can be closed. The BSO has the authority to close out nonconformity issues and may delegate this responsibility as appropriate. Until all nonconformities are adequately resolved, the Navy EMS appropriate facility shall submit an updated POA&M to the BSO on a quarterly basis, or as otherwise specified by the BSO.

(6) **Electronic Reporting Systems.** Commands are
encouraged to input EMS audit findings into electronic reporting systems. The Environmental Management System Web site (EMSWeb) is one system that is available, and can be used to conduct internal and external EMS and compliance audits, develop and manage POA&Ms to address resolution of findings, and maintain EMS and compliance documents (refer to appendix E (Web Sites) for Web site address).

b. EMS Declaration of Conformance Memorandum. The Navy EMS appropriate facility is required to resolve all major findings of nonconformity to the satisfaction of the BSO. Once resolved, the Navy EMS appropriate facility CO shall sign an EMS Declaration of Conformance Memorandum to formally re-declare conformance every 3 years. Although an EMS can be considered conformant with minor nonconformities, it is necessary that CAPAs be defined and planned and senior management commit to correcting and preventing identified minor nonconformities. If the EMS external audit is integrated with the external compliance audit, compliance deficiencies noted during the external audit need to be documented in POA&M, clearly communicated and assigned to specific person for action, and tracked on a regular basis by status updates to senior leaders. Compliance deficiencies noted during an external audit do not have to be corrected prior to declaring EMS conformance. Copies of the memorandum shall be provided to the Navy EMS appropriate facility's EMS management representative, BSO, audit team leader, OPNAV (N45), and other interested parties.

c. External EMS Audit Schedule. Each BSO shall prepare a schedule for external EMS audits of its Navy EMS appropriate facilities to confirm conformance to ISO 14001 or equivalent, at intervals not longer than 3 years. The schedule will also indicate those activities that serve only administrative functions with minimal environmental requirements where exemptions are justifiable. BSOs shall, annually, review this schedule, update it as necessary, and provide it to OPNAV (N45).

d. Third-Party Independent Reviews. BSOs shall obtain third-party independent reviews of those Navy EMS appropriate facilities with third-party certification to confirm conformance to ISO 14001 or equivalent. Reviews shall be conducted on a schedule to be determined by the BSO. BSOs shall assess their third-party independent review schedule annually and update it as necessary. BSOs shall provide the updated third-party independent review schedule to OPNAV (N45) annually.
17-4.1. BSOs of Navy EMS appropriate facilities shall:

a. Provide adequate resources to support the Navy EMS appropriate facilities under their cognizance. For nonconformities and deficiencies identified in internal and external EMS audits and compliance audits, assist in identification and programming for funding of corrective actions and process improvements. For mission-funded commands, submit funding to correct Environmental Program Requirement (EPR) Guidebook chapter (e.g., Clean Water Act (CWA) requirements, Clean Air Act (CAA) requirements, RCRA requirements). If necessary, submit funding requests as part of a mid-year review to address emergent requirements;

b. Maintain a roster of conforming Navy EMS appropriate facilities under their cognizance and report updates to OPNAV (N45);

c. Advise OPNAV (N45), region commander, regional environmental coordinator, and appropriate facility CO if a nonconformity, deficiency, or problem may result in adverse public relations or require national coordination to solve;

d. In coordination with other affected host and tenant BSOs, 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;

e. In coordination with other affected host and tenant BSOs, develop and execute an external EMS audit and environmental compliance audit schedule for external auditing of its Navy EMS appropriate facilities at intervals not longer than 3 years. Compliance audits may be conducted in combination with the external EMS audit. The BSO should release the final audit report to the Navy EMS appropriate facility within 60 days of completion of the external audit site visit. Review external audit schedules annually and update as appropriate. Provide the updated external EMS audit schedule to OPNAV (N45);

f. Obtain third-party independent reviews of those Navy EMS appropriate facilities with third-party certification to confirm conformance to ISO 14001 or BSO-approved equivalent. Reviews shall be conducted on a schedule to be determined by the BSO. BSOs shall assess their third-party independent review schedule
annually and update as necessary. BSOs shall provide the updated third-party independent review schedule to OPNAV (N45) annually; and

g. Issue notification of upcoming external EMS audits to the CO of the Navy EMS appropriate facility in a timely manner.

17-4.2. BSOs of tenant commands shall:

a. Ensure commands under their cognizance support and participate with the host Navy EMS appropriate facility in implementing an EMS to cover all the tenant's processes, facilities, and practices with environmental aspects;

b. For EMS nonconformities and compliance deficiencies identified in internal and external EMS audits and compliance audits, assist in identification and programming for funding of corrective actions and process improvements. For mission-funded commands, submit funding to correct nonconformities and deficiencies under the appropriate EPR Guidebook chapter (e.g., CWA requirements, CAA requirements, RCRA requirements). If necessary, submit funding requests as part of a mid-year review to address emergent requirements;

c. Advise OPNAV (N45), the host command, host BSO, and the tenant chain of command, if an EMS nonconformity, compliance deficiency, or problem identified may result in adverse public relations or require national coordination to solve;

d. Coordinate with the host BSO for any procurement that would affect environmental aspects or have environmental implications at the host command;

e. Coordinate with the BSOs of host Navy EMS appropriate facilities in developing and executing a schedule and plan to conduct external EMS audits and compliance audit site visits as appropriate; and

f. Close out nonconformity issues or delegate this responsibility as appropriate.

17-4.3. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) shall:

a. Provide support to BSOs, region commanders, and shore commands in the use of 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. Provide assistance in the development of the 3-year audit schedule as directed by the cognizant BSOs; and

c. Assist BSOs in conducting external EMS and compliance audits and preparing audit reports.

17-4.4. Commander, Naval Supply Systems Command shall:

a. Serve as the overall manager for the GPP and the supply and inventory control aspects of the P2 program;

b. Provide green procurement guidance and formal training to the acquisition community, contracting officers, purchasing agents, and customers holding government credit cards;

c. Ensure contracts include Federal Acquisition Regulation (FAR) and Defense FAR clauses citing green procurement requirements; and

d. Ensure DoD GPP metrics electronic tracking capabilities exist to monitor and measure performance and audit effectiveness of program criteria specified in reference (i).

17-4.5. COs of Navy EMS appropriate facilities shall:

a. Maintain conformance to ISO 14001 or BSO-approved equivalent and declare conformance per the Navy EMS Declaration of Conformance Protocol at least once every 3 years;

b. Sign the Navy EMS appropriate facility environmental policy statement, review it at least annually, and update as needed to ensure it remains relevant to the facility’s mission;

c. Provide leadership and commitment to improve EMS by overseeing and conducting periodic EMS management reviews throughout the year (at least one per year) to coincide with the internal and external EMS audit and the declaration of conformance cycle;

d. Review the status of existing objectives and targets and establish new objectives and targets as needed per this chapter;

e. In coordination with the affected commands, continually improve the EMS to cover all processes, facilities, and
practices with environmental aspects within the scope of the Navy EMS appropriate facility;

f. Establish a means to communicate and coordinate the environmental aspects with Navy and non-Navy tenants for the purpose of planning and sustaining the EMS;

g. Establish and participate in forums, such as environmental compliance boards, executive management boards, and EMS cross functional teams to ensure EMS policies are communicated throughout the Navy EMS appropriate facility and with all tenant commands;

h. Designate an EMS management representative in writing to establish, implement, and maintain the EMS and to report to senior management;

i. Meet with the EMS management representative on a regular basis to receive updates on the status and progress of the EMS;

j. Review results of annual internal EMS and compliance audits to identify nonconformities, compliance deficiencies, and their root causes. For nonconformities and compliance deficiencies identified in internal or external EMS audits, develop and execute POA&Ms to document corrective actions and process improvements and address the root causes;

k. Within 30 calendar days of the external audit out-brief, or sooner at the discretion of the BSO, provide a POA&M to the BSO and external audit team lead, identifying the root cause of each nonconformity and detailing how each has been or will be resolved. If the EMS external audit is integrated with the external compliance audit, compliance deficiencies noted during the external audit also need to be documented in POA&M, clearly communicated and assigned to specific person for action, and tracked on a regular basis;

l. Advise the BSO, affected tenant commands, and tenant BSOs if a nonconformity, compliance deficiency, or problem may result in adverse public relations or require regional coordination to solve;

m. In coordination with the affected commands, identify and fund corrective actions and process improvements to address compliance deficiencies and their root causes. For mission-funded facilities, submit funding requests to the BSO to correct EMS nonconformities and compliance deficiencies under the
appropriate EPR Guidebook chapter (e.g., CWA requirements, CAA requirements, RCRA HW requirements);

n. In coordination with the affected commands, maintain internal EMS audit and compliance audit documentation and present a summary of the results to the Navy EMS appropriate facility senior management during EMS management reviews;

o. Where EMS implementation staff and environmental functions are provided by a COMNAVFACENGCOM component command, coordinate support of EMS with the component's CO;

p. Where contractors' or concessionaires' tasks or actions could potentially impact an installation, evaluate those tasks and actions prior to contract award; and

q. Report status of DoD EMS metrics by 1 November for the previous fiscal year.

r. Note: In those regions where the Navy EMS appropriate facility is defined as the region, the region commander shall perform the responsibilities assigned to the COs of Navy EMS appropriate facilities.

17-4.6. COs of tenants or senior managers of tenants with significant environmental aspects shall:

a. Support and participate with the host command in implementing and continually improving the EMS to cover all processes, facilities, and practices with environmental aspects;

b. Support and participate in annual review of the EMS and internal audit plan and update as necessary;

c. Assist the host commands to re-declare conformance to ISO 14001 or equivalent at least every 3 years;

d. Support and participate with the host command in preparing EMS audit documentation;

e. For all EMS nonconformities and compliance deficiencies identified in internal and external EMS and compliance audits, identify root causes and develop, execute, and document POA&Ms with corrective actions and process improvements;

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

   g. Advise the host command and the BSO as soon as possible if an EMS nonconformity, compliance deficiency, or problem may result in adverse public relations or require regional coordination to solve; and

   h. Coordinate with the host CO for any procurement that would affect environmental aspects or have environmental implications at the host command.

   i. Note: Where a Navy command is a tenant on a non-Navy EMS appropriate facility, the Navy command may participate in the host's EMS and environmental compliance audit program per their inter-service or intra-governmental support agreement. Alternatively, Navy commands may establish their own internal audit plan and conduct EMS and compliance audits and provide appropriate information to the non-Navy host command.

17-5 Definitions

17-5.1. Corrective and Preventive Actions. CAPAs are measures taken to correct and prevent future occurrences of an EMS nonconformity.

17-5.2. Effectiveness. Effectiveness is meeting military mission while fully meeting executive, federal, state, and local environmental regulations, as well as the environmental policies of DoD, Navy, and the installation or regional complex.

17-5.3. Environmental Aspects. An environmental aspect is 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 environmental aspects. Typical environmental aspects of practices operated on Navy installations include: potential spills and releases, air releases, hazardous materials use, HW generation, SW generation, medical waste generation, noise, electricity use, fuel use, physical presence (in environmentally sensitive locations) and cultural, historical and natural resources.

17-5.4. Environmental Impact. An environmental impact is 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, other resource (e.g., landfill space) consumption, cost to mitigate risk, adverse regulatory exposure, negative public perception, real property damage, historic or cultural resource damage, natural resource disturbance, soil erosion, and human health effects.

17-5.5. Environmental Management System. An EMS is part of the installation's management system used to develop and implement its environmental policy and manage its environmental aspects. It is a formal management framework that provides a systematic way to review and improve operations, create awareness, and improve environmental performance. It 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 continual improvement. It consists of a set of interrelated elements used to establish policy and achieve objectives. A management system includes organizational structure, planning activities, responsibilities, practices, procedures, and resources.

17-5.6. Environmental Management System 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.

17-5.7. Environmental Management System Cross Functional Team. An EMS cross functional team is established by a Navy appropriate facility to implement and maintain the EMS. In addition to the cross functional team chair (designated by the CO), the team may include:

a. Navy EMS appropriate facility CO (i.e., major mission tenant CO, CO of the Navy host command or region command);

b. Executive officer and business manager;

c. EMS management representative (appointed by the CO in writing) who will be responsible for implementing and maintaining the EMS;
d. 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. Senior management representation should be consistent with the scope and area of responsibility of the EMS; and

e. Other key personnel, including but not limited to mission units, procurement, logistics, legal, budget, facilities, energy, environmental management, health and safety, tenant command representatives, contractor representatives (as appropriate), and technical support functional areas.

17-5.8. Environmental Management System Nonconformity. EMS nonconformity is non-fulfillment of an EMS requirement. A major nonconformity is the absence or total breakdown of an element to meet an EMS requirement, or a number of minor nonconformities against one requirement, that is likely to result in the failure of the EMS. A minor nonconformity is a failure in some part of the documented EMS or a single observed lapse in conforming to one requirement of the EMS that is not likely to result in failure of the EMS.

17-5.9. Green Procurement. Green procurement is the purchase of environmentally preferable products and services per federally-mandated DoD GPP. Such products and services have reduced impact on human health or 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.

17-5.10. Objective. An environmental objective is an overall environmental goal, consistent with the environmental policy that a command sets itself to achieve.

17-5.11. Plan of Action and Milestones. A POA&M provides proposed CAPAs, process improvements, and schedules to address a nonconformity or deficiency and its root cause(s). The documentation also serves as a record to verify problems are resolved.

17-5.12. Pollution or Pollutants. Pollution or pollutants are gaseous, liquid, or solid byproducts of industrial, agricultural, or even natural processes, which after recycling, treatment, or other mitigating processes, still produce
undesirable environmental effects. They are also known as environmental aspects under EMS.

17-5.13. **Pollution Prevention.** P2 is 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 or elimination of the use of dangerous, toxic, and HMs; or recycling or reuse of materials.

17-5.14. **Practice.** A practice is 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) and their associated physical controls (e.g., berms, oil and water separators, alarms). A practice often includes multiple processes, personnel, equipment, and materials.

17-5.15. **Practice Owner.** The practice owner is 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.

17-5.16. **Root Cause.** A root cause is 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. Commands and practice owners should pursue that series of causes until identifying the fundamental correctable cause.

17-5.17. **Senior Management.** Senior management is defined by the EMS appropriate facility consistent with the scope and area of responsibility of their EMS. It consists of the EMS appropriate facility CO (i.e., major mission tenant CO, installation CO, or region 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.

17-5.18. **Source Reduction**
a. Any practice that:

(1) 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; or

(2) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

b. 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.

17-5.19. Target. An environmental target is a measurable, detailed performance requirement that arises from the environmental objective and that needs to be set and met to achieve those objectives.

17-5.20. Third-Party Certification. Third-party certification involves an audit conducted by an accredited ISO 14001 certification body resulting in the facility or organization being fully certified to ISO 14001 and receiving a certificate stating conformance.
CHAPTER 18

ENVIRONMENTAL COMPLIANCE AUDITS ASHORE

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18-1 Scope. This chapter provides policy guidance for
            effectively managing environmental compliance audits.

18-1.1. Related Chapters. The proper conduct of environmental
        compliance audits is an overarching topic related to all other
        chapters in this manual.

18-1.2. References

(a) SECNAVINST 5720.42F, Department of the Navy Freedom of
    Information Act (FOIA) Program

(b) DoD Directive 5405.2 of 23 July 1985

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

(d) ODUSD(ES) Memorandum of 23 Apr 1997, Root Cause Analysis
    Methodology and Implementation (NOTAL)
18-1.3. **Applicability.** Environmental compliance audits are required for all Navy installations worldwide.

18-2 **Legislation.** There is no legislation for this chapter.

18-3 **Requirements**

18-3.1. **External Compliance Audits.** External compliance audits shall be conducted at all Navy installations worldwide, at least every 3 years on a schedule determined by their budget submitting office (BSO). They may be conducted in conjunction with external environmental management system (EMS) audits. External compliance audits shall consist of an evaluation of compliance with all applicable legal, Department of Defense (DoD) and Navy policies, and other requirements for environmental media selected for auditing. Additional focus may be placed on certain environmental programs based on the installation's compliance history, previous external audits, and the installation's internal compliance audits. The goal of the external audit is to identify environmental compliance deficiencies and the associated improvements which will most readily correct and prevent similar occurrences.

a. **External Compliance Audit Plan.** The external compliance audit plan describes the schedule and scope of oversight planned for the external compliance audit site visit at each of the BSO's installations. The BSO of the installation, in coordination with BSOs of tenant commands, determines the schedule and scope of oversight based on the review of the internal audit plan (IAP), internal audit documentation (IAD), and internal EMS audit documentation provided by each installation; previous compliance audits; notices of violation (NOVs); and any additional information available on each installation's environmental performance. The plan will also indicate those installations that serve only administrative
functions with minimal environmental requirements where exemptions are justifiable (refer to section 18-3.5). The BSO shall review the plan annually and update it as necessary.

b. External Compliance Audit Out-Brief. The audit team lead shall present findings of the external compliance audit in an out-brief to the installation commanding officer (CO), management staff, and the EMS management representative of the installation or host command, and provide a working draft report at the end of the site visit.

c. External Compliance Audit Report. The external compliance audit report provides the results of the audit conducted during a site visit and includes identified regulatory and policy compliance deficiencies and recommendations for corrective actions, preventive actions, and process improvements. Draft reports shall be provided to the installation during the site visit; however, final reports must be reviewed by the BSO legal counsel before release. The BSO shall release the final report to the installation and the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) within 90 days of site visit completion.

d. BSO Compliance Audit Summary. BSOs shall submit a compliance audit summary annually to OPNAV (N45) summarizing the health of the environmental program at the BSO's installations. It should provide information on compliance deficiencies requiring Chief of Naval Operations attention or recourses, and correlation with NOVs. The summary shall be submitted to OPNAV (N45) within 90 days after the end of the fiscal year.

e. Report Releasibility. BSOs shall consult legal counsel for advice on the releasability and exemptions under the Freedom of Information Act (FOIA). Reference (a) applies to all FOIA requests. If the request is made by a third party involved in litigation, references (b) and (c) also apply.

f. Documentation of Corrective Action. Within 30 days after the date of the final report, the installation shall provide a plan of action and milestones (POA&M) to the BSO and to the tenant command (if applicable) detailing how each identified compliance deficiency has been or will be resolved, as well as the root cause. Until all compliance deficiencies have been adequately corrected, the installation shall submit an updated POA&M to the BSO quarterly. The BSO has the authority
to close-out compliance deficiencies and may delegate this responsibility to the audit team lead. The installation will need to provide appropriate evidence the compliance deficiency has been adequately resolved before the issue can be closed. If the installation is an EMS appropriate facility, the EMS management representative will brief findings of the external compliance audit at the next EMS management review (refer to section 17-3.2.r). Compliance deficiencies that remain open for over 1 year and compliance deficiencies that are repeat findings shall be reported to OPNAV (N45) annually as part of the BSO compliance audit summary.

g. Root Cause Analysis. Per reference (d), installations are required to incorporate root cause analysis in their environmental compliance audit programs. Once a compliance deficiency is identified, it should be investigated to determine the cause so corrective and preventive action can be taken. In developing a plan for addressing a compliance deficiency, installations 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 compliance deficiency from recurring. The character and timing of such actions should be appropriate to the nature and scale of the compliance deficiency and the environmental impact. Additional information on performing root cause analysis is available in reference (d). Table 1 of appendix C (Message Formats) provides a list of standard Navy root causes.

h. Environmental Compliance Checklists. Checklists of regulations are available in several forms for use in evaluating compliance and may be tailored to include those requirements applicable to a particular installation. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) can assist installations with identifying and tailoring checklists. U.S. Navy ListBuilder (refer to appendix E (Web Sites) for Web site address) is a checklist creator that includes federal, state, and Navy requirements, as well as overseas final governing standards and is updated on a regular basis.

i. Schedule. External compliance audits shall be conducted on a schedule determined by the BSO at intervals not longer than 3 years from the last external compliance audit. Installations may also contact their BSO and request a compliance audit at any time. Compliance audits may be conducted in conjunction with EMS audits and during the traditional command inspection
process. The BSO will provide the updated external compliance audit schedule to OPNAV (N45) annually.

j. Auditors. The BSO of the installation shall conduct the external compliance audit in coordination with BSOs of tenant commands. BSOs shall select an audit team lead for each audit. BSOs may delegate auditing responsibilities; however, auditors may not audit a program over which they have direct management roles and responsibilities.

k. Training Requirements. Compliance auditors must be both knowledgeable of the compliance media they are assessing and understand EMS concepts contained within reference (e). Every person conducting, reviewing, or approving internal and external compliance audits shall receive specific comprehensive training in the assigned subject matter. In addition, compliance auditors must have completed the Naval Civil Engineer Corps Officers School Integrated EMS and Compliance Auditing (A-4A-0079).

l. 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 (f) and (g) provide the procedures for required consultation with the Office of the Deputy Assistant Secretary of the Navy (Environment) and the Assistant Deputy Under Secretary of Defense for Environment, Safety, and Occupational Health.

18-3.2. Internal Compliance Audits. Internal compliance audits shall be conducted annually at all installations worldwide and will be coordinated between host and tenant commands. A schedule shall be determined by the installation. In addition, an ongoing program to evaluate environmental compliance at overseas installations is required per reference (h). These compliance audits may be conducted in combination with the internal EMS audits, depending on the complexity, needs, and demonstrated compliance posture of the installation.

a. Internal Audit Plan. An IAP will be prepared by the installation to describe how the comprehensive internal compliance audit will be accomplished across the installation over the course of the year. The plan addresses an assessment of all applicable compliance requirements on a schedule based on the environmental aspects, vulnerabilities, and risk to the
environment. Installations shall review the IAP annually and update it as necessary.

b. Internal Audit Documentation. The IAD provides the results of the internal compliance audit and includes identified compliance deficiencies, those that remain open from previous audit periods, assigned root cause(s), and a POA&M. The IAD serves as a record of completed corrective and preventive actions and verification and assurance environmental compliance deficiencies are resolved. It shall be submitted to the CO of the Navy installation and tenant CO (if applicable) on a periodic basis and shall be reviewed annually to identify trends and outstanding compliance deficiencies. The BSO may request the installation submit the IAD to the BSO or, at a minimum, the BSO will review the IAD during the external compliance audit site visit.

18-3.3. Environmental Compliance Audits at Closed Installations. All environmental compliance audit program requirements apply to closing and closed installations, including those installations that have already undergone operational closure and are assigned to COMNAVFACENGCOM for caretaking until transfer of ownership.

18-3.4. Environmental Compliance Audits and Non-Navy Installations. Navy tenants on non-Navy installations shall follow the requirements of section 1-3.2.e.2.

18-3.5. Exemptions. Navy has numerous shore installations that serve only administrative functions. Those installations typically have minimal environmental requirements and therefore pose little risk to the environment. BSOs with installations that serve only administrative functions may elect to exempt them from the environmental compliance audit program. The BSO external audit plan shall reflect exemptions.

18-4 Responsibilities

18-4.1. BSOs shall:

a. In coordination with other affected BSOs of host and tenant commands, develop and execute an external environmental compliance audit schedule at intervals not longer than 3 years. Review external compliance audit schedules annually and update, as appropriate. Provide updated external compliance audit schedules to OPNAV (N45) annually;
b. Issue notification of upcoming external compliance audits to the CO of the installation in a timely manner;

c. Provide adequate resources and, for compliance deficiencies identified in compliance audits, assist in identification and programming for funding of corrective actions and process improvements. If necessary, submit funding requests as part of a mid-year review to address emergent requirements;

d. Advise OPNAV (N45), via the chain of command, if a compliance deficiency identified may result in adverse public relations or require national coordination to solve;

e. Release the final external compliance audit reports to the installations, regional environmental coordinators, and OPNAV (N45) within 90 days of the site visit; and

f. Provide an annual BSO compliance audit summary to OPNAV (N45) annually.

18-4.2. COMNAVFACENGCOM shall:

a. Upon request, assist BSOs in conducting external EMS and compliance audits and preparing audit reports; and

b. Upon request, review results of annual compliance audits to identify nonconformities, compliance deficiencies, and their root causes.

18-4.3. COs or officers in charge of shore installations shall:

a. In coordination with affected host and tenants commands, develop and execute a plan to implement an internal audit program to cover all processes, facilities, and practices with environmental aspects on the installation;

b. Review the IAP annually and update as necessary. On an annual basis, provide updated IAP to the BSO;

c. Perform annual internal assessments, identify deficiencies and their root causes, and develop POA&Ms with corrective actions and process improvements;

d. Coordinate identification of funding of corrective actions and process improvements. Submit funding requests in
Environmental Readiness Program Requirements Web (EPRWeb) per chapter 2 (Funding), if necessary; and

e. Advise the chain of command as soon as possible if a deficiency or problem identified may result in significant adverse public relations or require significant resources to solve.

18-4.4. COs of tenant commands:

a. Support and participate with the host command in developing, documenting, and executing a plan to implement an internal assessment to cover processes, facilities, and practices on the installation;

b. Support host command in performing annual internal assessments, identifying deficiencies and their root causes, and developing POA&Ms with corrective actions and process improvements;

c. Coordinate identification of funding of corrective actions and process improvements. Submit funding requests in EPRWeb per chapter 2 (Funding), if necessary; and

d. Advise the host command as soon as possible if a deficiency or problem identified may result in significant adverse public relations or require significant regional resources to solve.

18-5 Definitions

18-5.1. Compliance Deficiency. A compliance deficiency is a failure to comply with an environmental requirement. A regulatory compliance deficiency is non-compliance with a legal requirement; a policy compliance deficiency is non-compliance with a DoD or Navy policy requirement. A compliance deficiency is a type of finding.

18-5.2. External Compliance Audit. An external compliance audit is a systematic, documented, objective review of an installation's environmental program conducted at least every 3 years by their BSO or delegate.

18-5.3. Finding. A finding is identification of a compliance deficiency, or a process or practice that is particularly effective.
18-5.4. **Internal Compliance Audit.** An internal compliance audit is a comprehensive environmental compliance review of installation processes, facilities, and practices completed within a 12-month period.

18-5.5. **Plan of Action and Milestones.** A POA&M provides proposed corrective and preventive actions, process improvements, and schedules to address a nonconformity or compliance deficiency and its root cause(s). The documentation also serves as a record to verify compliance deficiencies are resolved.

18-5.6. **Root Cause.** A root cause is 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. Installations should pursue that series of causes until identifying the fundamental correctable cause. The Navy standard list of root causes is found in table 1 of appendix C (Message Formats).
CHAPTER 19

PROCESSING NOTICES OF VIOLATION UNDER ENVIRONMENTAL LAWS AND REGULATIONS

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19-1 Scope. This chapter applies to the investigation and reporting of violations of, or noncompliance with, environmental laws and regulations by Navy installations, tenant commands, construction contractors, maintenance contractors, and operators; and the subsequent payment of fines or penalties, where warranted.

19-1.1. Related Chapters. This chapter is applicable to all other chapters in this manual with regards to the reporting, recording, prevention, and correction of environmental violations, including chapter 1 (Organization and Coordination), chapter 2 (Funding), chapter 4 (Environmental Performance Reporting), chapter 17 (Environmental Management Systems), and chapter 18 (Environmental Compliance Audits Ashore).

19-1.2. References

  (a) DoD Publication 4715.05-G, DoD Overseas Environmental Baseline Guidance Document, May 2007

  (b) Executive Order 12088, Federal Compliance with Pollution Control Standards
19-2 Legislation

a. The following legislation contains provisions that pertain to permits, regulations, and penalties:

(1) Clean Air Act (CAA),
(2) Clean Water Act (CWA),
(3) Resource Conservation and Recovery Act (RCRA), and
(4) Safe Drinking Water Act (SDWA).

b. A summary of this legislation is included in appendix A (Laws and Regulations).

19-3 Requirements

a. Federal facilities must comply with applicable substantive and procedural requirements imposed by federal, state, interstate, regional, and local authorities to achieve compliance with regulatory environmental requirements. Navy shore activities, facilities, and installations provided by the United States and under the jurisdiction of the Navy in foreign nations will comply with applicable final governing standards (FGS). Where FGS have not been issued, Navy installations will comply with reference (a), host nation substantive pollution control laws of general applicability as required by reference (b), U.S. law with extraterritorial effect, and applicable treaties (including the status of forces agreement (SOFA) and bilateral agreements). Reference (b) requires, in part, the head of each executive agency constructing or operating federal facilities outside the United States ensure such construction or operation complies with environmental pollution control standards of general applicability in the host country or jurisdiction.
b. Where regulators detect violations of those requirements, regulators may issue a notice of violation (NOV) or other type of enforcement action. Where applicable, the Federal Facilities Compliance Act (FFCA) authorizes the Environmental Protection Agency (EPA) to seek monetary penalties from federal installations for certain environmental media violations. Violations of significant magnitude or duration may be classified by EPA as significant non-compliances (SNCs).

19-3.1. Notices of Violation

a. United States and Territories. For U.S. and territory installations, NOVs should cite the relevant standard or criteria to be met and request the installation take corrective action. NOVs do not include warning letters that do not cite a violation of specific environmental law or regulation, informal notices of deficiencies, or notices of deficiencies to permit applications. Warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws and regulations are considered NOVs. One written notice, regardless of the number of individual violations, findings, or citations listed in it, counts as one NOV if all violations cited relate to a single statutory category. If the NOV cites violations of more than one statutory category (e.g., CWA, CAA, RCRA, SDWA), then installations shall count it as multiple NOVs, one under each applicable statutory category. Items found to be out of compliance during any Department of Defense (DoD) internal review or audit are not to be counted as an NOV (i.e., are not included in the definition of). RCRA corrective action and Comprehensive Environmental Response, Compensation, and Liability Act NOVs which will be corrected using defense environmental restoration account funds are to be excluded.

b. Overseas. For overseas installations, NOVs should cite the relevant standard or criteria to be met and request the installation take corrective action. An NOV does not include warning letters that do not cite a violation of specific environmental law or regulation, informal notices of deficiencies, or notices of deficiencies to permit applications. Warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws, standards, and regulations are considered NOVs. One written notice, regardless of the number of individual violations, findings, or citations listed in it, counts as one NOV if all violations cited relate to a single environmental media. If the NOV cites violations in more than
one environmental media area (e.g., air, water, hazardous waste (HW), drinking water), then installations shall count it as multiple NOVs, one under each of the applicable media area. Items found to be out of compliance during an internal or other DoD component review, or a compliance review or audit, are not to be counted as an NOV (i.e., are not included in the definition).

19-3.2. Reporting Requirements

a. Receipt of a NOV or SNC. Installations or tenant commands shall immediately:

(1) Inform the chain of command, including the installation commanding officer, through the most expeditious means practicable, such as sending an email or naval message per the format in appendix C (Message Formats), containing as much of the information as possible; and

(2) Enter all pertinent details into the NOV module of the U.S. Navy Environmental Portal (Portal) (refer to appendix E (Web Sites) for Web site address). NOV class and root cause descriptions can be found in appendix C (Message Formats), section C-1.4 and table C-1.

b. Data Validation. Installations shall review data in the NOV module to ensure NOVs are properly documented and closed out per section 19-3.6. Installations shall review all open NOVs and follow-up on all corrective actions not yet complete. Budget submitting offices (BSOs) shall ensure NOVs are entered into the NOV module, information is accurate and up-to-date, and corrective actions are completed. Installations shall monitor compliance data posted on regulatory agency Web sites, databases, and tracking systems that contain Navy compliance data including SNC, such as EPA's Online Targeting Information System (OTIS) and Enforcement and Compliance History Online (ECHO) (refer to appendix E (Web Sites) for Web site addresses). At a minimum, installations shall:

(1) Verify installation address and permits associated with the installation,

(2) Verify all reported data associated with the permits, and

(3) Report any errors and follow up with EPA and state data stewards until errors are resolved.
c. Quarterly Updates for Open NOVs and SNCs. On a quarterly basis, installations or tenant commands shall send a follow-up email or message per the format in appendix C (Message Formats) and update the NOV module for all open NOVs and SNCs. The update should contain a remedial action plan or the status of pending actions. When an NOV or SNC is closed per section 19-3.9, no additional quarterly updates are required. BSOs shall provide the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) a summary of new and open NOVs and SNCs within 30 days after the end of each quarter. The summary should contain the description and plan of action and milestones for each NOV and SNC. The summary should also identify any trends and highlight any areas of concern which warrant guidance or specific attention.

19-3.3. Notice of Violation Inquiry. Installations shall conduct a preliminary inquiry into the facts and circumstances of the violation and obtain legal and technical support from the command environmental technical personnel and the assigned Staff Judge Advocate or Office of General Counsel. If no attorney is assigned, the commanding officer (CO) shall seek advice from counsel advising the chain of command or the BSO and may request that attorneys with subject specific environmental law expertise provide support and representation to ensure the most favorable outcome where shutdown of operations is threatened, a significant penalty is possible, or the action involves a significant Department of the Navy (DON) legal precedent.

19-3.4. Payment of Fines and Penalties

a. Responsible commands shall seek the advice of legal counsel before honoring requests for payment of fines and penalties for violation of environmental laws and regulations. In addition, NOVs may trigger formal legal proceedings with specific deadlines, procedures, and consequences. Accordingly, the responsible command shall seek early consultation with legal counsel in determining how to respond. Legal assistance is available from BSOs; Navy regional environmental coordinators; and Commander, Naval Facilities Engineering Command.

b. Upon request for payment of a fine or penalty, the CO shall prepare a written investigative report per procedures established by the BSO or delegated representative. Commands should consult with counsel to ensure the investigation is convened and structured in a manner which provides maximum benefit to the command's defense and is privileged from
disclosure to regulators. The investigative report will include the facts and circumstances of the incident, documents, statements, photographs, claims for damage, notice of fine or penalty, and further data as may be required in the particular case. The report shall be formatted as either a Judge Advocate General Manual investigation or letter report.

c. After consultation with on-site or command counsel and if no factual or legal defense exists, the installation shall prepare a penalty analysis, develop a negotiation strategy, and negotiate the lowest achievable penalty. Suggested elements of the penalty analysis and negotiation strategy can be found in section 19-3.5.

d. The applicability of state and local penalties issued under CAA is not clear due to conflicting court opinions amongst the federal circuit courts. Due to this uncertainty in the courts, a mandatory DON process has been formally established by reference (c) to review settlement packages of state and local penalties issued under CAA and coordinate them with the Department of Justice via the Navy Office of the General Counsel. Accordingly, any Navy installation proposing settlement of a CAA penalty received from a state or local governmental agency shall proceed per the process established by reference (c).

19-3.5. Suggested Elements of a Penalty Analysis. Report of violation (assertion by the regulatory agency):

a. **Background**

   (1) Applicable regulations.

   (2) Responsible agency.

   (3) Direct supervisor (if known).

   (4) Specific circumstances.

   (5) Date of corrective action.

   (6) Description of corrective action.

b. **Facts**

   (1) Did the violation occur?
(a) Is this a repeat violation?

(b) Is the FFCA applicable?

(2) Liability of responsible agency or individual?

c. Fine or Penalty Analysis. Class of violation (as defined by regulatory agency).

d. Factors Associated with the Violation

(1) Determine the actual or potential harm associated with the violation (Note: Use classification such as major, moderate, or minor as defined by regulatory agency schedule of penalties).

(a) Characteristics of the substance involved:

1. Hazardous material or HW.

2. Characteristics? (i.e., corrosive, toxic, ignitable, reactive) Listed or characteristic waste? Extremely hazardous? Carcinogen?

3. Degree of hazard? (Note: Use classification such as major, moderate, or minor as defined by regulatory agency schedule of penalties).

(b) Amount of material involved: Based on the characteristics, does the regulatory agency consider the amount large or small?

(c) Specific situation information:

1. Was human life or health threatened? Extent?

2. Were natural resources threatened? Extent?

3. Was the environment threatened? Extent?

4. Were water supplies or resources threatened? Extent?

5. Can potential damage be minimized or prevented?
(2) Determine the extent of deviation from regulatory standards (Note: Use classification such as major, moderate, or minor as defined by regulatory agency schedule of penalties).

(3) Calculate initial penalty or fine from regulatory agency schedule of penalties.

(4) Calculate multi-day penalties, if applicable.

(5) Calculate base total penalty.

(6) Adjust penalty for factors associated with the violator, for economic benefit of non-compliance, and all other adjustments allowed by regulatory agency schedule of penalties.

   e. Recommendation

(1) If there is a legal defense, forward the investigative report to the BSO via the chain of command with a copy to the Navy Office of the Assistant General Counsel, (Energy, Installations, and Environment) (OAGC(EI&E)) and recommend the fine or penalty be contested.

(2) Recommended settlement amount.

(3) Recommended corrective action.

(4) COs may also recommend the use of supplement environmental projects (SEPs) when appropriate. SEPs are environmentally beneficial projects that an alleged violator agrees to undertake in full or partial settlement of an enforcement action, but which the alleged violator is not otherwise legally required to perform. SEPs can play a role in securing significant environmental benefits and protection of public health and the environment.

(5) Recommended disciplinary or personnel action. If there is a legal defense, forward the investigative report to the BSO via the chain of command with a copy to Navy (OAGC(EI&E)) and recommend the fine or penalty be contested.

19-3.6. Closing a Violation

a. Installations shall contact the regulatory agency to discuss the corrective action taken, request regulator concurrence the NOV is closed, and follow-up with a memorandum to the regulator confirming the communication. Alternatively,
installations may address a letter to the regulatory agency
detailing the corrective action taken and requesting regulator concurrence by return receipt mail. A statement such as, "We will consider this matter closed and remove it from the active database if we do not receive a reply from you within the next 60 days" shall be included. An installation may accept verbal confirmation from the regulatory agency the action is closed. If the regulator responds by verbal communication, the installation representative must follow-up with a memorandum to the regulator confirming the communication. In cases where the regulator acknowledges that no further action is required, installations shall report the NOV as closed; additional coordination with the regulator is not necessary.

b. If the regulator requires further action, installations shall negotiate and enter into a compliance agreement with the regulatory agency. A compliance agreement may be used as justification to close-out associated NOVs or other notices. Installations will follow the close-out procedures described in this section for this subsequent compliance agreement. A violation received later for similar circumstances is considered a separate instance of non-compliance.

c. When the NOV or SNC is closed, installations or tenant commands shall update the NOV module. An email or message indicating closure is not required and no further quarterly messages will be required for that NOV or SNC.

19-4 Responsibilities

19-4.1. OPNAV (N45) shall:

   a. Formulate policy guidance, allocate resources, and oversee compliance tracking and reporting requirements throughout Navy; and


19-4.2. BSOs shall:

   a. Review NOVs and identify trends across regions, and notify OPNAV (N45) if any areas of concern warrant guidance or specific attention;
b. Ensure NOVs are entered into the NOV module, information is accurate and up-to-date, and corrective actions are completed; and

c. Provide OPNAV (N45) with a summary of new and open NOVs and SNCs within 30 days of the end of each quarter.

19-4.3. Naval Facilities Engineering Service Center shall:

a. Maintain the NOV module and assist users, as requested; and

b. Provide data reports to OPNAV (N45), as requested.

19-4.4. COs of Navy installations and tenant commands shall:

a. Immediately report the NOV or SNC per this chapter;

b. Conduct a preliminary inquiry into the facts and circumstances of the violation;

c. Negotiate payment of fines and penalties with the regulator, if applicable;

d. Review the NOV module and regulatory Web sites to ensure information is accurate and current; and

e. Ensure violation corrective actions are programmed.

19-5  Definitions

19-5.1. Notice of Violation. For the purposes of this manual and aligned with the definition of enforcement action in reference (d), an NOV is defined as follows:

a. United States and Territories. For U.S. and territory installations, an NOV is a formal, written notification by EPA or other federal, state, interstate, regional, or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement.

b. Overseas. For overseas installations, an NOV is a formal, written notification by the appropriate host nation environmental regulatory authority of the violation of any applicable environmental standard as defined in the FGS.
19-5.2. **Significant Non-Compliance.** A SNC is an EPA term that describes facilities that have a violation of significant magnitude or duration warranting priority for review or response by an agency. The air program uses the term high priority violation (HPV) instead of SNC. For the purposes of this chapter, the definition of SNC includes HPV. Media-specific definitions are developed by the EPA program offices.

19-5.3. **Inspection.** Any inspection conducted by State, Federal, or local regulators. An inspection that addresses more than one environmental media shall be counted as more than one inspection; these inspections are referred as multi-media inspections. For example, an inspection that reviews an air permit and a wastewater permit shall be counted and reported as two inspections. Self-audits or inspections by Navy personnel do not count as an inspection.
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20-1 Scope. 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 and its territories.

20-1.1. Related Chapters. Refer to chapter 2 (Funding) for information on resourcing, chapter 3 (Environmental Readiness Training) for information on Clean Water Act (CWA) training, chapter 4 (Environmental Performance Reporting) for reporting CWA metric data, chapter 19 (Processing Notices of Violation Under
Environmental Laws and Regulations), chapter 34 (Overseas Environmental Compliance Ashore) for information on Navy activities in foreign countries, and chapter 35 (Environmental Compliance Afloat) for information on ship discharges.

20-1.2. References

(a) E.O. 12088, Federal Compliance with Pollution Control Standards

(b) 40 CFR 130

(c) 33 U.S.C. 1342

(d) 40 CFR 122

(e) 40 CFR 403 and 405-471

(f) 33 U.S.C. §1329

(g) 40 CFR 144, 146, and 147.1250

(h) 40 CFR 148

(i) 42 U.S.C. §6901 et seq.

(j) 42 U.S.C. §6939e

(k) 40 CFR 503

(l) DUSD(I&E) Memorandum of 22 Apr 2009, Perchlorate Release Management Policy

(m) OPNAVINST F3100.6J Special Incident Reporting (OPREP-3 PINNACLE, OREP-3 NAVY BLUE, and OREP-3 NAVY UNIT SITREP) Procedures

(n) 33 U.S.C. §1323

(o) Assistant DUSD (I&E) Memorandum of 20 Apr 2011, DoD Legal Guidance on Stormwater Charges Under Clean Water Act

(p) 64 FR 48701

(q) 33 U.S.C. §1251 et seq.

(r) Public Law 83-703, Atomic Energy Act of 1954
20-3.1. Compliance. As required by reference (a) and CWA, Navy facilities shall 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, E.O.s, and regulations respecting the control and abatement of water pollution such as load reduction requirements resulting from the development of total maximum daily loads (TMDLs) for impaired water bodies (reference (b)). Navy facilities must comply in the same manner and same extent as any nongovernmental entity, including the payment of reasonable service charges (not payment of civil penalties or fines). 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.

20-3.2. **Surface Water Discharges**

   a. **Direct Discharges.** Permits are required for all point source discharges of pollutants to waters of the U.S. (reference (c)). For all discharge points in states with an Environmental Protection Agency (EPA)-approved National Pollutant Discharge Elimination System (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 must be requested from EPA. All permit compliance records must be retained as required by federal, state, and local regulations.

      (1) **Wastewater Discharges.** Navy installations shall explore opportunities for pollutant reduction or elimination in wastewater discharges through product substitution, wastewater reduction, water conservation, reuse, and recycling. Domestic and industrial wastewater treatment plant discharges as well as wastewater and cooling water discharges to waters of the U.S. from other processes from Navy installations must comply with all terms or conditions of EPA, state, or locally issued permits.

      (2) **Stormwater Discharges.** Pollutants shall be reduced or eliminated from stormwater discharges by control of pollutant sources through procedural and structural best management practices (BMPs).

         (a) **Compliance.** Stormwater discharges must meet all applicable federal, state, and local permit requirements. Stormwater discharges are a major contributor to surface water quality impairment. The NPDES Stormwater Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. These types of stormwater discharges are either regulated under Phase I or Phase II of the CWA Stormwater Program. Phase I regulations apply to MS4s serving a population of 100,000 or more, as well as stormwater discharges associated with regulated industrial activities as defined in the stormwater regulations, including construction activities disturbing 5 acres of land or more. 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 1 acre of land (including smaller sites in a larger common plan of
development or sale), or as specified by an individual state. Federally-operated storm sewer systems are defined as MS4s.

(b) Permit Application. Navy installations subject to stormwater regulations must apply for NPDES permit coverage under either an individual permit or a general permit. Installations applying for coverage under an individual or general stormwater NPDES permit will be required to prepare a stormwater pollution prevention plan (SWPPP). Part 122.26, paragraph (a) of reference (d) includes information on the types of stormwater discharges that are regulated. Part 122.34, paragraph (b)(3)(iii) of reference (d) includes information on non-stormwater discharges such as water line flushing, lawn watering, and firefighting activities that may be a significant contributor of pollutants to an MS4.

(3) Pesticide Discharges. Installations shall obtain a NPDES permit for all point source discharges to waters of the U.S. of biological pesticides and chemical pesticides that leave a residue. In many cases, installations can be covered under an EPA or state issued general permit. Installations shall ensure on-site contractors are covered under the permit or obtain their own permit.

b. Indirect Discharges. Indirect discharges to Navy owned treatment works (NOTW), publicly owned treatment works (POTW), and privately owned treatment works must meet all applicable federal effluent guidelines (reference (e)) 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 (e)) 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 (f)). Navy installations must comply with state and local laws and regulations regarding non-point source pollution control.

20-3.3. Subsurface Discharges. Discharges to groundwater must meet applicable requirements of 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 sections 21-3.5 and 21-3.6. All owners or operators of Class I and V wells and all applicants for UIC permits shall comply with applicable
provisions of subpart Z of reference (g) and reference (h). On-site wastewater treatments systems, commonly referred to as septic systems, can also be considered Class V underground injection wells. New large-capacity cesspools are banned nationwide as of 5 April 2000 (new large-capacity cesspools are those for which construction was started on or after 5 April 2000 (part 144.88, paragraph (a)(2) of reference (h))). Large-capacity cesspools may no longer be constructed. Existing large-capacity cesspools should have been closed by 5 April 2005 (part 144.88, paragraph (a)(1)(i) of reference (h)). The definition of large-capacity cesspool may vary from state to state.

20-3.4. **Land Application.** A permit may be required from the state for land application which includes the use and disposal of treated wastewater, biosolids (sewage sludge), industrial sludge, or septage. These systems may include spray fields, tile fields, rapid infiltration basins, percolation ponds, and evaporation basins.

20-3.5. **Hazardous Pollutant Discharges.** Hazardous waste (HW) may be introduced into a treatment facility only if the facility is specifically permitted to treat the type of waste introduced under a Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal permit or a "permit by rule" (reference (i)). Reference (j) provides federally owned treatment works (FOTW) with the same domestic sewage exclusion provided to POTWs, provided no HW is introduced to the FOTW.

20-3.6. **Sludge Disposal.** The sewage sludge use and disposal regulation (reference (k)) sets national standards for management and disposal of biosolids (sewage sludge). The rule is designed to protect human health and the environment when biosolids (sewage sludge) is beneficially applied to the land, placed in a surface disposal site, or incinerated. Generally, NOTW biosolids (sewage sludge) disposal requirements are incorporated into NPDES permits. If they are not, reference (k) is self-implementing in most cases. This means 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 biosolids (sewage sludge) disposal requirements. Navy facilities shall take all reasonable measures to beneficially dispose of sludge including land application methods and composting.

20-3.7. **Waste Disposal Sites.** Surface water runoff and leachate from waste disposal sites will conform to applicable requirements specified for disposal of HW (refer to chapter 27 (Hazardous
Waste Management Ashore) or solid waste (refer to chapter 28 (Solid Waste Management and Resource Recovery Ashore)).

20-3.8. Dredge and Fill Operations

a. Permit Application

(1) Permit applications must be made to U.S. Army Corps of Engineers (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.

(2) 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, and fish and wildlife protection plans. 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.

b. Permit Renewal. Requests for renewal of permits for maintenance dredging from USACE shall be filed with the cognizant district engineer at least 2 years before expiration.

c. Permit Exemptions. Projects for which environmental impact statements (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.

d. Discharges of Dredged or Fill Material

(1) Early planning for dredge spoils disposal site selection, preparation, and use is essential. CWA requires a permit for discharge of dredged or fill materials into waters of
the U.S. Refer to chapter 27 (Hazardous Waste Management Ashore), chapter 30 (Oil Management Ashore), chapter 31 (Storage Tanks), and chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) for information on oil and HW handling requirements. Discharges of dredged or fill material into waters under USACE jurisdiction shall comply with federal regulations. Discharges to waters of the U.S. under the regulatory jurisdiction of states shall comply with applicable permits and discharge regulations, including state fee schedules. Disposal by ocean dumping requires a USACE permit and compliance with EPA requirements (refer to chapter 36 (Permitted Ocean Disposition)).

(2) 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 2.5 years before project initiation. Disposal site selection may entail field sampling and analyses. Elutriate and 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 (reference (k)).

e. Environmental Assessment or EIS. An environmental assessment (EA) or EIS shall be prepared by the sponsoring Navy installation and reviewed under chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) for each project involving a change to the width or depth of a channel or other water body.

20-3.9. In-Water Construction. USACE and some states require a permit for any in-water construction. Installations proposing in-water construction shall obtain applicable permits prior to award of construction contracts and comply with all permit conditions. Construction activities that will need permit coverage are construction of piers, wharfs, bulkheads, pilings, marinas, docks, ramps, floats, moorings, and like structures; construction of wires and cables over the water, and pipes, cables, or tunnels under the water; dredging and excavation; any obstruction or alteration of navigable waters; depositing fill and dredged material; filling of wetlands adjacent or contiguous to waters of the U.S.; construction of riprap, revetments, groins, breakwaters, and levees; and transportation of dredged material for dumping into ocean waters.

20-3.10. Watershed Management
a. 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 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; Comprehensive Environmental Response, Compensation, and Liability Act; air) to fully implement the watershed approach.

b. 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.

20-3.11. 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. Installations shall periodically develop a list of all industrial waste discharges on the installation. This is to be accomplished no less than once every 5 years as part of an industrial wastewater management plan.

20-3.12. Water Reuse. To support water conservation efforts, Navy commands shall ensure all activities implement water reuse practices to reclaim, recycle, and reuse 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 installation. Reuse of water shall be accomplished per all applicable federal, state, and local laws, E.O.s, regulations and requirements.

20-3.13. 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, per reference (1). 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 the level identified in reference (1) shall consult with their budget submitting office (BSO) on appropriate actions. Installations may cease sampling after 2 consecutive semi-annual samples are below 15 parts per billion. Sample results are to be reported to the permitting regulatory authority if it is required by the NPDES permit or state regulations.

20-3.14. 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 Operations Event/Incident Report (OPREP-3) NAVY BLUE or OPREP-3 NAVY UNIT Situation Report (SITREP) per reference (m). Spills of oil and hazardous substances shall be reported per the requirements in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response).

20-3.15. Fines, Penalties, and Notices of Violation. There is no waiver of sovereign immunity for fines and penalties in CWA. This includes EPA imposed penalties, state imposed penalties, local penalties, or any penalties sought by citizens in a citizen's suit. Because Navy cannot pay penalties, Navy also cannot undertake supplemental environmental projects in lieu of environmental penalties. Refer to chapter 19 (Processing Notices of Violation under Environmental Laws and Regulations) for more detailed and specific Navy policy guidance on what actions shall be taken upon receipt of any notice of violation of federal, state, interstate, or local environmental control laws, E.O.s or regulations. This paragraph does not apply to payment of reasonable stormwater service charges, which are discussed in section 20-3.18.

20-3.16. Request to Board or Regulate Navy Vessels. Refer to chapter 35 (Environmental Compliance Afloat) if there is any request by federal, state, or local regulators to board or regulate any Navy vessel.

20-3.17. Training Requirements

    a. Every person involved in operations at naval shore facilities which could result in pollution of surface or groundwater shall have received environmental overview training specified in chapter 3 (Environmental Readiness Training); shall
have received specific comprehensive training in water pollution prevention required by CWA and implementing regulations; and shall be familiar with the provisions of this chapter.

b. Wastewater treatment plant operators shall have received training and certification required by applicable state and local water quality regulations. Where state or local regulations do not specify training, the following subjects shall be included in their training plan:

(1) Basic wastewater plant design,
(2) Wastewater plant operations,
(3) Basic maintenance and calibration of plant controls and equipment,
(4) Wastewater treatment principles,
(5) Wastewater sampling and analysis, and
(6) Wastewater plant and systems documentation and reporting requirements.

20-3.18. Payment of Reasonable Stormwater Service Charges

a. Reference (n) requires federal entities to pay "reasonable service charges," to include any reasonable, nondiscriminatory fee, charge, or assessment to state and local authorities to pay or reimburse the costs of managing stormwater from federal property or facilities. The stormwater management costs that may be reimbursed include the full range of costs attributable to collecting stormwater, reducing pollutants in stormwater, and reducing the volume and rate of stormwater discharge. Any such reasonable fee, charge, or assessment must be paid regardless of whether it is denominated a tax.

b. Determining whether a stormwater service charge is "reasonable" and therefore payable requires a fact-specific analysis of the circumstances. In reference (o), the Department of Defense provides guidance for conducting this analysis using seven criteria. To be payable by a Navy facility, a stormwater service charge must:

(1) Relate to the control and abatement of water pollution;
(2) Be reasonable;

(3) Be nondiscriminatory;

(4) Be based on some fair approximation of the proportionate contribution of the property or facility to stormwater pollution;

(5) Be measured in terms of quantities of pollutants, or volume or rate of stormwater discharge or runoff from the property or facility;

(6) Be used to pay or reimburse the costs associated with any stormwater management program (whether associated with a separate storm sewer system or a sewer system that manages a combination of stormwater and sanitary waste); and

(7) May include the full range of programmatic and structural costs attributable to collecting stormwater, reducing pollutants in stormwater, and reducing the volume and rate of stormwater discharge.

c. Navy installations receiving a new or revised demand for payment of stormwater service charges from a state or local entity shall inform Facilities Engineering Command (FEC) or Region Counsel of the demand for payment, and a coordinated review of the demand by both environmental technical and legal staff shall be performed. Initial payment of a stormwater service charge shall not be made without region counsel's advice that it is payable. Recurring charges may be paid without additional legal analysis provided that the justification for and method of calculating the amount payable remains unchanged.

(1) The coordinated review shall consist of the following steps:

(a) Ensure that the charges are based on a reasonable assessment of the facility's stormwater profile using the criteria in paragraph 20-3.18.b. This includes, but is not limited to, careful analysis of any assumption or algorithms used to estimate impervious surface area.

(b) Ensure that Region Counsel is given the opportunity to review all coordinated technical and legal reviews. Region counsel will advise through documented analysis whether the demand to payment is payable under reference (o) and communicate is advice in writing to the Region Comptroller.
Payment of a stormwater service change shall not be made without Region Counsel’s advice that it is payable.

(2) If after review and negotiation it is determined that the stormwater service charges are valid and appropriate, payment must be made and cannot wait until the next program objective memorandum (POM). The project shall be entered as an emergent project into the Environmental Readiness Program Requirements Web (EPRWeb) (refer to appendix E (Web Sites) for Web site address) under the guidebook for wastewater and stormwater fees along with all legal and cost documents that support the requirement. A legal memorandum or assessment supporting the decision to pay must be attached to the EPR project demonstrating how the seven criteria in section 20-3.18.b have been met. This memorandum or assessment only needs to be resubmitted in subsequent EPRWeb projects if the original assessment changes.

(3) If Region Counsel determines that a stormwater service charge is not payable, Region Counsel shall provide a legal opinion providing the reasons for determining why the bill is not payable, along with the bill itself to Commander, Navy Installations Command (CNIC), which is responsible for notifying the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) and Assistant Deputy Under Secretary of Defense (Installations and Environment) through the chain of command prior to communication of the determination to the state or local government entity that presented the demand for payment. The Department of Justice has determined that no stormwater charge may be denied based on lack of specific appropriations act language.

20-4 Responsibilities

20-4.1. BSOs shall:

a. Ensure activities under their command comply with current federal, state, regional, and local laws, E.O.s, regulations, and permits; and

b. Plan, program, budget, and provide funding for current and future requirements under CWA and revisions to the applicable regulations.

20-4.2. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) shall:
a. Prepare permit applications for construction and initial operation of military construction funded projects, pay related fees from the funds appropriated and budgeted for the projects, and provide permit applications for submittal to the applicable regulatory agency;

b. Assist commands, as requested, in identifying applicable effluent standards, appropriate control technologies, and BMPs, and in developing SWPPPs 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 liaisons with USACE to facilitate dredge and fill project planning, preparation of EAs and EISs, and disposal site approval; and

e. Operate and maintain NOTWs.

20-4.3. Region commanders and commanding officers (COs) of shore installations shall:

a. Comply with the applicable substantive and procedural federal, state, local, and regional clean water laws, E.O.s, regulations, and permits;

b. 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;

c. Identify and submit environmental compliance projects, per chapter 1 (Organization and Coordination), required to bring wastewater sources into compliance with applicable requirements;

d. Identify, plan, program, budget, and implement requirements for current and future requirements under CWA;

e. Improve opportunities to recycle and reclaim and reuse wastewater and sludge;

f. Develop, implement, and maintain current SWPPPs;
g. Ensure environmental personnel are properly trained and certified, as applicable; and

h. Implement the instructions outlined in chapter 19 (Processing Notices of Violation under Environmental Laws and Regulations) upon receipt of a CWA violation.

20-4.4. COs or officers in charge (OICs) of tenant commands that operate or use sewage and wastewater collection or treatment systems shall:

a. Ensure compliance with all permit conditions for applicable federal, state, and 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; and

c. Advise host command of any changes in process, materials, or procedures that may impact permit requirements.

20-5 Definitions

20-5.1. Contiguous Zone. The contiguous zone of the United States is a zone contiguous to the territorial sea of the United States, in which the United States may exercise the control necessary to prevent infringement of its customs, fiscal, immigration, or sanitary laws and regulations within its territory or territorial sea, and to punish infringement of the above laws and regulations committed within its territory or territorial sea. The U.S. contiguous zone, as proclaimed in reference (o), extends to 24 nautical miles (NM) from the baselines of the United States determined per international law, but in no case within the territorial sea of another nation.

20-5.2. Direct Discharge. A direct discharge is a discharge of a pollutant directly into the waters of the U.S.

20-5.3. Discharge. Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any pollutant, but excludes certain cases under section 402 of reference (p).

20-5.4. Discharge of a Pollutant

a. Discharge of a pollutant includes:
(1) Any addition of any pollutant or combination of pollutants to waters of the U.S. from any point source; or

(2) 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.

b. This definition includes additions of pollutants into waters of the U.S. from:

(1) Surface runoff which is collected or channeled by man;

(2) Discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment work; and

(3) Discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

c. This term does not include an addition of pollutants by any indirect discharger.

20-5.5. Domestic Discharge. Domestic discharge is any wastewater discharge produced by ordinary living uses, including liquid waste containing animal or vegetable matter in suspension or solution; water-carried waste from the discharge of water closets, laundry tubs, washing machines, sinks, or dishwashers; or other source of water carried wastes of human origin.

20-5.6. 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.

20-5.7. Federally Owned Treatment Works. An FOTW is a domestic sewage treatment works owned 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."
20-5.8. **Indirect Discharge.** An indirect discharge is a nondomestic discharge introducing pollutants to a POTW, FOTW, or NOTW.

20-5.9. **Industrial Wastewater.** Industrial wastewater is water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Examples of this type of wastewater on Navy installations includes, but is not limited to, wastewater resulting from production of energetics and propellants, used oil and solvent handling operations, photo and X-ray processing, laboratories and clinics activities, and operation of large food services and large-scale laundries.

20-5.10. **Industrial Wastewater Management Plan.** An industrial wastewater management plan is a document that includes a list of all industrial discharges and treatment processes, a copy of the applicable permit(s), and a description of how industrial wastewater will be managed to maintain compliance with the applicable permit(s).

20-5.11. **Industrial Wastewater Treatment Plant.** An industrial wastewater treatment plant is a facility that treats exclusively nondomestic wastewater. Treatment may be chemical or physical. An oily waste treatment facility is a type of industrial waste treatment plant.

20-5.12. **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.

20-5.13. **Land Application.** Land application is the use or disposal of treated wastewater, biosolids (sewage sludge), industrial sludge, or septage by application upon or incorporated into the soil with no resulting discharge to surface waters.

20-5.14. **National Pollutant Discharge Elimination System.** NPDES is 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 reference (p). The term includes a
state or interstate program which has been approved or authorized by EPA.

20-5.15. **Navigable Waters.** As defined in section 502.7 of reference (p), navigable waters means the waters of the U.S., including the territorial seas.

20-5.16. **Navy Owned Treatment Works.** An NOTW is a type of FOTW that is owned by a Navy installation. 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 Navy owned pretreatment works.

20-5.17. **Non-Point Source Pollution.** Non-point source 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.

20-5.18. **Point Source.** A point source is 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 stormwater runoff.

20-5.19. **Pollutant.** Pollutants include dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, biosolids (sewage sludge), munitions, chemical wastes, biological material, radioactive materials (other than those regulated as source, by-product, or special nuclear material under reference (q)), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

20-5.20. **Pretreatment.** Pretreatment is 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 POTW, FOTW, or NOTW.

20-5.21. Privately Owned Treatment Works. A privately owned treatment works is 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 privately owned treatment works providing treatment.

20-5.22. Publicly Owned Treatment Works. A POTW is 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.

20-5.23. Stormwater. Stormwater is 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 stormwater 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.

20-5.24. Territorial Sea Baseline. The territorial sea baseline is the line defining the shoreward extent of the territorial sea of the United States drawn according to the principles, as recognized by the United States, of references (r) and (s). Normally, the territorial sea baseline is the mean lower low water line along the coast of the United States, as shown on official U.S. nautical charts.

20-5.25. Territorial Seas of the United States. The territorial sea of the United States is a maritime zone extending beyond the land territory and internal waters of the United States over which the United States exercises sovereignty and jurisdiction over the water column, airspace above, and seabed and subsoil below. The breadth of the U.S. territorial sea is 12 NM from the baselines of the United States, as proclaimed in reference (t).

20-5.26. Total Maximum Daily Load. The TMDL is the amount of a specific pollutant that a water body can receive, assimilate, and still meet water quality standards. The TMDL consists of the sum
of waste load allocations from point sources, load allocations from non-point sources, and a margin of safety.

20-5.27. Treatment Works. A treatment works is 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).

20-5.28. Water Quality Standards. Water quality standards are 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.

20-5.29. Waters of the United States

a. Waters of the U.S. include:

(1) 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;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:

(a) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(c) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the U.S. under this definition;
(5) Tributaries of waters identified in sections 1-4 of this definition;

(6) The territorial sea; and

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in sections 1-6 of this definition.

b. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in part 423.11, paragraph (m) of reference (e) which also meet the criteria of this definition) are not waters of the U.S. Waters of the U.S. 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 CWA, the final authority regarding CWA jurisdiction remains with EPA.

20-5.30. **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.
CHAPTER 21

SAFE DRINKING WATER ACT COMPLIANCE ASHORE

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21-1 Scope. This chapter identifies requirements, establishes policy guidance, and assigns responsibilities for the production, use, and protection of drinking water at shore installations in the United States and its territories.

21-1.1. Related Chapters. Drinking water performance reporting shall be reported per chapter 4 (Environmental Performance Reporting). Chapter 7 (Sampling and Laboratory Testing) provides Navy policy guidance regarding sampling and testing protocols. Violations of the Safe Drinking Water Act (SDWA) shall be reported per chapter 19 (Processing Notices of
Violation Under Environmental Laws and Regulations). Navy installations overseas shall follow chapter 34 (Overseas Environmental Compliance Ashore) for drinking water requirements.

21-1.2. References

(a) 40 CFR 141

(b) EPA Operator Certification Guidelines Implementation Guidance of Jan 2000

(c) NAVMED P-5010-5, Manual of Naval Preventative Medicine, Water Supply Ashore

(d) EPA 812-8-94-002, Lead in Drinking Water in Schools and Non-Residential Buildings, April 1994

(e) COMNAVFACENGCOM Guidance for Sampling Lead in Drinking Water of 22 Jul 1998

(f) 40 CFR 141.201 - 211

(g) EPA 816-R-09-011, 2nd Revision, Preparing Your Drinking Water Consumer Confidence Report, Guidance for Water Suppliers of Apr 2010

(h) Department of Defense Consumer Confidence Report Guidance Document of Sep 1999

(i) 40 CFR 144-147

(j) Public Law 107-188, Public Health Security and Bioterrorism Preparedness and Response Act of 2002

(k) USD(AT&L) Memorandum of 3 Jul 2003, DoD Policy on Drinking Water Vulnerability Assessments and Emergency Response Plans


(m) EPA, Cross Connection Control Manual, 1973, updated 2003

(o) EPA/State Joint Guidance on Sanitary Surveys of Dec 1995

(p) Public Law 104-182, Safe Drinking Water Act Amendments of 1996

21-2 Legislation

a. The following legislation contains provisions that pertain to the regulation of the nation's public drinking water supply and its sources:

(1) National Primary Drinking Water Regulations (NPDWR),

(2) National Secondary Drinking Water Regulations, and

(3) SDWA.

b. A summary of this legislation is included in appendix A (Laws and Regulations).

21-3 Requirements. Safe drinking water must be provided to all personnel assigned to Navy shore facilities and installations. Navy water systems must comply with all applicable federal, state, and local safe drinking water regulations, executive orders (E.O.s), and Navy policy. In general, states are responsible for implementation of SDWA programs.

21-3.1 Executive Agent for Drinking Water Quality

a. Commander, Navy Installations Command (CNIC) is a designated as executive agent for drinking water quality matters for all Navy shore facilities and installations worldwide, including government properties, leased facilities, non-contiguous facilities, Naval Sea Systems Command (NAVSEASYSCOM), Bureau of Medicine and Surgery (BUMED), or other budget submitting office (BSO) operated facilities. This responsibility extends to all property that is operated by or under the responsibility of an installation commanding officer.

b. As executive agent for drinking water quality at Navy shore facilities and installations, CNIC shall serve as the single point of contact on all matters related to water systems that provide drinking water to Navy personnel. Executive agent responsibility shall include oversight and ensure:

(1) Compliance testing and monitoring of drinking water
supplied both by outside vendors and Navy owned treatment works;

(2) Treatment and distribution of drinking water;

(3) Operation and maintenance of all aspects of drinking water systems;

(4) Training and certification of personnel who operate such systems;

(5) Preparation and submission of annual Consumer Confidence Reports where applicable; and

(6) Preparation and submission of applicable public notifications and contingency plans for alternative water supplies required in the event that a water system is unable to supply drinking water that meets public health standards.

c. By 15 December of each year CNIC shall provide an annual report on the status of Navy shore facility and installation drinking water quality worldwide for previous fiscal year to the Vice Chief of Naval Operations (VCNO), via CNO (N4). This detailed report shall include:

(1) An inventory of all water systems providing drinking water to Navy shore facilities and installations;

(2) An analysis of the quality of drinking water provided by each system;

(3) Identification of any outstanding maintenance or repair requirements;

(4) Identification of any operational and water quality deficiencies; and

(5) Any other significant discrepancies or problems and associated funding requirements. Discrepancies and problems to be identified include, but are not limited to, violations of applicable standards, issuance of public notifications, delayed or deferred maintenance and repair, and any case in which an applicable water system outside the United States is providing Navy consumers with lower quality drinking water than provided to Navy consumers within the United States as determined by the executive agent. Significant issues or discrepancies noted shall be accompanied by a plan of action to address the matter expeditiously and shall include contingency plans to provide
alternate water supplies when necessary.

21-3.2. Water System Classification. Water systems are initially classified as public water systems (PWSs) or non-PWSs. Federal, state, and local regulations for determining compliance with SDWA generally apply to PWSs and 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 (GWUDI) of surface water). Refer to section 21-5 and figure 21-1 to determine the type of water system in operation.

21-3.3. Consecutive Public Water Systems (PWSs)

   a. Consecutive PWSs generally are not subject to the requirements of SDWA if they satisfy all of the following criteria specified in part 141.3 of reference (a):

      (1) Consist only of distribution and storage facilities and do not have any collection and treatment facilities;

      (2) Obtain all their water from, but are not owned or operated by, a PWS to which the regulations apply;

      (3) Do not sell water to any persons; and

      (4) Are not carriers that convey passengers in interstate commerce.

   b. There is no definition of "selling water" in SDWA; however, reference (b) 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." Navy does not consider reimbursement for distribution system maintenance costs and water from one federal entity to another as selling water; this is merely an internal allocation of funds within the executive branch. The Environmental Protection Agency (EPA) definition above would apply to non-federal consumers including banks,
credit unions, private companies, and restaurants to which Navy distributes water.

c. If a consecutive PWS does not satisfy all of the above exemption criteria specified under part 141.3 of reference (a), it may still be exempt 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 part 141.29 of reference (a). 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.
Figure 21-1. Water System Classification Flowchart

Does system serve 25 or more people at least 60 days per year or does system have 15 or more service connections?

- NO → Non-PWS - Not federally regulated

- YES → PWS

Does PWS serve at least 15 service connections used by year round residents or serve at least 25 year round residents?

- YES → CWS

- NO → Non-community system serves at least 25 of the same persons over 6 months per year?

- YES → NTNCWS

- NO → TNCWS

Notes:
1. Per federal laws. State and local laws may be more stringent.
2. Does not address regulatory requirements of consecutive water systems. This is determined independently by each state.
21-3.4. Water System Monitoring. Navy water systems will, at a minimum, accomplish the monitoring described in the following sections. This monitoring is required regardless of variance or exemptions (refer to section 21-3.3.k) from regulatory monitoring requirements. Any modified monitoring would be conducted under a schedule specified by the applicable state regulatory agency and agreed upon by the EPA administrator. Installations shall consult with the Chief, Bureau of Medicine and Surgery (BUMED) for public health and preventative medicine guidance for Navy personnel concerned with medical surveillance of public water systems at shore installations in accordance with chapter 5 of reference (c).

a. Arsenic. Navy water systems are required to comply with EPA's 10 parts per billion (ppb) standard including reporting on the consumer confidence report (CCR) (refer to section 21-3.4).

b. Asbestos. All Navy water systems with asbestos cement pipes shall monitor for asbestos. At a minimum, one sample shall be taken during the first 3 years of every 9 year compliance period and must comply with EPA's limit of 7 million fibers per liter (longer than 10 micrometer).

c. Lead and Copper. All Navy PWSs shall comply with all applicable requirements for the control of lead and copper, as stated in the federal Lead and Copper Rule (subpart I of reference (a)), to ensure 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 (a) and if approved by the state regulatory agency or EPA (whichever has primacy), installations may combine their consecutive PWS monitoring plan as part of the supplier's plan, instead of treating each as a separate system.

(1) Lead Action Level

(a) The lead action level (AL) is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted per reference (a) is greater than 0.015 milligrams per liter (mg/L) (i.e., if the 90th percentile lead level is greater than 0.015 mg/L). The copper AL is exceeded if concentrations of copper in more than 10 percent of tap water samples collected during any monitoring period conducted per reference (a) is greater than 1.3 mg/L (i.e., if the 90th percentile copper level is greater than 1.3 mg/L).
(b) As specified in reference (a), if an AL 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 AL, lead service lines may have to be replaced. Water systems that meet the lead and copper ALs during specified monitoring periods may reduce the number and frequency of sampling per reference (a).

(2) Lead in Priority Areas

(a) 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 (d) and (e) 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, installations shall secure the affected water outlets from service and institute permanent corrective measures.

(b) 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.

(3) Lead and Copper in Family Housing. Navy consecutive PWSs that serve family housing and are 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 PWSs document that their water supplier passed its Lead and Copper Rule monitoring and that the water being supplied to them is noncorrosive. A formal waiver does not need to be submitted but documentation must be maintained in drinking water program records.

d. Radionuclides. Navy water systems are required to comply with EPA's standards for radionuclides and uranium as follows: combined radium 226/228 (5 picocuries per liter
(pCi/L)), beta emitters (4 millirems), gross alpha standard (15 pCi/L), and uranium (30 micrograms per liter).

e. Unregulated Contaminants. Large Navy PWS and some small PWSs may be required to collect data on a selection of unregulated contaminants. Data from this monitoring will be used in future rulemaking.

f. Coliform Bacteria

(1) Navy PWSs shall perform bacteriological monitoring as specified in the Total Coliform Rule at part 141.21 of reference (a). This rule sets requirements for coliform levels in drinking water. Coliform bacteria in drinking water indicate the treatment system is not working or there are problems in the distribution system. EPA standards require systems to 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 part 141.21 of reference (a).

(2) Consecutive non-community water systems may request waivers from this requirement. Waivers shall be submitted by budget submitting offices (BSOs) to the Office of the Chief of Naval Operation, Energy and Environmental Readiness Division (OPNAV (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.

g. Surface Water Treatment Rule. The objective of this rule is to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires water systems using surface water and GWUDI of surface water provide filtration and disinfection. Under certain criteria, the filtration requirement can be waived; however, there are no exceptions to the disinfection requirement.

(1) Interim Enhanced Surface Water Treatment Rule. This rule strengthens filter turbidity performance and monitoring requirements to optimize treatment reliability. An overall goal of this rule is to minimize levels of cryptosporidium in finished water. The rule applies to PWSs serving at least 10,000 people that use surface water or GWUDI of surface water. The rule also requires states to conduct sanitary surveys for all surface water and GWUDI systems, regardless of size.
(2) Filter Backwash Recycle Rule. This rule applies to all PWSs using surface water or GWUDI of surface water; utilizing direct or conventional filtration processes; and recycling 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.

(3) Long-Term 1 Enhanced Surface Water Treatment Rule. The rule applies to PWSs using surface water or GWUDI of surface water and extends protection against cryptosporidium and other disease causing microbes to water systems that serve fewer than 10,000 people annually.

(4) Long-Term 2 Enhanced Surface Water Treatment Rule. This rule increases monitoring and treatment requirements for water systems at high risk of outbreaks of cryptosporidium and requires PWSs supplied by surface water sources to 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.

h. Groundwater Rule. This rule provides increased protection against microbial contamination of drinking water systems that use groundwater sources by requiring sanitary surveys be conducted by the state every 3 years for CWSs and every 5 years for non-community water systems. In addition, the rule contains additional requirements such as hydrogeologic sensitivity assessments and enhanced source water monitoring for certain systems. Monitoring of source water is also required if there is a detection of coliform in the distribution system.

i. Disinfectant and Disinfection Byproducts

(1) Stage 1 Disinfectant and Disinfection Byproduct Rule. This rule applies to all CWSs and NTNCWSs that use a chemical disinfectant in any part of their system. It establishes maximum residual disinfectant levels for disinfection using chlorine, chloramine, and chlorine dioxide, and maximum contaminant levels (MCLs) for disinfection byproducts (i.e., total trihalomethanes, haloacetic acids, chlorite, and bromate).
(2) Stage 2 Disinfectant and Disinfection Byproduct Rule. This rule provides additional public health protection from disinfection byproducts and tightens compliance monitoring requirements for trihalomethanes and haloacetic acids. In addition, this rule imposes requirements on consecutive systems.

j. Public Notification and Violations. The owner or operator of a PWS that fails to comply with an applicable MCL, AL, or treatment technique (TT), or with the requirements of any schedule prescribed under a variance or exemption (refer to section 21-3.3.k) shall notify persons served by the system per reference (f). 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. Notices of violation shall be reported per chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations).

k. Exemptions. Navy installations that own and operate a consecutive PWS subject to full or partial exemption from regulatory monitoring requirements under parts 141.3 or 141.29 of reference (a), 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.

l. Review of Primary PWS System 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 water quality has not degraded above the MCL for parameters within the distribution system.

21-3.5. Consumer Confidence Reports

a. CCRs present the quality of the water delivered by the system. Each report must contain data collected during, or prior to, the previous calendar year. Requirements are outlined in reference (g) and parts 141.151 and 141.155 of reference (a). For exceedances, only report data based on certified laboratory results.
b. Each CWS shall mail or otherwise directly deliver one copy of the CCR to each of its customers by 1 July on an annual basis. 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 (reference (h)). States may waive the mailing requirement for CWSs 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. Navy consecutive CWSs shall obtain a copy of their water supplier's CCR and amend this report with information on any additional testing or exceedances.

c. A good faith effort shall be made to ensure all customers are aware of the CCR and additional information. Alternative delivery methods should be used to make a "good faith" effort to reach customers who do not receive water bills including 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 the information in the CCR is correct.

d. Certain electronic methods may be used to accomplish the required "direct delivery" of CCRs.

(1) Electronic delivery must provide the CCR in a manner that is "direct." This means CWSs can use paper or electronic communication with uniform resource locators (URLs) to meet their CCR requirement if the URL provides a direct link to the CCR, and the communication prominently displays the URL and a notice explaining the nature of the link. The link must take the customer to the entire CCR so that navigation to another webpage to find the required CCR content is not necessary.

(2) Use of social media (e.g., Facebook or Twitter) directed at customers does not meet the requirement to "directly deliver" since these internet outlets require a customer to join the website in order to read the CCR.

(3) Use of automated phone calls (e.g., emergency telephone notification systems) is not considered direct
delivery, because the entire contents of the CCR cannot be provided in a phone call.

(4) If a CWS is aware of a customer’s inability to receive a CCR by the chosen electronic means, it must provide the CCR by an alternative means allowed by the rule, including those discussed in paragraph 21-3.5.b.

21-3.6. Underground Injection Program. Reference (i) requires each state to have an Underground Injection Control (UIC) Program to ensure 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 establishes and maintains a UIC well inventory and procedures for proper well closure. The broadest category of UIC wells (i.e., Class V) includes stormwater drainage wells, aquifer remediation wells, and some septic systems.

21-3.7. Wellhead Protection Program. Installations that receive drinking water from wells shall establish a wellhead protection program that meets applicable state or local wellhead protection requirements or adopt and comply with local wellhead protection program requirements to minimize contamination.

21-3.8. Water System Vulnerability Assessments and Emergency Response Plans

a. All Navy drinking water systems serving more than 25 consumers must complete a water system vulnerability assessment (WSVA) and emergency response plan (ERP) as required by reference (j) and Department of Defense policy (reference (k)). Systems covered under this requirement include consecutive and unregulated systems, as well as small community and non-community PWSs in the United States and its possessions and territories.

b. Specific criteria to be addressed by the WSVA include, but are not limited to:

(1) Pipes and constructed conveyances;

(2) Physical barriers;

(3) Water collection, pretreatment, treatment, storage, and distribution facilities;
(4) Electronic, computer, or other automated systems utilized by the PWS;

(5) The use, storage, or handling of various chemicals; and

(6) The operation and maintenance of the system.

c. Activities shall maintain accurate WSVA and ERP status in the water quality module of the U.S. Navy Environmental Portal.

21-3.9. Cross-Connection and Backflow Prevention

a. 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, ensure compliance with primary and secondary drinking water standards by establishing policy, procedures, and instructions for installing, repairing, maintaining, inspecting, and testing backflow preventers.

b. All installations that own or operate a water system shall develop and implement a cross-connection control and backflow prevention program. At a minimum, this program shall include procedures and mechanisms to:

(1) Find and eliminate existing cross-connections and prevent new cross-connections;

(2) Install, inspect, and test backflow preventers when cross-connections cannot be eliminated, or as required by state or local regulations;

(3) Keep an inventory of all existing backflow preventers;

(4) 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 state or local water authority certified tester; and

(5) Promptly repair or replace defective backflow preventers, and retain cross-connection and backflow preventer inspection and maintenance records for at least 5 years.
c. Reference (l) provides guidance to Navy installations for complying with this requirement and reference (m) provides EPA guidance on the Cross-Connection Control Program.

21-3.10. Operation and Maintenance. Installations that own 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 (a), in particular part 141.63, paragraph (d)(3) which stresses "proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of positive water pressure in all parts of the distribution system." The program shall include the proper implementation and documentation of:

a. Emergency and preventive maintenance;

b. System disinfection after maintenance work is performed;

c. Scheduled flushing of the system;

d. Reduction of water quality problems (as needed);

e. Implementation and documentation of a valve exercise and maintenance program;

f. Proper operation and maintenance of storage tanks and reservoirs;

g. Maintenance of current water distribution maps;

h. Documentation of location and dates of water line breakage;

i. Documentation of emergency operations procedures required as a result of events such as earthquakes, hurricanes, chemical releases, and terrorist activities; and

j. Determination of response roles and responsibilities as well as contingency plans for providing potable water to the Navy installation. Reference (n) provides information on emergency planning.
21-3.11. **Sanitary Surveys.** In many instances, a state may require treatment plants or PWSs experiencing compliance problems, particularly with microbial pathogens, to perform a sanitary survey. The state regulatory agency will usually perform the survey; however, 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:

1. Verification and reevaluation of vulnerability assessments, watershed protection programs, and wellhead protection programs, as applicable;

2. Examination of the source water physical components and condition;

3. 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, contact time assessment as defined in part 141.2 of reference (a);

4. 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, recordkeeping, process control, and safety programs;

5. Evaluation of the ability of the treatment plant to respond to changes in raw water fluctuations; and


b. **Distribution System Sanitary Survey Review**

1. 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:

   a. Elimination of unneeded or excess storage;

   b. Adequate turnover of storage tanks;
(c) Storage tank cleaning and maintenance;

(d) Adequate disinfection practices during all main repairs and replacements;

(e) Effective corrosion control program, if applicable;

(f) Comprehensive cross-connection control program;

(g) Aggressive valve and hydrant exercise program;

(h) Adequate water quality monitoring program that achieves compliance with the appropriate regulations and provides for effective water quality control;

(i) Adequate flushing program, preferably a unidirectional flushing program that is implemented on a yearly basis; and

(j) Review of location and dates of water line breakage and system failures to evaluate overall system reliability.

(2) Reference (o) includes more information on sanitary surveys.

21-3.12. Consumptive Use Permits. In coordination with legal and technical staff at the BSO and appropriate region commander, installations that withdraw groundwater shall:

a. Document historical water use;

b. Determine reasonably foreseeable future water uses;

c. Evaluate water rights laws;

d. Determine on a case-by-case basis whether the installation should obtain a consumptive use permit; and

e. Ensure, if applying for a consumptive use permit, that restrictions will not impact mission requirements or existing water rights.

21-3.13. 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.

21-3.14. Recordkeeping. In the absence of more stringent federal, state, or local recordkeeping requirements, installations shall maintain records as follows:

   a. Bacteriological results - 5 years;

   b. Chemical results - 10 years;

   c. Lead and copper testing results - 12 years;

   d. Actions taken to correct violations - 3 years after acting on the particular violation involved;

   e. Sanitary survey reports - 10 years;

   f. Variance or exemption records - 5 years following the expiration of such variance or exemption;

   g. Water treatment plant and distribution system operating records (including monthly reports) - 5 years;

   h. Cross-connection inspection records - 5 years; and

   i. CCRs - 5 years.

21-3.15. Sampling and Analysis. 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. Sampling and testing shall comply with chapter 7 (Sampling and Laboratory Testing) requirements.

21-3.16. Fines and Penalties. Reference (p) waives 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.

21-3.17. Certification and Training

   a. All Navy personnel involved in the drinking water program shall receive appropriate environmental training (refer
to chapter 3 (Environmental Readiness Training) for detailed information). 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:

(1) Basic water plant and distribution system design and operation;

(2) Basic maintenance and calibration of plant controls and equipment;

(3) Water plant and distribution systems treatment principles, including chemical storage and handling;

(4) Water sampling and analysis;

(5) Water plant and distribution system documentation and reporting requirements; and

(6) Cross-connection control and backflow prevention.

b. Reference (p) requires states to develop operator certification programs which must specify minimum standards for operators of community and non-transient, non-community PWSs. Details include provisions for certification, recertification, and grandfathering.

21-4 Responsibilities

21-4.1. OPNAV (N45) shall:

a. Coordinate the overall implementation of SDWA requirements,

b. Issue policy guidance as needed,

c. Act as the assessment sponsor for SDWA projects, and

d. Approve or disapprove monitoring waivers for bacteriological sampling by Navy consecutive non-community water systems.

21-4.2 CNIC shall:

a. Serve as executive agent for drinking water quality matters for all Navy shore facilities and installations;
b. Provide annually, by 15 December, a report on the status of Navy shore facility and installation drinking water quality for the previous fiscal year as specified in section 21-3.1.c;

21-4.3 NAVFACENGCOM shall support CNIC on all aspects of drinking water system management, including, but not limited to: operation, maintenance, repair, compliance testing results from the United States accredited and certified laboratories, and compliance with applicable drinking water quality standards.

21-4.4. BUMED shall:

a. Establish and publish appropriate medical surveillance guidance for Navy water systems; and

b. Provide public health advice and consultative services to CNIC and Navy commands for drinking water quality to include: risk assessment and risk communication; review of drinking water sampling and compliance data; public health assistance on preparation of consumer confidence reports and public notifications; and health related recommendations when water does not meet U.S. water quality standards; and

c. Determine when drinking water system issues or discrepancies warrant implementation of alternative water supplies and coordinate corrective action with the CNIC and NAVFACENGCOM.

21-4.5. Regional environmental coordinators (RECs) shall:

a. Provide coordination and assistance to installations within the applicable region regarding implementation of this chapter; and

b. Assist BSOs with resolution of issues and communication with OPNAV (N45) and federal, state, and local regulators.

21-4.6. BSOs shall:

a. Implement SDWA program requirements at their shore installations;

b. Plan, program, budget, and provide funding for current and future requirements of SDWA, state and local regulations, E.O.s, and Navy policy; and
c. Ensure activities under their command comply with current federal, state, regional, and local laws, E.O.s, regulations, and permits.

d. Provide any information to CNIC as necessary for the annual drinking water quality report to VCNO specified in section 21-3.1.c.

21-4.7. Commanding officers (COs) or officers in charge of shore installations shall:

a. Ensure the installation is in compliance with all federal, state, and local regulations; E.O.s; and Navy policy pertaining to drinking water;

b. Identify, plan, program, budget, and implement requirements for current and future requirements under SDWA state and local regulations, E.O.s, and Navy policy;

c. Ensure contracts between Navy and water suppliers require the supplier to provide the results of all permit required NPDWR monitoring performed on raw and treated water that serves the applicable Navy installation or command at least once a year;

d. Ensure all personnel involved in the drinking water program are properly trained; and

e. Report noncompliance with any NPDWR.

21-5 Definitions

21-5.1. Action Level. The AL is 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, ALs have replaced lead and copper MCLs.

21-5.2. Backflow Preventer. A backflow preventer is an approved device, assembly, or piping arrangement (i.e., air gap) used to prevent backflow into a potable water system.

21-5.3. Community Water System. A CWS is a PWS that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

21-5.4. Consecutive Public Water System. A consecutive PWS is a water system which has no water production or source facility
of its own, which obtains all of its water from another water system, and meets the definition of a PWS.

21-5.5. Consecutive Water System. A consecutive water system is 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 21-1.

21-5.6. Consumer. A consumer is any person served by a PWS. Human consumption includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene.

21-5.7. Consumer Confidence Report. A CCR is an annual report which provides water quality information to consumers. The CCR must contain mandatory information and be delivered to customers annually by 1 July.

21-5.8. Consumptive Use Permit. A consumptive use permit regulates the withdrawal of groundwater.

21-5.9. Cross-Connection. A cross-connection is 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.

21-5.10. Customer. A customer is a billing unit or service connection to which water is delivered.

21-5.11. Disinfectant. A disinfectant is 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.

21-5.12. Disinfection Byproducts. Disinfection byproducts are compounds formed from the reaction of a disinfectant with organic and inorganic compounds in the source water during the disinfection process.

21-5.13. Emergency Response Plan. The potable water 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 PWS.
21-5.14. **Lead-Free.** Solders and flux are considered lead-free if they contain no more than 0.2 percent lead; wetted surfaces of pipes, pipe fittings, plumbing fittings, plumbing fixture and fixtures are considered lead-free if they contain no more than an 8 percent (note: beginning January 2014, this will change from 8 percent to a weighted average of 0.25 percent lead).

21-5.15. **Lead Service Line.** A lead service line is 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.

21-5.16. **Maximum Contaminant Level.** The MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a PWS.

21-5.17. **Non-Community Water System.** A non-community water system is a PWS that is not a CWS. There are two kinds of non-community water systems: transient and non-transient.

21-5.18. **Non-Transient, Non-Community Water System.** A NTNCWS is a PWS that is not a CWS and that regularly serves at least 25 of the same persons over 6 months per year.

21-5.19. **Permitted Public Water System.** A permitted PWS is a PWS that has been issued a permit or other formal authorization to operate (i.e., has been issued a PWS identification number).

21-5.20. **Potable Water.** Potable water is water that has been examined and treated to meet the proper standards and declared by the responsible authorities to be fit for drinking.

21-5.21. **Public Water System**

  a. A PWS is 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:

    (1) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and

    (2) Any collection or pretreatment storage facilities not under such control, used primarily in connection with such system.
b. A PWS is either a CWS or a non-community water system. Figure 21-1 helps installations determine what type of system they operate.

21-5.22. Sanitary Survey. A sanitary survey is 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.

21-5.23. Selling Water. There is no definition of "selling water" in the SDWA. Refer to discussion under section 21-3.2.

21-5.24. Service Connection. A service connection is the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

21-5.25. Source Water Assessment Program. Source water assessment programs delineate source water protection areas, inventory significant contaminants in these areas, and determine the susceptibility of each public water supply to contamination.

21-5.26. Source Water Protection Program. Source water protection programs are state efforts to manage identified sources of contamination in a manner that will protect drinking water supplies based on the source water assessment program.

21-5.27. Supplier of Water. A supplier of water is any person who owns or operates a PWS. Under SDWA, a person is defined as an individual, corporation, company, association, partnership, municipality, or federal, state, or tribal agency.

21-5.28. Transient, Non-Community Water System. A TNCWS is a non-community water system that does not regularly serve at least 25 of the same persons over 6 months per year.

21-5.29. Treatment Technique. A TT is a required process intended to reduce the level of a contaminant in drinking water.

21-5.30. Underground Injection. Underground injection means well injection (i.e., 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 (reference (i))).
21-5.31. **Water System Vulnerability Assessment.** A WSVA is an assessment of the vulnerability of a PWS 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.

21-5.32. **Well.** A well is a bored, drilled, or driven shaft; or a dug hole whose depth is greater than the largest surface dimension.

21-5.33. **Wellhead Protection Program.** A wellhead protection program is a program to protect groundwater supply wells and well fields that contribute drinking water to public water supply systems.
CHAPTER 22
CLEAN AIR ASHORE

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22-1 Scope. This chapter applies to air emissions from stationary and mobile sources at all shore facilities.

22-1.1. Related Chapters. Chapter 11 (Environmental Readiness in the Acquisition Process) provides Navy policy guidance regarding Clean Air Act (CAA) requirements related to acquisition programs. Chapter 25 (Toxic Substances Control Act) provides Navy policy guidance for asbestos-containing materials (ACM). Chapter 34 (Overseas Environmental Compliance Ashore) provides Navy policy guidance with respect to installations in foreign countries. Chapter 35 (Environmental Compliance Afloat) provides Navy policy guidance with respect to Navy vessels and floating dry docks.

22-1.2. References

(a) 40 CFR 81

(b) 40 CFR 51

(c) 40 CFR 93
(d) Navy Guidance for Compliance with the Clean Air Act General Conformity Rule of 2013

(e) EPA Memorandum of 2 Aug 1996, Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act (Act)

(f) 40 CFR 70

(g) 40 CFR 63

(h) 40 CFR 61

(i) 40 CFR 68

(j) 40 CFR 60

(k) 40 CFR 80


(m) 40 CFR 98

(n) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance


(q) 40 CFR 82

(r) SECNAV Memorandum of 28 May 1993, Elimination of Class I Ozone-Depleting Substances in Department of the Navy Contracts (NOTAL)

(s) SECNAVINST 5000.2E (series), Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System

(t) DFARS Subpart 223.8, Ozone-Depleting Substances, 19 Dec 2006
(u) ASN(RDA) Memorandum of 18 Nov 1997, Equipment/Systems Requiring the Unplanned Use of Class I Ozone-Depleting Substances (ODS)


(w) Unified Facilities Criteria 3-600-1: Fire Protection Engineering for Facilities

(x) BUMEDINST 6270.8B (series), Procedures for Obtaining Health Hazard Assessments Pertaining to Operational Use of Hazardous Materials


(z) ASN(EI&E) Memo of 14 May 2012, Department of the Navy Process for Reviewing Potential Settlements of Penalties for Past Violations of the Clean Air Act (CAA)


(bb) DASN (Environment) Memo of 12 July 2012, Air Emission Rights at Department of Defense Installations

(cc) 10 U.S.C. §2571

(dd) 40 CFR 86.000-2

(ee) 10 CFR 490

22-1.3 Applicability. Requirements and policies in this chapter are derived from CAA, other legislation, regulations, E.O.s, and instructions related to air emissions. They apply to installations within the United States, Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, and Commonwealth of the Northern Mariana Islands. The requirements of sections 22-3.5.c and 22-3.6 of this chapter apply to all Navy ships, aircraft, vehicles, and shore activities worldwide except when the requirements in the Overseas Environmental Baseline Guidance Document (OEBGD) and final governing standards (FGS), set per chapter 34 (Overseas Environmental Compliance Ashore), are more stringent.

22-2 Legislation
The following legislation and international treaty contain provisions that pertain to clean air, protection of stratospheric ozone, mitigation of global warming, and energy conservation, which are relevant to this chapter:

1. CAA,
2. Energy Policy Act,
3. Montreal Protocol on Substances that Deplete the Ozone Layer, and

A summary of this legislation and the Montreal Protocol is included in appendix A (Laws and Regulations).

22-3 Requirements. Navy commands and installations must comply with applicable CAA requirements and related regulations promulgated by federal, state, and local regulatory agencies in the same manner and to the same extent as a nongovernmental entity. Navy policy also requires all Navy installations to follow Department of Defense (DoD) and Navy-specific guidance.

22-3.1 National Ambient Air Quality Standards

The Environmental Protection Agency (EPA) sets primary and secondary National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter (PM) regulated as PM10 (10 microns or smaller) and PM2.5 (2.5 microns or smaller). EPA designates all areas in the country as unclassifiable, attainment, nonattainment, or maintenance with respect to the NAAQS for each criteria pollutant in subpart C of reference (a). Some regulatory requirements are fundamental and apply to sources in all areas, regardless of their attainment status, while other requirements apply only to sources located in nonattainment and or maintenance areas.

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 and implement the CAA programs. States may require pollution control and prevention measures more stringent than those mandated by EPA, but may not allow measures that are less
stringent. Table 22-1 summarizes the primary requirements applicable to Navy installations located in nonattainment areas.

Table 22-1. Primary Applicable Requirements in Nonattainment Areas

<table>
<thead>
<tr>
<th>Area Designation</th>
<th>Summary of Applicable Requirements&lt;sup&gt;a,b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pollutant: Ozone</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Subpart 1<sup>c</sup> | • State must complete emissions inventory, to be updated every 3 years. Will obtain data from sources.  
• New source review (NSR) offset ratio for volatile organic compounds (VOCs) and nitrogen oxides (NOx) of 1 to 1. |
| Marginal | • State must complete emissions inventory, to be updated every 3 years. Will obtain data from sources.  
Specific requirements for VOC and NOx emissions.  
• Basic motor vehicle inspection and maintenance (I/M) program.  
• NSR offset ratio for VOCs and NOx of 1.1 to 1. |
| Moderate | Requirements of marginal areas plus:  
• Reasonably available control technology (RACT) applies to all major stationary VOC and NOx sources.  
• Stage II vapor recovery required.  
• NSR offset ratio 1.15 to 1. |
| Serious | Requirements of moderate areas plus:  
• Clean fuel fleet program.  
• Enhanced I/M program enforced through denial of vehicle registration.  
• NSR offset ratio 1.2 to 1.  
• Major source threshold for VOCs and NOx is 50 tons per year (tpy). |
| Severe | Requirements of serious areas plus:  
• NSR offset ratio 1.3 to 1.  
• Reformulated gasoline required in metropolitan areas.  
• Major source threshold for VOCs and NOx is 25 tpy. |
| Extreme | Requirements of severe areas plus:  
• NSR offset ratio 1.5 to 1.  
• Major source threshold for VOCs and NOx is 10 tpy. |

**Pollutant: Carbon Monoxide**

| Moderate | • State must complete emissions inventory, to be updated every 3 years. Will obtain data from sources.  
• I/M program (type of program depends on ambient carbon monoxide level).  
• Oxygenated fuel required in metropolitan areas during high carbon monoxide season. |
| Serious | Requirements of moderate areas plus:  
• Transportation control measures.  
• Where stationary sources are believed to contribute substantially to ambient carbon monoxide levels, major source threshold for carbon monoxide is 50 tpy. |
<table>
<thead>
<tr>
<th>Area Designation</th>
<th>Summary of Applicable Requirements&lt;sup&gt;a,b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-State</td>
<td>Affected states must coordinate the revision and implementation of the carbon monoxide SIPs as they apply to the affected areas.</td>
</tr>
</tbody>
</table>

**Pollutant:** Particulate Matter – PM10, 24-hour standard

- **Moderate**
  - State must complete emissions inventory, to be updated every 3 years. Will obtain data from sources.
  - Reasonably available control measures apply.

- **Serious**
  - Meet requirements of moderate areas plus:
    - Best available control measures (BACM) apply.
    - Major source threshold for PM10 is 70 tpy.

**Pollutant:** Particulate Matter – PM2.5, annual and 24-hour standard

- State must complete emissions inventory, to be updated every 3 years. Will obtain data from sources. Must include both direct and PM2.5 precursor emissions.
- Reasonably available control measures apply.

Notes:

a. This table lists those requirements that will likely affect Navy facilities. Details for these provisions are set by each state per reference (b). States have additional requirements that must be included in their SIPs but do not directly affect sources such as ambient monitoring plans.

b. The major stationary source threshold under the NSR and Title V permit programs is 100 tpy except as noted in the table.

c. The Subpart 1 category will no longer be used by EPA as it reconsiders the ozone NAAQS. Refer to final 2008 Ozone NAAQS Implementation Rule for details.

22-3.2. General Conformity Analysis. CAA section 176(c) 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 federal implementation plan (FIP). EPA criteria and procedures for determining conformity are found in subpart B of reference (c). Navy installations located in nonattainment and maintenance areas must make a determination that an action conforms to the SIP or FIP before proceeding with the action. Conformity analyses will typically be done as part of the National Environmental Policy Act analysis and documentation procedures for the planned action and must follow the procedures described in reference (d).

22-3.3. Provisions for Stationary Sources. The following requirements of CAA apply to stationary sources only. EPA issued guidance in 1996 specific to military installations for the CAA permit programs and hazardous air pollutant (HAP) regulations (reference (e)). This guidance provides details on how a military installation may determine its major source status under the CAA regulations, if approved by the cognizant regulatory authority. Permitting authorities have the
discretion to issue more than one Title V permit to each major source at a single installation when certain conditions related to command and control, industrial grouping, and interrelated support are met.

a. CAA Permit Programs. Two of the air permit programs under the CAA affect emission sources located on Navy installations and are discussed below. A facility may choose to take federally enforceable limits on the operation of an emission source (called a synthetic minor permit) to reduce emissions below the threshold required to be subject to these permit programs, thus reducing the number and scope of applicable requirements. Greenhouse gases (GHGs) are subject to permitting under the CAA but with specific requirements set forth in the GHG Tailoring Rule. Refer to section 22-3.5.b for additional information.

(1) NSR and Prevention of Significant Deterioration Permits

(a) The CAA Preconstruction Permit Program is designed to ensure no new or reconstructed emission source will have a significant adverse impact on air quality. The program is typically implemented by state or local regulatory agencies which may impose stricter requirements. It is divided into two types of preconstruction permits based on the attainment status of the area.

(b) Navy facilities shall apply for and obtain required permits for air emission sources prior to project start. Navy installations shall comply with federal, state, and local requirements which will vary with the local ambient air quality, size of the project, and potential emissions.

(c) The Prevention of Significant Deterioration (PSD) Program applies to the criteria pollutants for which an area is in attainment or maintenance of the NAAQS. The major source threshold in most cases is a potential to emit 250 tpy or more under PSD. Navy installations shall comply with applicable permit requirements under the PSD program per section 166 of reference (b). The NSR Permit Program applies to the criteria pollutants for which an area is designated nonattainment. Major source thresholds under NSR are shown in table 22-1. Navy installations shall comply with the applicable permit requirements under the NSR Program per section 165 of reference (b). Minor source NSR permits may be required for projects that do not meet PSD or NSR thresholds to prevent the construction or
modification of sources that would interfere with attainment or maintenance of the NAAQS.

(2) CAA Title V Operating Permits. The Title V Operating Permit Program consolidates all CAA requirements applicable to the operation of a source, including requirements from the SIP, preconstruction permits, and the air toxics program. It applies to stationary sources of air pollution that exceed the major stationary source emission thresholds, as well as other non-major sources specified in a particular regulation. The program includes a requirement for payment of permit fees to finance the operating permit program whether implemented by EPA or a state or local regulator. Navy installations subject to Title V permitting shall comply with the requirements of the Title V Operating Permit Program, which are detailed in reference (f), and all specific requirements contained in their individual permits.

b. Hazardous Air Pollutants. CAA Section 112 (b)(1) includes an initial list of 189 HAPs with deletions and additions to the list identified in subpart C of reference (g).

(1) Source Categories. EPA must publish and update a list of source categories and subcategories that emit certain levels of HAPs. For each listed source category, EPA indicates whether the sources are considered to be "major" sources or "area" sources. EPA sets standards for all major sources of air toxics (and some area sources that are of particular concern). "Major" sources are defined as sources that emit or have the potential to emit 10 tpy of any of the listed HAPs, or 25 tpy of a mixture of HAPs. For HAPs, major source thresholds typically apply to the entire facility. "Area" sources consist of smaller facilities that release lesser quantities of toxic pollutants into the air. If a facility is not a major HAP source, it is an area source.

(2) National Emission Standards for Hazardous Air Pollutants. EPA's standards for sources of HAPs are known as National Emission Standards for Hazardous Air Pollutants (NESHAPs). For major sources of HAPs, EPA must initially establish technology-based emission standards based on the maximum achievable control technology (MACT) for each listed source category and subcategory according to a prescribed schedule. Eight years after each MACT-based standard is issued, EPA must assess residual health risk to the population exposed. If the risk is too high, EPA must incorporate additional requirements in the standards. For area sources of HAPs, the
EPA Administrator has the discretion of establishing less stringent standards that are based on generally available control technology rather than MACT. General provisions applicable to all NESHAPs are available in subpart A of reference (g). The specific characteristics of a source of HAPs that determine the applicability of a particular NESHAP are provided in each NESHAP. Table 22-2 shows the most common NESHAPs that apply to Navy installations. For additional requirements that affect ACM, refer to chapter 25 (Toxic Substances Control Act).

Table 22-2. Commonly Applicable NESHAPs

<table>
<thead>
<tr>
<th>Subpart</th>
<th>NESHAP Source Category</th>
<th>Affected HAP Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 CFR 61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Asbestos</td>
<td>All</td>
</tr>
<tr>
<td>I</td>
<td>Radionuclide Emissions from Federal Facilities Other Than NRC Licensees and Not Covered by Subpart H</td>
<td>All</td>
</tr>
<tr>
<td>40 CFR 63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks</td>
<td>All</td>
</tr>
<tr>
<td>DD</td>
<td>Off-Site Waste and Recovery Operations</td>
<td>Major</td>
</tr>
<tr>
<td>GG</td>
<td>Aerospace Manufacturing and Rework Facilities (Coating)</td>
<td>Major</td>
</tr>
<tr>
<td>II</td>
<td>Shipbuilding and Ship Repair (Coating)</td>
<td>Major</td>
</tr>
<tr>
<td>EEEE</td>
<td>Hazardous Waste (HW) Combustion</td>
<td>All</td>
</tr>
<tr>
<td>JJ</td>
<td>Wood Furniture Manufacturing Operations</td>
<td>Major</td>
</tr>
<tr>
<td>DDDD</td>
<td>Industrial, Commercial, and Institutional Boilers and Process Heaters</td>
<td>Major</td>
</tr>
<tr>
<td>ZZZZZ</td>
<td>Stationary Reciprocating Internal Combustion Engines</td>
<td>All</td>
</tr>
<tr>
<td>CCCCCC</td>
<td>Gasoline Dispensing Facilities</td>
<td>Area</td>
</tr>
<tr>
<td>JJJJJJJ</td>
<td>Industrial, Commercial, and Institutional Boilers and Process Heaters</td>
<td>Area</td>
</tr>
<tr>
<td>WWWW</td>
<td>Plating and Polishing Operations</td>
<td>Area</td>
</tr>
</tbody>
</table>

Note: Other NESHAPs may affect Navy installations now or in the future due to changes in operations or publication of new or amended rules. References (g) and (h) include a complete list of NESHAPs and their particular requirements.

(a) Ship Building and Ship Repair NESHAP. Navy facilities that are major sources of HAPs and use marine coatings in excess of 264 gallons per year shall comply with the emission limitations, management practices, certification, and recordkeeping requirements in subpart II of reference (g). Navy vessels that dock at these or commercial facilities shall comply with Navy policy and only use materials which do not exceed permissible VOC limits per section 35-3.13. Affected facilities shall compile records of certification of the as-supplied volatile organic HAP (VOHAP) content or the VOC content as a
surrogate for VOHAP of each batch of marine coating on a monthly basis and maintain those records for a minimum of 5 years. Affected facilities are prohibited from thinning marine coatings with anything except water unless authorized in writing and in advance by Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) and the installation environmental office. Ship's forces are prohibited from thinning marine coatings with anything except water at all times per chapter 35 (Environmental Compliance Afloat). Affected facilities authorized to thin a marine coating shall not cause or allow the application of any coating to a ship or a part of a ship with an as-applied VOHAP or VOC content exceeding the applicable emission limit. Reference (g) exempts coatings used in volumes of less than 52.8 gallons per year, provided the total volume of coating exempt does not exceed 264 gallons per year at any facility. These exempt coatings shall be clearly labeled as "low-usage exempt" and the volume of each such coating applied shall be maintained in the facility's records. Accordingly, such coatings may be thinned in excess of the applicable VOHAP limit if the as-applied volume is properly tracked and does not exceed the low-usage thresholds.

(b) Batch Certificates

1. Navy supply activities including fleet logistics centers shall implement procedures ensuring all marine coatings have batch certificates on the content of VOHAP or VOC per the requirements of subpart II of reference (g) (refer to note below) prior to issue of marine coatings to affected sources. Batch certificates may be obtained by any of the following means:

   a. Directly from the vendor or manufacturer;

   b. From the Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) Ship-NESHAP batch certification database; or,

   c. Locally prepared by an activity qualified to perform VOC content analysis per EPA Method 24.

2. Note: When using VOC as a surrogate for VOHAP, subpart II of reference (g) requires VOC-exempt compounds that are HAPs be included in the certified VOC content when preparing batch certifications, if present. As required in section 22-4.5, COMNAVSUPSYSCOM shall ensure Navy contracts for
marine coatings require manufacturers or suppliers to provide batch certifications that include all information and statements necessary to demonstrate compliance.

(3) Accidental Releases and Risk Management Plans. Owners and operators of stationary sources that manufacture, process, use, handle, or store EPA-regulated substances have a general duty 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 threshold quantity limits for a regulated substance contained in a covered process must submit a risk management plan (RMP) as required by reference (i). Facilities are responsible for updating their RMPs at least once every 5 years or sooner if required per sections 68.190(b) and 68.195 of reference (i).

c. New Source Performance Standards and Existing Source Emission Guidelines. CAA Section 111 requires EPA to establish federal emission standards for source categories which cause or contribute significantly to air pollution. Navy installations are required to comply with applicable new source performance standards (NSPS), which can be found in reference (j). They are intended to promote use of the best available control technology (BACT), taking into account the cost of such technology and any other non-air quality, health, environmental impact, and energy requirements. Generally, state and local air pollution control agencies are responsible for implementation, compliance assistance, and enforcement of the NSPS. The specific characteristics of an emissions source determine the applicability of a particular NSPS. CAA Section 129 requires EPA to establish both NSPS and existing source emission guidelines (EG) for solid waste combustion sources. Table 22-3 shows the most common NSPS and EG that apply to Navy installations.

Table 22-3. Commonly Applicable NSPS or EG\textsuperscript{a}

<table>
<thead>
<tr>
<th>40 CFR 60 Subparts</th>
<th>NSPS or EG Source Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cc, WWW</td>
<td>Municipal Solid Waste Landfills EG and NSPS</td>
</tr>
<tr>
<td>Dd, Dc</td>
<td>Industrial-Commercial-Institutional Steam Generating Units NSPS</td>
</tr>
<tr>
<td>K, Ka</td>
<td>Storage Vessels for Petroleum Liquids</td>
</tr>
<tr>
<td>Kb</td>
<td>Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) NSPS</td>
</tr>
<tr>
<td>K</td>
<td>Sewage Treatment Plants NSPS</td>
</tr>
<tr>
<td>GG, KKKK</td>
<td>Stationary Gas and Combustion Turbines NSPS</td>
</tr>
<tr>
<td>JJJ</td>
<td>Petroleum Dry Cleaners NSPS</td>
</tr>
</tbody>
</table>
22-3.4. Provisions for Mobile Sources. EPA has issued a series of rules that reduce emissions from a broad spectrum of mobile sources (e.g., vehicles, equipment). Table 22-4 lists requirements applicable to mobile sources commonly used by Navy.

Table 22-4. Regulations Applicable to Engines and Fuels

<table>
<thead>
<tr>
<th>Regulated Entity</th>
<th>CFR Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft</td>
<td>40 CFR 87</td>
</tr>
<tr>
<td>Clean fuel vehicles</td>
<td>40 CFR 88</td>
</tr>
<tr>
<td>Engine test procedures</td>
<td>40 CFR 1065</td>
</tr>
<tr>
<td>Fuels and additives</td>
<td>40 CFR 79 and 40 CFR 80</td>
</tr>
<tr>
<td>Highway motor vehicles</td>
<td>40 CFR 86</td>
</tr>
<tr>
<td>Large spark-ignition (SI) engines</td>
<td>40 CFR 1048</td>
</tr>
<tr>
<td>Locomotive compression-ignition (CI) engines</td>
<td>40 CFR 92 and 40 CFR 1033</td>
</tr>
<tr>
<td>Marine CI engines</td>
<td>40 CFR 94 and 40 CFR 1042</td>
</tr>
<tr>
<td>Marine SI engines</td>
<td>40 CFR 91</td>
</tr>
<tr>
<td>Mobile source control: conversions, importation, preemption, exclusions</td>
<td>40 CFR 85</td>
</tr>
<tr>
<td>Nonroad general compliance provisions</td>
<td>40 CFR 1068</td>
</tr>
<tr>
<td>Nonroad diesel engines (other)</td>
<td>40 CFR 89 and 40 CFR 1039</td>
</tr>
<tr>
<td>Recreational vehicles</td>
<td>40 CFR 1051</td>
</tr>
<tr>
<td>Small SI engines</td>
<td>40 CFR 90</td>
</tr>
</tbody>
</table>

Notes:
- a. Applies to both mobile and stationary engines.
- b. Reference (k) includes additional details on requirements that apply to fuels and refueling.

a. National Security Exemptions. The highway, nonroad, locomotive, and marine engine rules each contain automatic exemption provisions for equipment with substantial combat features. When purchasing non-compliant engines for equipment without these features, the activities must specifically request an exemption from EPA or a state or territorial regulatory authority. Regulations promulgated by EPA and states under CAA Title II (Emission Standards for Mobile Sources) have established regulatory mechanisms for requesting exemptions from emission standards applicable to highway and nonroad engines. In order to obtain an exemption, the procuring representative...
must submit an official request to EPA or the state regulatory agency. The request typically must describe the equipment, engines, application, quantity, and requirement for the exemption. Once the exemption is approved, the manufacturer may proceed with the production and sale of the engine for the Navy. The exemption request may cover specific types and quantities, or include a blanket request covering a range of engines, equipment types, and quantities.

b. California Emission Standards. CAA granted the state of California exclusive authority to establish new engine and fuel standards. This authority does not cover aircraft or locomotive engines, nor does it cover construction or farm equipment with engines less than 175 horsepower. New California engine standards generally harmonize with federal engine standards. However, California rules are unlike federal standards in that they require retrofit and replacement of existing engines to maintain compliance. For Navy operations in California, consult the regional environmental coordinator (REC) for applicable requirements.

c. Aircraft and Aircraft Engines. CAA regulations for aircraft and aircraft engines apply only 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 regulator, including California, may adopt or attempt to enforce any standard respecting emission of any air pollutant from any aircraft or aircraft engine unless such standard is identical to an applicable standard developed by EPA and the Secretary of Transportation.

d. Vehicle Inspection and Maintenance. Vehicles located in ozone nonattainment areas with a marginal or higher classification or in carbon monoxide moderate or serious nonattainment areas are subject to periodic inspections of the vehicle's pollution control equipment and emissions testing. Navy 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, as 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 or leased vehicles
operated more than 60 days per year on the installation. Military tactical vehicles are exempt from the I/M program.

e. 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.

f. Alternative Fuel and Clean Fuel Fleet Vehicles

(1) Per CAA Title II, Part C, Navy installations with a covered vehicle fleet (i.e., 10 or more vehicles centrally fueled) in a covered area must ensure at least 70 percent of all new light-duty fleet vehicles acquired are clean fuel vehicles. For heavy-duty trucks above 8,500 pounds (lbs) and up to 26,000 lbs gross vehicle weight rating, that percentage shall be at least 50 percent. Additional and more stringent requirements under reference (1) must also be considered.

(2) CAA Section 246(g) 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.

22-3.5. Green House Gas Emissions. Although GHGs are not criteria pollutants and are not specifically called out for regulation in CAA, the Supreme Court determined that GHGs are air pollutants under CAA and EPA has the authority to regulate GHGs under CAA. Navy installations that emit GHGs above established thresholds are required to comply with applicable annual reporting requirements of reference (m) (commonly known as the GHG Reporting Program (GHGRP)), state rules, and permitting requirements of the GHG Tailoring Rule. In addition, Navy reports GHG emissions inventory annually to the Office of the Secretary of Defense (OSD) for the submission of a single DoD consolidated GHG inventory to the Office of Management and Budget Director and the Council on Environmental Quality Chair as required by reference (n).

a. GHGRP. GHGs included under the RP are carbon dioxide (CO₂), methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated gases as defined in section 98.6 of reference (m). In general, for facilities that emit GHGs, the threshold for reporting is 25,000 metric tons or more of CO₂ equivalent (CO₂e)
Facilities subject to the rule are required to report annual emissions of GHGs per reference (m). Some states may require reporting at lower thresholds under their own GHG programs.

b. GHG Permitting Requirement. On 13 May 2010, EPA issued a rule commonly referred to as the GHG Tailoring Rule, which amended several existing rules (40 CFR Parts 51, 52, 70, and 71) and defined when permits under the PSD and Title V permit programs are required for new and existing facilities based on its potential to emit (PTE) GHG emissions. As of March 2012, PSD permitting is required for an increase in PTE of 75,000 tpy CO\textsubscript{2}e or more for modified sources and PTE of 100,000 tpy CO\textsubscript{2}e or more for new sources. Title V permitting applies to sources with PTE of 100,000 tpy CO\textsubscript{2}e or more. EPA will implement the programs in areas where state rules and SIPs are deemed deficient. Consult your REC and EPA's Web site for the current status.

c. GHG Emissions Reporting and Reduction Requirements under E.O. 13514. Reference (n) requires agencies to measure, report, and reduce their GHG emissions from direct and indirect activities. References (o) and (p) provide GHG accounting and reporting methodologies to be used by Navy in conducting a fiscal year (FY) 2008 baseline emissions inventory and any FY 2010 and subsequent years' annual inventories under reference (n). Navy's inventory for reporting GHG under reference (n) is prepared by Chief of Naval Operations (CNO); Commander, Navy Installations Command (CNIC); and Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) per the responsibilities identified in sections 22-4.1 and 22-4.6 using a centralized approach primarily relying on data already collected via existing reporting programs. Therefore, there is no requirement for individual installations to develop their own inventory for purposes of compliance with reference (n). OSD has established FY 2020 GHG emissions reduction targets of 34 percent from a FY 2008 baseline for direct emissions (Scope 1 and 2) and 13.5 percent for indirect emissions (Scope 3). These reduction targets apply only to shore facilities and non-tactical vehicles.

22-3.6. Management of Ozone-Depleting Substances. Regulations issued under CAA Sections 601-607 phase-out the production and import of ozone-depleting substances (ODSs) consistent with the schedules developed under the Montreal Protocol. In the United States, ODSs are regulated as Class I or Class II controlled
substances. Class I substances have a higher ozone-depleting potential and have been completely phased out in the U.S., except for exemptions allowed under the Montreal Protocol. Class II substances are hydrochlorofluorocarbons (HCFCs) which are transitional substitutes for many Class I substances and are also in the process of being phased out. The requirements of this section apply to all Navy ships, aircraft, vehicles, and shore activities worldwide. Reference (p) establishes DoD policy on GHG emissions reporting and reduction per reference (n), which includes fluorinated substances that are GHGs (e.g., HFCs, PFCs) and are used by Navy as substitutes for Class I and Class II ODS in multiple applications (i.e., as refrigerants, solvents, and firefighting agents). Accordingly, Navy facilities shall follow similar procedures for HFCs and PFCs as are required for ODS in section 22-3.6.e, including technician certification, recovery and recycling, and leak monitoring and repair to reduce emissions to help achieve GHG emission reduction targets established by DoD per reference (n).

a. Class II ODSs Phase-Out 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 as detailed in section 82.16 of reference (q).

b. Mission Critical Applications

(1) The use of Class I and Class II ODSs shall continue for mission critical applications so as not to jeopardize or degrade the safety or operational requirements of 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. Navy mission critical applications are:

(a) Chlorofluorocarbon (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;

(b) 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;

(c) HCFC-22 used in legacy ship air conditioning, stores and cargo refrigeration, shipboard oxygen and nitrogen producers (and oxygen and nitrogen producers at training
facilities), and landing craft air cushion (LCAC) air conditioning systems;

(d) Halon 1211 used in flight line fire protection, ship and shore-based aircraft rescue and firefighting vehicles, and LCAC fire suppression systems;

(e) Halon 1301 used in legacy shipboard total flooding fire suppression applications and legacy aircraft explosion suppression and fire protection applications;

(f) CFC-113 used in support of oxygen system cleaning and precision guidance system cleaning applications; and

(g) Shore-based heating, ventilation, air conditioning, and refrigeration (HVAC&R) equipment and fire protection systems as approved by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)).

(2) ODS Procurement. Per references (r) through (v), use of Class I ODS in contracts is prohibited unless an appropriate technical representative (ATR) certifies that no suitable substitute is available and a senior acquisition official (SAO) approves the procurement. Substitutes must also be approved under EPA's Significant New Alternatives Policy (SNAP) Program for the intended use and application. ODS procurement must be per the following provisions:

(a) The cognizant command shall designate an ATR who will conduct a technical review and certify there are no suitable substitutes available;

(b) A flag officer or member of the senior executive service designated by the requiring command to be the SAO for the procurement shall approve the contract following 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) Class I ODSs for mission critical applications (planned use) have already been centrally procured and are supplied from the ODS reserve per section 22-3.6.b.2. Therefore, all Class I ODS for mission critical applications
(planned use) shall be obtained from the ODS reserve and not by contracting action; and

(d) Unplanned use of Class I ODS for mission critical applications shall be approved per the procedures in reference (u). Upon approval of the unplanned use, OPNAV (N45) may authorize access to the ODS reserve.

(e) Procurement of ODS by Navy activities for transfer to Foreign Military Sales (FMS) customers is prohibited, since supply of such substances could be in violation of the provisions of reference (k), the Montreal Protocol, and the laws of the foreign government. Navy activities that are designated as authorized users of the ODS reserve are also not authorized to transfer ODS reserve material to FMS customers for any reason. Non-OSD alternatives should be offered to FMS customers whenever possible. If alternatives are not available, the FMS customer should be advised to procure Class ODS directly, preferably from their own domestic sources.

(3) Use of ODS Reserve. The ODS reserve shall be used to support only mission critical applications (planned use) when no alternative is available or when interim support is required during retrofit or implementation of alternatives. Accordingly, the following provisions apply:

(a) Requisition of ODS reserve material for non-mission critical applications is not authorized;

(b) Oversight and control of access shall be exercised through an authorized use list (AUL);

(c) Defense Logistics Agency (DLA) has established procedures for deposits to and requisitions from the ODS reserve. DLA publishes these procedures on the DLA Aviation Web site (refer to appendix E (Web Sites) for Web site address); and

(d) Upon approval of an unplanned use, OPNAV (N45) may authorize access to the ODS reserve and COMNAVSEASYSCOM shall update the AUL accordingly.

(4) ODS Solvents. CFC-113 and other Class I ODS solvents were phased out of production on 31 December 1995. Existing supplies are limited. Mission critical CFC-113 solvent applications with no identified alternatives shall be supported by the ODS reserve until alternatives are implemented or until 1 January 2015, whichever is sooner. Waivers to this policy will
be considered by OPNAV (N45) per section 22-3.6.i only if there is no suitable alternative identified and implemented by the cognizant systems command and the ongoing use can be supported by the ODS reserve as determined by COMNAVSEASYSCOM. Per reference (q), purchase and use of HCFC-141b solvent is prohibited. Purchase and use of other HCFC solvents is prohibited effective 1 January 2015 per reference (q) and Navy policy. Turn-in of unused excess Class I ODS solvent to the ODS reserve is mandatory. DLA procedures for deposits to the reserve are found on the Defense Supply Center Richmond Web site (refer to appendix E (Web Sites) for Web site address).

c. Non-Mission Critical Applications

(1) New Equipment. All new shore-based, non-mission critical HVAC&R equipment shall use an EPA SNAP Program-approved refrigerant with an ozone-depletion potential (ODP) of 0.05 or less and an ODP of zero when possible. In addition, the following requirements apply:

(a) HVAC&R equipment using EPA SNAP Program-approved refrigerants with ODP values of 0.05 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 (e.g., size, reliability and maintenance, logistics);

(b) 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 phase-out date of the specific Class II substance used. For example, activities may not procure new HCFC-123 equipment with life-cycles extending beyond 2035;

(c) Procurement and installation of new appliances containing HCFC-22, HCFC-142b, or a blend containing one or both of these ODS is prohibited;

(d) Outside continental United States activities should consult applicable FGS to determine if earlier HCFC production and or use phase-outs are applicable; and

(e) Installation of shore-based Halon 1301 fire protection systems and procurement of non-mission critical portable halon fire extinguishers is prohibited.
(2) **Procurement.** Refer to section 22-3.6.b.1 for procurement requirements for Class I ODS.

(3) **Use of ODS Reserve.** Activities shall not requisition ODSs from the ODS reserve for non-mission critical applications such as shore-based HVAC&R equipment or shore-based fire protection systems.

(4) **Conversions.** Shore facilities should have already converted or replaced all existing non-mission critical HVAC&R equipment containing Class I ODS based upon the policies in previous versions of this manual, unless a waiver was received from OPNAV (N45) per section 22-3.6.i. This phase-out requirement does not apply to small appliances, air conditioning equipment with 5 tons or less cooling capacity (60,000 British Thermal Units), and motor vehicle air conditioners. In addition, the following requirements apply:

(a) If an accidental discharge or fire should occur in a shore facility space protected by Halon 1301, the system should not be refilled with Halon 1301. Reference (w) should be used to determine if water sprinklers provide adequate protection or if retrofit with an alternative agent is required; and

(b) All excess Class I ODS refrigerants, HCFC-22 refrigerant, and halons should continue to be recovered and returned to the ODS reserve using procedures posted on the DLA Aviation Web site (refer to appendix E (Web Sites) for Web site address).

(5) **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.

(6) **ODS Solvents.** Use of Class I ODS solvents in non-mission critical applications is prohibited except for essential laboratory or analytical uses as defined in appendix G of subpart A of reference (q). Purchase and use of the Class II ODS solvent HCFC-141b is prohibited. Purchase and use of other Class II ODS solvents are prohibited effective 1 January 2015.

(7) **ODS Solvent Alternatives.** 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.

(8) 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. 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 OPNAV (N45) per section 22-3.6.i.

(9) Shipboard Galley and Ancillary Refrigeration Equipment. Section 35-3.13.c contains policies and procedures for support of shipboard galley and ancillary refrigeration equipment.

d. Criteria for Selection of ODS Alternative

(1) Navy activities shall select alternatives that are EPA SNAP Program-approved with an ODP of zero when possible, except as noted in section 22-3.6.c.1.

(2) 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 (x) details specific procedures for obtaining health hazard assessments pertaining to operational use of hazardous materials (HM).

e. Refrigerants Handling. In addition to the following requirements for ODS refrigerants contained in reference (q), Navy facilities will follow similar procedures for HFC and PFC refrigerants to help achieve GHG emissions reduction targets established by DoD per reference (n). Refer to section 22-3.5.c for additional details.

(1) Maintenance. Navy personnel shall conduct maintenance, service, repair, disposal, leak monitoring, and recordkeeping on appliance and motor vehicle air conditioners (MVACs) and MVAC-like appliance containing Class I or II ODS and
or substitutes for these refrigerants (e.g., HFCs, PFCs) per requirements detailed in subparts B and F of reference (q).

(2) Refrigerant Recovery. Intentional release of ODS refrigerants and their substitutes (such as HFCs), while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment is prohibited. Activities shall use EPA-approved refrigerant recovery equipment and shall certify to the appropriate EPA regional office, per section 82.162 of reference (q), they have acquired such equipment and are complying with reference (q). Overseas activities and ships are not required to submit this certification. 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 air conditioning and refrigeration 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 recovery equipment by EPA.

(3) Refrigerant Technician Certification. All Navy military and civilian refrigerant technicians, except for motor vehicle technicians, shall be certified per section 82.161 of reference (q). Proof of such certification shall be readily available at the work place. Technicians may require additional state or local certifications if they are more stringent than federal certification. Although technician certification requirements of reference (q) do not apply to foreign nationals working on U.S. Navy equipment overseas, certification of foreign nationals may be required by the host nation. The applicable FGS should be consulted to determine if the host nation has certification requirements for foreign nationals.

(4) 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 section 82.40 of reference (q). Certification requirements do not apply to foreign nationals working on U.S. Navy vehicles overseas. The applicable FGS should be consulted to determine if the host nation has certification requirements for foreign nationals.

(5) Refrigerants as HM. ODS refrigerants are considered HM and shall be controlled and managed per this chapter and chapter 23 (Hazardous Materials Management Ashore). However,
used Class I and Class II ODS refrigerants that are to be recycled for future use are not considered HW under federal HW regulations. Where they are more restrictive, however, state and local HW regulations apply to storage, transportation, and disposal of used ODS refrigerants.

f. Prohibition of Intentional Releases of Halon and Substitute Fire Suppressants. Navy personnel shall not intentionally release halon or substitute fire suppressants that are GHGs, such as HFCs, 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 emission reduction as specified by section 82.270 of reference (q).

g. Emerging Technology and Alternatives. Navy activities having any information regarding new emerging technologies and alternatives for the elimination of ODSs or substitutes which are GHGs should contact their budget submitting office (BSO) or COMNAVSEASYSCOM for incorporation into the Navy Shipboard Environmental Information Clearinghouse. In addition, activities may request information on ODS alternatives by contacting the clearinghouse through COMNAVSEASYSCOM.

h. Disposal of ODS

(1) Sale of ODS. No Navy activity shall sell or otherwise transfer any Class I ODS or HCFC-22 outside Navy without written permission from their chain of command and OPNAV (N45). Contract specifications and contractual actions shall not include the transfer of Class I ODSs and HCFC-22 to contractors. Activities shall deposit excess Class I ODSs and HCFC-22 into Navy's portion of the ODS reserve.

(2) Turn-In of HVAC&R to DLA Disposition Services. Activities transferring HVAC&R equipment to DLA Disposition Services for reuse shall label the equipment to indicate that it contains an ODS. Activities transferring HVAC&R equipment to DLA Disposition Services for disposal as scrap shall recover the ODS prior to disposal and label the units as having had all refrigerants and oils removed per EPA regulations. Additional information on HVAC&R equipment disposal can be found in chapter 10 of reference (y).

i. Waivers. Requests for waivers to the provisions of the ODS sections of this chapter shall be submitted to OPNAV (N45) via the chain of command. For such waivers, an activity must
demonstrate the application of the requirements of these sections 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.

(1) Content. At a minimum, waiver requests should contain the following:

(a) ODS involved and its intended use;

(b) Number of units affected;

(c) Quantity of ODS involved;

(d) Associated costs;

(e) Statement of environmental impact (e.g., annual leakage, average annual discharge of material);

(f) Safety and occupational health impact;

(g) Operational impact;

(h) Plan for meeting requirement; and

(i) Additional information as appropriate.

(2) Review and Approval Process. OPNAV (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.

22-3.7 Other CAA Requirements. This section lists several additional CAA sections that may impact Navy operations.

a. Enforcement

(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. CAA provides for penalties of up to $37,500 per day for each violation. Navy installations must notify their RECs and OPNAV (N45) via their chain of command if EPA, the state, or a local regulatory entity implements CAA regulatory requirements in a manner that is discriminatory per CAA Section 118(a).

(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. Therefore, all penalty assessments should be coordinated per the provisions of chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) and the additional policy provisions of this chapter. Due to the uncertainty in the courts, CAA penalty provisions response letters to state agencies are also reviewed by the Department of Justice via the Navy Office of the General Counsel Litigation Office. Reference (z) formally established that process as a DON policy.

(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. Navy installations must notify their RECs and OPNAV (N45) via their chain of command if any civil action is brought against the installation and or person performing any act or duty on behalf of the installation.

b. Training Requirements. In addition to the training requirements contained in chapter 3 (Environmental Readiness Training), personnel may be required to take appropriate courses based upon job duties where CAA requires explicit training, including:

(1) Prevention of accidental releases under CAA Section 112(r),

(2) Solid waste incineration under CAA Section 129(d),

and

(3) ODSs under Title VI of CAA.

c. Emission Reduction Credits
(1) CAA Sections 110(a)(2)(A) and 172(c)(6) authorize states or their local air quality districts (AQDs) to establish economic incentive programs (e.g., trading system for emission reduction credits (ERCs)). ERCs are created when equipment that emits pollutants is removed from service or emissions from equipment remaining in service are reduced, provided the emissions reductions would not otherwise be required by CAA or current SIP, and the owner applies under the AQD regulations for credit for the reduction.

(2) Navy installations located in areas where economic incentive programs have been established under CAA can create and trade ERCs. ERCs shall be acquired and disposed by a Navy entity as if they were personal property. No ERCs may be disposed of or traded to non-Navy facilities unless such action has been coordinated with the appropriate REC. For installations being closed or realigned, ERCs shall be utilized and disposed of per reference (aa). For operating installations, ERCs shall be utilized and disposed of per reference (bb) in the following manner:

(a) 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:

1. Future use by that same installation,

2. Transfer to another Navy installation within the same AQD or another AQD that will accept transfer of the credits,

3. Transfer to any DoD installation within the same AQD or another AQD that will accept transfer of the credits, or

4. Transfer to any other federal agency within the same AQD or another AQD that will accept transfer of the credits.

(b) ERCs may be transferred between military services under reference (cc), with or without compensation;

(c) ERCs determined to be surplus to the federal government shall be reported for screening and disposal using the existing personal property disposal mechanisms; or
(d) Installations requiring ERCs shall either purchase ERCs from other sources or obtain emissions offsets from on-installation sources.

d. Air Pollution Emergency Episodes. Where required as part of a SIP approved by EPA per reference (b), Navy shore facilities shall develop, in coordination with the appropriate state authorities, an air pollution emergency episode contingency plan to reduce air emissions during emergency episodes, identifying all actions that can reasonably be taken without compromising essential services and mission responsibilities.

e. Exemptions for Certain Territories. Per CAA Section 325(a)(1), upon petition by the Governor of Guam, American Samoa, U.S. Virgin Islands, or Commonwealth of the Northern Marianas Islands, the EPA Administrator may exempt any person or source in such territory from any CAA requirement other than those provisions concerning HAPs or implementation plans for the achievement of the NAAQS. This is also applicable to Navy entities located in American Samoa, U.S. Virgin Islands, or Commonwealth of the Northern Marianas Islands. After being petitioned by the Governor, 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.

f. Federal Contractor Restrictions. No Navy entity may enter into a contract with any person convicted of a criminal offense under 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.

22-4 Responsibilities

22-4.1. OPNAV (N45) shall:

a. Coordinate the overall implementation of CAA requirements and chair the Navy CAA Steering Committee;

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 Office of Assistant General Counsel (Energy, Installations, and Environment) (OAGC(EI&E));

e. Review all requests for waivers (refer to section 22-3.6.i) to the requirements of ODS sections of this chapter and issue determinations as appropriate;

f. Provide oversight of the ODS reserve, control access through an AUL, and authorize any supportable unplanned use approved per reference (u);

g. Compile BSO data on ODS reserve requirements and identify any shortfalls;

h. Review, in coordination with the cognizant OPNAV organizations in charge of activities that emit reportable GHG per reference (n), activities such as personnel travel and commuting, emission of HFC gases, waste disposal, operational and shore energy usage, and the annual GHG emissions inventories prepared by COMNAVFACENGCOM and CNIC per section 22-4.6.k; and

i. Submit the annual Navy GHG Emissions Inventory in compliance with reference (n) to Deputy Assistant Secretary of the Navy (Environment) (DASN(Environment)) and DASN(Energy).

22-4.2. BSOs shall:

a. Implement the policies and procedures of this chapter;

b. Ensure activities under their command comply with current federal, state, interstate, and local air pollution control requirements;

c. Include requests for resources to meet air pollution control requirements in program objectives memorandum and budget submissions;

d. Ensure activities execute funds to meet mandatory requirements of CAA;

e. Revise preventive and corrective maintenance procedures, for which they are the cognizant activity, to incorporate the use of ODS recovery and recycling units;

f. Revise military specifications and manuals, for which they are the cognizant activity, to reduce or eliminate
references to the use of ODSs, closely coordinating with other
BSOs and systems commands, as appropriate, for cross-cutting
requirements;

g. Ensure all field activities meet requirements for
elimination of ODS equipment;

h. Review all requests from subordinate activities for
waivers (refer to section 22-3.6.i) to the requirements of the
ODS sections of this chapter and forward recommendations to
OPNAV (N45); and

i. Assign a representative to the Navy CAA Steering
Committee and participate in meetings and activities of the
committee.

22-4.3. All Navy system commands shall:

a. Ensure procurement and or leasing of non-tactical or
non-deployable commercial vehicles, equipment, and vessels which
are not covered under a national security exemption comply with
applicable federal and state standards and regulations in effect
at the location where the equipment will be placed into service;

b. Ensure all procured tactical or deployable vehicles,
equipment, and vessels, when required, are appropriately covered
under a national security exemption per section 22-3.4.a and
assigned the appropriate demilitarization code to prevent their
sale to the public as a serviceable engine; and

c. Ensure all new acquisitions and or retrofitting of both
mobile and stationary sources (e.g., facilities, equipment,
engines, vehicles) are made per chapter 11 (Environmental
Readiness in the Acquisition Process) to ensure compliance with
all applicable emission standards and operational requirements
under CAA.

22-4.4. COMNAVSEASYSCOM shall:

a. Maintain the Navy Shipboard Environmental Information
Clearinghouse for use by all Navy activities;

b. Manage the conversion of Navy shipboard HVAC&R systems;

c. Monitor the drawdown of Navy's reserve of ODSs and
provide quarterly reports of the status of the ODS reserve to
OPNAV (N45). If the actual rate of drawdown varies from
predicted rates, develop corrective action plans, fully coordinate them with the appropriate echelon 2 commands, and provide recommended corrective actions to OPNAV (N45);)

d. 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 OPNAV (N45);

e. Revise procurement guidance for shipboard galley equipment to include only equipment that meets the requirements of section 35-3.13.c;

f. Ensure miscellaneous COMNAVSEASYSCOM-owned 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 administrative additions, deletions, or changes to the AULs for the ODS reserve for all shipboard mission critical applications;

h. Maintain the ODS reserve AUL as directed by OPNAV (N45) and ensure administrative changes to planned users are made as requested by Commander, Naval Air Systems Command (COMNAVAIRSYSCOM); Commander, Military Sealift Command (COMSC); and COMNAVSUPSYSCOM. If a request involves an unplanned use, ensure the requesting activity has complied with the procedures contained in reference (u); and

i. Review and approve requests from shore facilities for thinning marine coatings per section 22-3.3.b.2.a.

22-4.5. COMNAVSUPSYSCOM shall:

a. Include language in marine coating procurement contracts that requires suppliers to provide a batch certification that demonstrates compliance with the applicable VOHAP limit given in Table 2 of subpart II of reference (g);

b. Serve as the Navy liaison with DLA on matters pertaining to the establishment, maintenance, operation, and funding, as appropriate, of the ODS reserve;

c. Revise, as necessary, procurement instructions and guidance to include additional ODSs and ODSs replacements as they are regulated by EPA;
d. Assist echelon 2 commands with the ODS recycling and reclamation program;

e. 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;

f. Provide monthly reports of ODS requisitions as compiled by Navy Inventory Control Point, Mechanicsburg to COMNAVSEASYSCOM for incorporation into the ODS reserve monitoring system; and

g. Review and approve requests for administrative additions, deletions, or changes to the ODS reserve AUL for all logistics distribution activities in support of mission critical applications.

22-4.6. COMNAVFACENGCOM in coordination with CNIC 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 applicable permit requirements, obtain permit data, complete permit applications and renewals, and determine and implement requirements for mobile source controls;

c. Develop and provide to activity COs required air permit applications or renewals for all construction projects. For military construction-funded air projects, pay related fees from the funds appropriated and budgeted for the projects, which include initial source testing for startup of facilities and initial operating permits;

d. Identify appropriate emissions offsets, where required for new construction, and prepare and coordinate projects to implement offset requirements;

e. Identify compliance requirements for new construction by coordinating new projects or modifications with appropriate state, local, and or EPA regional offices and the affected facility;
f. Provide Navywide coordination and technical support for compliance with CAA Title II requirements applicable to Navy's vehicle fleets;

g. Assist Navy vehicle fleets in I/M testing;

h. Maintain Navywide information on the location and physical characteristics of Navy stationary sources, including key features of variances and delay compliance orders;

i. Develop and revise, as necessary, guidance for shore activities on ODS alternatives for HVAC&R equipment and fire protection systems;

j. Provide technical support to shore activities for replacement of ODS; and

k. Prepare annual Navy energy and GHG emissions inventories required by reference (n) and submit them to OPNAV (N45) for review and subsequent submission to DASN(E) and DASN(Energy).

22-4.7. COMNAVAIRSYSCOM shall:

a. Monitor the drawdown of the COMNAVAIRSYSCOM portion of the ODS reserve and develop any required corrective actions in cooperation with OPNAV (N45), COMNAVSEASYSCOM, 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 OPNAV (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 OPNAV (N45); and

d. Review and approve requests for administrative additions, deletions, or changes to the ODS reserve AUL for all aviation mission critical applications.

22-4.8. COMSC shall:

a. Monitor the drawdown of the MSC portion of the ODS reserve and develop any required corrective actions in cooperation with OPNAV (N45), COMNAVSEASYSCOM, 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 OPNAV (N45);

c. Identify and address ODS program, technical, and supportability issues related to COMSC operations and coordinate solutions with appropriate echelon 2 commands and OPNAV (N45);

d. Revise procurement guidance for shipboard galley equipment to include only equipment that meets the requirements of section 35-3.13.c;

e. Manage the conversion of shipboard HVAC&R systems on MSC 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; and

g. Review and approve requests for administrative additions, deletions, or changes to the AUL for the ODS reserve for all sealift mission critical applications.

22-4.9. Chief, Bureau of Medicine and Surgery (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 (x) provides guidance regarding procedures for requesting health hazard assessments.

22-4.10. Naval Education and Training Command (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 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 (q) as a condition for graduation; and

f. Manage Navy's refrigerant technician training and certification program and ensure compliance with all reporting and recordkeeping requirements as specified in subpart F, appendix D of reference (q), including the submission of semi-annual certification reports to EPA headquarters and maintenance of technician certification records to allow issuing of replacement certification cards to technicians whose cards have been lost or stolen.

22-4.11. 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 to eliminate the use of ODSs;

b. In coordination with OPNAV (N45), COMNAVSEASYSCOM, COMNAVAIRSYSCOM, and MSC, 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 HVAC&R equipment leakage rates as described in section 35-3.13.a.5; and

e. Ensure type commanders manage existing funds to replace shipboard galley equipment as described in section 35-3.13.c.

22-4.12. RECs shall:

a. Coordinate input and comments on all applicable CAA requirements in their area of responsibility;

b. Coordinate ERC trading among Navy or other service facilities;
c. Notify OPNAV (N45) of any significant or precedent-setting state or local regulatory actions with the potential to impact Navy operations;

d. Perform the functions of the Navy air pollution episode coordinator within air quality control regions, or portions thereof, under their jurisdiction. Air pollution episode coordinators shall ensure 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; and

e. Assign a representative to the Navy CAA Steering Committee and participate in meetings and activities of the committee.

22-4.13. Region commanders and commanding officers (COs) of shore installations shall:

a. Comply with the applicable substantive and procedural federal, state, local, and regional clean air laws, E.O.s, regulations, and permits;

b. Designate, in writing, a responsible official for preparation, review, and signature of required permit applications. 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 periodically certify ongoing compliance with all permit provisions once a permit is issued. The responsible official could be either the CO of the Navy installation or the Navy region commander having responsibility for the overall operation of the principal geographic unit of Navy where the installation is located;

c. Implement appropriate ODS procurement guidance as established by COMNAVSUPSYSCOM, COMNAVFACENGCOM, CNIC, and other echelon 2 commands; and establish requisition procedures to ensure ODS reserve material is used only for prescribed mission critical applications;

d. Ensure ODSs are included in the HM AUL;

e. Establish practices and procedures internally to reduce emissions of ODSs as much as possible;
f. Provide resources (e.g., tuition, travel, per diem) for training refrigerant and halon technicians on ODS emission reduction, recovery, and recycling equipment and ensure compliance with applicable technician certification requirements; and

g. Submit requests for waivers to any of the requirements of section 22-3.6.i via the chain of command to OPNAV (N45). Statutory requirements may not be waived.

22-4.14. COs ashore shall:

a. Ensure all non-mission critical ODS equipment is managed per section 22-3.6.c and conversions and replacements are implemented per said section and CNO waivers where applicable;

b. Identify and submit environmental compliance projects, per chapter 1 (Organization and Coordination) and chapter 2 (Funding), required to bring air sources into compliance;

c. Budget sufficient resources to maintain and demonstrate compliance, including all routine air monitoring and scheduled sampling or testing;

d. Assure CAA General Conformity Rule requirements are satisfied for all Navy actions on the installation;

e. Sign all permit applications and compliance statements for operations conducted on the installation unless multi-installation permits are to be signed by a higher authority;

f. Develop specific environmental MOAs between host commands and tenant commands per chapter 1 (Organization and Coordination) to ensure tenants comply with all CAA requirements;

g. 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-military construction projects. Similarly, sign applications and pay related fees associated with operating permits and variances to temporarily operate sources out of compliance with emission limitations;
h. Notify state and local authorities to conform with permit requirements of all instances of noncompliance;

i. Report all notices of violation and penalty assessments, and consult with counsel as appropriate, per the requirements of chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations);

j. As part of the environmental management system processes established in chapter 17 (Environmental Management Systems), survey emission sources to identify potential reductions of emissions;

k. Report potential ERC sources to the REC;

l. Submit, via the chain of command to OPNAV (N45), all instances in which compliance with fuel standards are impractical, such as the use of ultralow sulfur fuels in deployable and or tactical equipment;

m. 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;

n. Ensure the development of air episode plans as required and provide copies of plans to the REC;

o. 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;

p. Ensure motor vehicles and other mobile sources comply with applicable emission standards and other requirements;

q. Develop and implement transportation control measures as required by the SIP;

r. 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 60 or more days per year;

s. Ensure 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;

\[ t. \] Implement and maintain proper adjustments in stationary heating and power plant operations to reduce total emissions and optimize energy efficiency. Substantial fuel savings can also result from proper combustion operations and combustion air monitoring;

\[ u. \] Ensure personnel are properly trained as required by CAA;

\[ v. \] If required, develop, update, and submit a RMP to EPA per section 22-3.3.b.3 and coordinate its development and or updates with the Navy on-scene coordinator (NOSC); and

\[ w. \] Notify the NOSC of any accidental releases of EPA-regulated substances if required by chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response).

22-5 Definitions

22-5.1. Air Pollution Emergency Episodes. Air pollution emergency episodes exist when the accumulation of air pollutants in any place are attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of individuals.

22-5.2. Aircraft Engine. An aircraft engine is a propulsion engine which is installed in or which is manufactured for installation in an aircraft.

22-5.3. Alternative Fuels. Motor vehicle emission regulations (reference (dd)) define "alternative fuels" as any fuel other than gasoline and diesel fuels, such as methanol, ethanol, and gaseous fuels. "Alternative Fuel Transportation Program" (reference (ee)) defines 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 biodiesel); electricity; and other substantially non-petroleum based fuels.

22-5.4. Appliance. An appliance is any device which contains and uses a refrigerant and which is used for household,
industrial, or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.

22-5.5. Appropriate Technical Representative. An appropriate technical representative is an individual (also referred to as approved technical representative) who has sufficient technical experience and knowledge to provide a competent certification.

22-5.6. Area Source. Area source only applies to sources of regulated HAPs and shall have the same meaning as such term has under CAA Section 122(a).

22-5.7. Attainment Area. An attainment area is an area that meets the NAAQS.

22-5.8. Best Available Control Measures. BACM are emission control measures that achieve the greatest possible reduction in particulate matter emissions.

22-5.9. Best Available Control Technology. BACT is 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.

22-5.10. Clean Alternative Fuels. Clean alternative fuels are any fuels (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 meet the requirements and emission standards of CAA.

22-5.11. Clean Fuel Vehicle. A clean fuel vehicle is any vehicle in a class or category of vehicles which has been certified to meet the clean fuel vehicle standards applicable under CAA Title II for that class or category.

22-5.12. Commercial Motor Vehicles, Equipment, or Vessels. Commercial motor vehicles, equipment, or vessels are vehicles, equipment, and vessels which are substantially similar to commercial products that are available for sale to the general public.

22-5.13. Covered Area. For purposes of CAA clean fuel fleet requirements, a covered area is one designated as serious,
severe, or extreme for ozone or serious for carbon monoxide, with a 1980 census population of 250,000 or more.

22-5.14. **Criteria Pollutants.** Criteria pollutants are the following six common air pollutants for which CAA has established NAAQS: ozone, carbon monoxide, PM regulated as PM10 (10 microns or smaller) and PM2.5 (2.5 microns or smaller), sulfur dioxide, nitrogen dioxide, and lead. EPA calls these pollutants "criteria" air pollutants because they are regulated by developing human health-based and or environmentally-based criteria (science-based guidelines) for setting permissible levels.

22-5.15. **Federal Implementation Plan.** A FIP is 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.

22-5.16. **Greenhouse Gases.** GHGs are CO₂, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons, and other gases meeting the definition of fluorinated GHGs as defined in section 6 of reference (m).

22-5.17. **Maintenance Area.** A maintenance area is 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 per CAA Section 175A to ensure continued attainment.

22-5.18. **Major Source.** A major source is 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 CAA. The term does not include motor vehicles or nonroad vehicles subject to regulation under CAA Title II.

22-5.19. **Marine Engine.** A marine engine is a nonroad engine 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.

22-5.20. **Maximum Achievable Control Technology.** MACT is emissions control technology that achieves the maximum emission
reduction as determined using criteria consistent with CAA Section 112(d)(3). MACT is applicable only to those pollutants listed as HAPs under CAA Section 112.

22-5.21. Mission Critical Application. Mission critical applications are uses of ODSs as determined by CNO and defined in section 22-3.6.b.

22-5.22. Motor Vehicle. A motor vehicle is any self-propelled vehicle designed for transporting persons or property on a street or highway.

22-5.23. National Ambient Air Quality Standards. NAAQS are air quality standards established by EPA for six criteria pollutants to provide an adequate margin of safety in protecting the general health and welfare of the public.

22-5.24. National Emissions Standards for Hazardous Air Pollutants. NESHAPs are standards established for categories of stationary sources that emit one or more of the HAPs listed under CAA Section 112.

22-5.25. New Source Performance Standards. NSPS are 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.

22-5.26. New Source Review. The NSR is a 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, PSD for major stationary sources in attainment and maintenance areas, and minor NSR for non-major projects in all areas. NSR programs are typically implemented by the states.

22-5.27. Nonattainment Area. A nonattainment area is 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.

22-5.28. Nonroad Engine. A nonroad engine is any internal combustion engine: (a) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (e.g., garden tractors, off-highway mobile cranes, bulldozers); or (b) in or on a piece of equipment that is intended to be propelled while performing its function (e.g., lawnmowers, string trimmers); or (c) that,
by itself, 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, dollies, trailers, or platforms. Nonroad engines do not include engines in highway vehicles, aircraft, and those specifically excluded in a particular regulation.

22-5.29. Nonroad Vehicle. A nonroad vehicle is a vehicle powered by a nonroad engine that is not a motor vehicle or a vehicle used solely for competition.

22-5.30. Offsets. Offsets are emission reductions obtained from one source to compensate for increased emissions from another.

22-5.31. Oxygenated Gasoline. Oxygenated gasoline is gasoline blended with additives to increase the oxygen content.

22-5.32. Ozone. The major constituent of "smog," ozone is formed when VOCs and nitrogen oxide 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.

22-5.33. ODS Reserve. The ODS reserve is a supply of selected Class I ODS substances and HCFC-22 to support mission critical applications as defined in section 22-3.6.b. The ODS reserve is located at Defense Supply Center, Richmond, Virginia and was sized to meet all known mission critical applications when established.

22-5.34. Ozone-Depleting Substances. ODSs are any chemical listed as a Class I or Class II substance in CAA Section 602.

22-5.35. Particulate Matter. PM are criteria air pollutants that include dust, soot, and other small, solid materials that are released into and are transported by the air. PM10 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.
22-5.36. **Planned Use.** Planned use is a mission critical application as defined in section 22-3.6.b that uses Class I ODSs and was identified and quantified to size the ODS reserve.

22-5.37. **Prevention of Significant Deterioration Program.** The PSD Program is a federal permit program for reviewing new major stationary sources and modifications to existing major stationary sources located in attainment and maintenance areas prior to construction. The program is typically implemented by the states.

22-5.38. **Reasonably Available Control Technology.** RACT is 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.

22-5.39. **Recovery.** Recovery is the removal and containment (or capture) of any ODS in any condition from a system without testing or processing.

22-5.40. **Recycling.** Recycling is 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.

22-5.41. **Reformulated Gasoline.** Reformulated gasoline is gasoline which has undergone special distillation processes to meet performance requirements for nitrogen oxide emissions, oxygen content, benzene, heavy metals, VOCs, and toxic air pollutants.

22-5.42. **Refrigerant.** A refrigerant is any substance consisting in part or whole of a Class I or Class II ODS used for heat transfer purposes and provides a cooling effect.

22-5.43. **Senior Acquisition Official.** An SAO is an official at a level no lower than a general or flag officer or member of the senior executive service within the requiring activity or the requiring activity chain of command.

22-5.44. **Small Appliance.** A small appliance is any appliance that is fully manufactured, charged, and hermetically sealed in a factory with 5 pounds or less of a Class I or Class II substance used as a refrigerant, including, but not limited to,
refrigerators and freezers (designed for home, commercial, or consumer use), medical or industrial research refrigeration equipment, room air conditioners (including window air conditioners and packaged terminal air heat pumps), dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.

22-5.45. State Implementation Plan. A SIP is 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 CAA, EPA maintains strong oversight in this process.

22-5.46. Stationary Source. A stationary source is 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 or stand.

22-5.47. Substitute. A substitute is any chemical or product, whether existing or new, that is used as a replacement for a Class I or II ODS.

22-5.48. Synthetic Minor Source. A synthetic minor source is 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.

22-5.49. Title V Operating Permit. A Title V operating permit is a federally enforceable document issued by the states (or in certain situations by EPA) to major sources and certain non-major sources of air pollution that defines emission standards, operational procedures, and all obligations of the source under CAA.

22-5.50. Unclassifiable Area. An unclassifiable area is an area that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for the pollutant.

22-5.51. Unplanned Use. Unplanned use is the use of Class I ODSs from the ODS reserve that was not planned for when the reserve was established and sized to support those mission critical applications as defined in section 22-3.6.b.
22-5.52. **Volatile Organic Compounds.** VOCs are any compound of carbon that participates in atmospheric photochemical reactions unless specifically excluded in reference (b). Some of the carbon compounds excluded from the definition of VOC are carbon monoxide, CO$_2$, 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. The current version of reference (b) includes a complete list of exclusions.
CHAPTER 23

HAZARDOUS MATERIALS MANAGEMENT ASHORE

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23-1 Scope. This chapter identifies requirements and
responsibilities for hazardous material control and management
(HMC&M) at all Navy shore installations. Any other hazard-
specific guidance (instructions or directives) takes precedence
over this manual for control purposes of hazardous material (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.

23-1.1. Related Chapters. Chapter 11 (Environmental Readiness
in the Acquisition Process) provides policy guidance regarding HM
management in acquisition programs. Chapter 17 (Environmental
Management Systems) contains information on green procurement
program (GPP) initiatives that can reduce procurement of HM.
Chapter 26 (Procedures for Implementing the Emergency Planning
and Community Right-to-Know Act) defines Emergency Planning and
Community Right-to-Know Act (EPCRA) reporting requirements supported by data generated via HMC&M processes. Chapter 27 (Hazardous Waste Management Ashore) provides policy guidance for minimization of hazardous waste (HW) generation, which includes effective HMC&M. Chapter 31 (Storage Tanks) provides policy guidance for management of storage tanks, including those containing HM. Chapter 34 (Overseas Environmental Compliance Ashore) provides HMC&M policy guidance with respect to Navy commands outside the United States. Chapter 35 (Environmental Compliance Afloat) defines requirements and responsibilities for the management of HM aboard Navy ships. Chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) covers procedures for oil and hazardous substance spills, including HM spills.

23-1.2. References

(a) 29 CFR 1910.1200

(b) OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual

(c) NAVSUP Publication 722, Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP) Manual

(d) Navy Enterprise Resource Planning (ERP) Program Operational Requirements Document (ORD) under Joint Requirements and Oversight Council (JROC) Memorandum 152-04 of 12 Aug 2004 (NOTAL)

(e) CNO ltr 5090 Ser N4/4U745710 of 4 Feb 2004

(f) ASN(RDA) Memorandum of 19 Jan 1995, National Aerospace Standard 411

(g) DoD Instruction 5000.02 of 8 December 2008

(h) Navy Safety and Occupational Health Navy Training System Plan (SOH NTSP), May 2009

(i) Navy Environmental Readiness Training Program Navy Training System Plan (NERTP-NTSP) (NOTAL)

(j) NAVSUP Publication 723, Navy Inventory Integrity Procedures
23-2 Legislation

a. The following legislation contains provisions that pertain to HM labeling, disposal, training, reporting, and management:

(1) EPCRA,

(2) Occupational Safety and Health Act, and

(3) Pollution Prevention Act (PPA).

b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, the Clean Air Act (CAA); Clean Water Act; Federal Insecticide, Fungicide, and Rodenticide Act; Hazardous Materials Transportation Act; and Toxic Substances Control Act all contain provisions that impact HM management practices.

23-3 Requirements. HM required in support of Navy's mission shall be packaged, labeled, handled, stored, transported, issued, tracked, used, and disposed of in a manner compliant with Occupational Safety and Health Administration (OSHA) requirements, and Department of Transportation (DOT), EPCRA, PPA, Resource Conservation and Recovery Act (RCRA), CAA, and other applicable laws, E.O.s, and regulations. Effective HMC&M is critical to achieving pollution prevention (P2) goals by minimizing HW generation and subsequent disposal costs. It is Navy policy to employ a comprehensive HMC&M approach to meet the various regulatory requirements imposed on the use of HM.

23-3.1. Material Safety Data Sheets. Installations and commands shall maintain readily-accessible OSHA Form 174, OSHA Material Safety Data Sheet (MSDS) (electronic or hardcopy) or equivalent
form) for all HM in the workplace per reference (a) and for all HM issued per reference (b). Department of Defense (DoD) maintains a central repository of MSDSs via the Hazardous Material Information Resource System (HMIRS) that may be used to retrieve MSDS copies when a manufacturer's original MSDS is not available. Reference (b) provides detailed policy on MSDS management and additional detail regarding Navy's implementation and operation of HMIRS.

23-3.2. Product Labeling. Reference (a) requires all HM to be labeled with the product's name, identity of hazardous constituents, and appropriate warnings. The original OSHA hazard communication (HAZCOM)-compliant manufacturer's label meets this requirement and shall not be replaced by locally produced labels except as detailed in this paragraph. In the absence of the original label, or upon repackaging of HM, copies of the original label, DD Form 2521 Hazardous Chemical Warning Label (8-1/2 X 11) or DD Form 2522 Hazardous Chemical Warning Label (4 X 6), or other labels developed by the facility that convey the information required by reference (a) shall be used. HAZCOM-compliant labeling is not a substitute for any labeling required by the Environmental Protection Agency; Consumer Product Safety Commission; Food and Drug Administration; Bureau of Alcohol, Tobacco, and Firearms; or DOT. National Fire Protection Association labels used alone or without a HAZCOM-compliant label are not adequate to meet the HAZCOM standard. Consult reference (b) for additional policy on HM labeling.

23-3.3. Authorized Use Lists. It is Navy policy to restrict HM procurement, storage, issue, and use via authorized use lists (AULs) based on validated need and trained and qualified users. This serves to promote personnel safety, reduce potential environmental impacts, and minimize costs associated with the use of HM and disposal of associated HW. AUL approval is required prior to acquiring or adding any new HM products to the installation. AULs shall be managed and maintained per reference (b).

23-3.4. Consolidated Hazardous Material Reutilization and Inventory Management Program. The Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP) supports OSHA HAZCOM and RCRA waste minimization requirements, and uses government designated systems (GDS) as the primary source of data necessary to produce mandatory EPCRA and CAA reports. Under CHRIMP, all HM shall be centrally controlled via a tracking system and container serialization when issued to work centers on an as-needed basis per the AUL. Manufacturers'
MSDSs are provided at the time of issue. Units of issue shall be modified to prevent excess HM disposal by the work center. Serviceable, partially used, or excess HM is returned for potential redistribution, reuse, recycling, or as a last resort for disposal. CHRIMP also supports shelf-life management and extension and transfer of unused new stock to other Navy work centers or DoD commands in lieu of disposal. In addition to its integral role supporting compliance with OSHA, EPCRA, CAA, and other applicable laws, CHRIMP is a key element of the Navy's P2 program that significantly reduces HW disposal costs. It is Navy policy to:

a. Implement CHRIMP at all Navy shore installations and commands per guidance in reference (c);

b. Utilize GDS developed with standardized software and data sets for CHRIMP operations. Navy Enterprise Resource Planning Single Supply Solution (ERP SSS) with Environmental Health and Safety (EHS) functionality is the logistics program of record for Navy HMC&M and the only authorized GDS for Navy managed CHRIMP operations. Installations using previously authorized systems shall convert to the Navy ERP SSS with EHS functionality per reference (d). Navy commands with externally managed HM operations (e.g., Defense Logistics Agency-managed) shall conform to CHRIMP business rules. Information technology systems serving these commands must support EHS data management equivalent to Navy ERP SSS with EHS functionality; and

c. Regionalize CHRIMP operations per reference (e) so serviceable used or excess HM will be utilized to the maximum extent feasible.

23-3.5. Other Hazardous Material Control & Management Policies. Navy has adopted additional HMC&M policies that support RCRA waste minimization requirements, PPA, and GPP requirements. It is Navy policy to:

a. Consider "green" products first in all procurements per Department of the Navy GPP requirements detailed in chapter 17 (Environmental Management Systems);

b. Identify, reduce, and eliminate HM requirements associated with weapon systems via reference (f) as early as possible in the systems acquisition process per requirements detailed in reference (g) and chapter 11 (Environmental Readiness in the Acquisition Process);
c. Reduce or eliminate requirements for HM in technical references consistent with safety and reliability requirements, including weapon system maintenance record cards, technical manuals, specifications, standards, and local process documents. HM citations in such reference documents shall be screened during initial drafting of new documents and reviewed for potential reduction or elimination of HM during the routine revision of existing documents; and

d. Validate HM requirements before introducing new HM into the supply system. A valid requirement may be substantiated by the original equipment manufacturer documentation, technical manual, or allowance parts list that specifies HM. An environment, safety, and occupational health review shall be performed per reference (b) and GPP requirements in chapter 17 (Environmental Management Systems) to ensure the least hazardous, environmentally-preferred or "green" product is stocked for new applications.

23-3.6. Training Requirements. Personnel involved in HM management shall receive appropriate, job-specific education, experience, and training to perform their assigned tasks per references (h) and (i). Depending on the specific job duties, this may include HAZCOM training, DOT 40 CFR Part 172 HM training, and Hazardous Waste Operations and Emergency Response (HAZWOPER) training. Additional Navy-specific training requirements are covered in chapters 6 and 7 of reference (b).

23-4 Responsibilities

23-4.1. The Office of the Chief of Naval Operations, Energy and Environmental Readiness Division shall actively participate with industry and other services through joint initiatives to eliminate or reduce shared HM procurement, use, and requirements.

23-4.2. Budget submitting offices (BSOs) shall:

a. Ensure their commands and subordinate commands assist Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) in implementing HMC&M practices including MSDS management, AUL management, product labeling, shelf-life management, regional CHRIMP implementation, and conversion to the Navy ERP SSS with EHS functionality;

b. Ensure their commands and subordinate commands comply with Navy HM reporting requirements and validate new HM
requirements before requesting their addition to the supply system;

c. Manage technical reference documents under their cognizance to ensure new documents minimize HM requirements and existing documents are updated to reflect the least hazardous technically acceptable materials;

d. Ensure new systems, processes, and operations incorporate the least hazardous technically acceptable materials; and

e. Develop and implement HM elimination or substitution processes that replace HM in existing systems, processes, and operations with the least hazardous technically acceptable materials.

23-4.3. COMNAVSUPSYSCOM shall:

a. Serve as:

(1) Navy's lead organization with technical and management authority and accountability for all logistics support functions associated with P2 and HMC&M programs including regional CHRIMP implementation and operations ashore;

(2) Logistics automatic identification technology and information technology functional area manager for HM tracking systems; and

(3) BSO for planning, programming, budgeting, and allocation of funds to support HMC&M program requirements, including regional CHRIMP implementation and operation ashore.

b. Implement and sustain standardized regional CHRIMP procedures for total asset visibility and life-cycle management of HM products and services at all Navy installations ashore using the Navy ERP SSS with EHS functionality;

c. Develop and maintain metrics to assess the effectiveness of regional CHRIMPs using criterion outlined in section 23-3.4. Monthly CHRIMP metrics reports will be provided to region commanders and commanding officers (COs) of Navy installations in support of environmental reporting requirements and environmental quality assessment audits;

d. In conjunction with Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM), ensure the Navy ERP SSS
with EHS functionality provides sufficient product hazard data (PHD) to support the full spectrum of EPCRA; CAA; environmental, safety, and occupational health (ESOH); and Secretary of Navy GPP metrics and reporting requirements;

e. Develop, maintain, and manage standardized DoD logistics procedures and EHS data associated with the Navy's HMC&M program. This includes the Navy ERP SSS with EHS functionality material master database, the master AUL that identifies and quantifies authorized HM and approved users by installation and work center, and GPP products available in lieu of HM;

f. Serve as Navy focal point for PHD associated with installation EPCRA and CAA reporting;

g. Coordinate periodic review of standard ESOH data elements with appropriate stakeholders in the environmental, safety, and technical communities;

h. Implement policy guidance and procedures established by references (j), (k), and (l) for storage and handling of HM and shelf-life management of all HM products to include receipt, storage, surveillance, inspection and testing, issue, and disposal. A reliable and accurate audit trail will be maintained in the Navy ERP SSS with EHS functionality for all HM products including HM located in work centers;

i. Integrate GPP practices guided by reference (m) into the HMC&M program in collaboration with appropriate stakeholders in the environmental, safety, and technical communities;

j. Screen requests for addition of new HM to the supply system to ensure a valid requirement exists, an alternative GPP product is not available, and the new item is not duplicative of an existing catalogued national stock number (NSN) for HM products;

k. Support the Office of the Chief of Naval Operations, Special Assistant for Safety Matters Navy Safety and Occupational Health (SOH) Program requirements in reference (b) and serve as a member of the SOH Navy Training System Plan Working Group to develop and improve formal training capabilities for HMC&M-related functions; and

l. Coordinate with Naval Safety and Environmental Training Center, Navy Education and Training Command, and Navy Supply Corps School and Center for Service Support Newport, RI for
development and remote or electronic delivery of computer-based training or Navy Knowledge Online Web-based training.

23-4.4. COMNAVFACENGCOM shall:

a. Assist COMNAVSUPSYSCOM in implementing HMC&M practices to ensure the full spectrum of OSHA and environmental requirements associated with HM management are met, and

b. Coordinate with COMNAVSUPSYSCOM to ensure the Navy ERP SSS with EHS functionality is implemented in a manner that supports the full spectrum of EPCRA and CAA reporting requirements.

23-4.5. Region commanders and COs of Navy installations shall:

a. Assist COMNAVSUPSYSCOM in implementing HMC&M program business practices including the following minimum elements of regional CHRIMP compliance:

(1) A centralized regional CHRIMP center under the consolidated leadership and management of COMNAVSUPSYSCOM enterprise using Navy ERP SSS with EHS functionality to serve as the single point of entry for all HM requirements;

(2) Full participation by every command, department, work center, and tenant within the physical and jurisdictional boundaries of the region commander;

(3) Proactive chain-of-command support in the form of directives, instructions, training, staffing, and funding resources;

(4) Reduction of procurement, storage, and use of HM products by work center personnel to the minimum quantity necessary to perform assigned tasks or 7 days supply, whichever is less; and

(5) Accountability of all HM and containers issued to work centers.

b. Ensure procedures are in place to restrict local purchases of HM to only those items unavailable from the federal supply systems necessary to support mission requirements per the DoD Uniform Material Movement and Issue Priority System;
c. If an existing HM NSN item is not acceptable upon receipt, submit a product quality deficiency report to the regional CHRIMP center;

d. Develop, implement, and measure GPP plans to evaluate environmentally friendly products and services (including service contracts) as first choice alternatives to toxic chemicals (TCs); and

e. Identify GPP alternative products to the regional CHRIMP center during the EHS review process to facilitate AUL revisions in the Navy ERP SSS with EHS functionality material master database.

23-5 Definitions

23-5.1. Authorized Use List. The AUL is the list of all HM products approved by ESOH representatives for use that are necessary to support the requirements of a region, command, facility, or installation.

23-5.2. Consolidated Hazardous Material Reutilization and Inventory Management Program. CHRIMP is Navy's standardized methodology to achieve life-cycle HMC&M and total ownership cost reductions for HM products and services. CHRIMP establishes a centralized approach to HMC&M that facilitates compliance with CAA, OSHA, EPCRA, PPA, RCRA, and other environmental laws, E.O.s, and regulations. CHRIMP also reduces total ownership cost by efficiently managing HM procured, stocked, distributed, and eventually disposed of as waste. CHRIMP is widely recognized for generating significant savings in HW disposal cost avoidance.

23-5.3. Excess Hazardous Material. Excess HM is HM for which there is no further immediate requirement by the command or installation in possession of the material. Such materials will be returned to the regional CHRIMP center for redistribution to other naval commands or installations.

23-5.4. Hazardous Material. A HM is any material regulated as HM per reference (n); which requires a MSDS per reference (a); 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 HW as defined by subparts A, B, C, and D of reference (o). In general, HM is 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 extremely hazardous substances, hazardous chemicals, hazardous substances, and TCs.

23-5.5. **Material Safety Data Sheet.** An MSDS is an OSHA Form 174 or an equivalent authorized form containing identical data elements used by manufacturers of chemical products to communicate to users the chemical, physical, and hazardous properties of their products.
CHAPTER 24

PESTICIDE COMPLIANCE ASHORE

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24-1  Scope. This chapter provides policy guidance, safety, and compliance requirements relative to the procurement, storage, and use of pesticides at Navy shore installations.

24-1.1. Related Chapters. This chapter is applicable to other chapters in this manual which discuss topics pertinent to
pesticides. Prevention of pollutants in wastewater is discussed in chapter 20 (Clean Water Ashore), management of hazardous waste (HW) is discussed in chapter 27 (Hazardous Waste Management Ashore), policy guidance with respect to installations in foreign countries is discussed in chapter 34 (Overseas Environmental Compliance Ashore), and spill prevention and management is discussed in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response). Reference (a) describes Navy policy with respect to pest management aboard naval vessels.

24-1.2. References

(a) NAVMED P-5010, Preventive Medicine Manual

(b) OPNAVINST 6250.4C (series), Pest Management Programs

(c) DoD Instruction 4150.07 of 29 May 2008

(d) OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual

(e) 29 CFR 1910


(g) 40 CFR 262

(h) 40 CFR 273

(i) 40 CFR 122 and 123

(j) EBUSOPSOFFINST 4200.1, Department of Navy Policies and Procedures for the Operations and Management of the Government Commercial Purchase Card Program

(k) 40 CFR 150-186

(l) CNO ltr 5090 Ser N456M/1U595820 of 10 Jan 2002

(m) DoD 4150.07-M, DoD Pest Management Training: The DoD Plan for the Certification of Pesticide Applicators, December 2008

24-1.3. Applicability. These requirements apply within the United States, its possessions, and its trust territories.
24-2 Legislation

a. The following legislation contains provisions that pertain to pesticide procurement, distribution, and regulation:

(1) Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA);

(2) Federal Water Pollution Control Act; and

(3) Food Quality Protection Act.

b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, several laws including the Comprehensive Environmental Response, Compensation, and Liability Act; Emergency Planning and Community Right-to-Know Act; Endangered Species Act; Federal Facility Compliance Act; and Resource Conservation and Recovery Act all contain provisions that impact the release and disposal of pesticide products, notification of communities in the event of a release, protection of endangered or threatened species from pesticides, and immunity waivers.

24-3 Requirements. Reference (b) 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 Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) and BUMED, which is responsible for disease vector surveillance and control and safety matters. It is unlawful to procure, mix, apply, store, or dispose of any pesticide or container in any manner inconsistent with applicable regulations.

24-3.1 Aerial Application of Pesticides. Prior to execution, plans for aerial operations shall be submitted to the appropriate BUMED (for vector control) or COMNAVFACENGCOM (for non-vector control) pest management consultant (PMC) who shall coordinate National Environmental Policy Act documentation, aerial spray validation, and quality assurance.

24-3.2 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 per the pesticide label directions.
24-3.3. Paints and Coatings Containing Pesticides. Paints containing insecticides shall not be used on Navy property. This policy applies to both interior and exterior paints that contain insecticides intended for application to broad structural surfaces such as walls, ceilings, and siding. It also applies to insecticides formulated and labeled for use as paint additives. Paints containing fungicides as mildew inhibitors may be used when application directions specify no special restrictions due to the fungicide. Approved marine anti-fouling compounds or coatings may be applied to protect surfaces of watercraft. Installations using marine anti-fouling coatings registered by the Environmental Protection Agency (EPA) as pesticides shall comply with state and federal requirements for applicator certification, recordkeeping, management, and control of sandblasting residues and other applicable requirements. Procurement of wood preservatives registered as pesticides shall be approved in advance by the responsible pest management professional. Use of wood preservatives shall be included in monthly pest control reports.

24-3.4. Records and Recordkeeping

a. Installations, including government-owned, contractor-operated (GOCO) facilities, shall maintain indefinitely daily, comprehensive pest management operation records. Reference (c) describes the tri-service computer recordkeeping and reporting requirements. All Navy installations shall keep and submit records electronically using the COMNAVFACENGCOM PMC prescribed reporting system. Pest management operation records shall be submitted to the COMNAVFACENGCOM PMC monthly, at a minimum. If no pesticides are applied, a negative report should be submitted.

b. 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, contract services, and as part of outleases; land management and forestry programs; morale, welfare, and recreation (MWR); privatization partners (outdoors); tenants; and work performed by installation pest management personnel. Records shall include, at a minimum, the date and type of operation; site description; pest; size of area treated; pesticide applicator's name; and pesticide trade name, active ingredient(s), formulation, quantity, and final concentration applied.
24-3.5. **Pesticide Labels.** Installations shall ensure 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, made available to interested departments (e.g., fire, safety), and provided to the integrated pest management coordinator (IPMC). Label instructions legally apply to all users.

24-3.6. **Material Safety Data Sheet.** A copy of OSHA Form 174 or equivalent form for every pesticide product in the shop inventory shall be available at all pesticide facilities and provided to the IPMC.

24-3.7. **Personal Protective Equipment.** Installations shall provide Navy personnel engaged in pesticide application with appropriate personal protective equipment (PPE) (i.e., face shields, respirators, eye protection, impermeable gloves, and protective clothing). Occupational safety and health standards in references (d) and (e), the MSDS, and pesticide labels establish the requirements for PPE. Installations shall obtain guidance for selection of PPE from the cognizant BUMED industrial hygienist, installation safety manager, or respiratory protection program manager.

24-3.8. **Integrated Pest Management and Pesticide Use Reduction.** Installations shall employ an Integrated Pest Management (IPM) Program that minimizes pesticide use. This policy also pertains to pesticide use by contractors. Further, where additional regulation prevails, Navy shall comply with substantive state and local pesticide regulatory guidance whenever possible. A memorandum of understanding between the Department of Defense (DoD) and a state for the use of pesticides on shore installations may also apply. Pesticide reduction goals are delineated in reference (c).

24-3.9. **Integrated Pest Management Plans.** Installations that conduct pest management operations, whether by in-house personnel or by contract, shall fund, 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). The COMNAVFACENGCOM PMC writes or rewrites the plans on a reimbursable basis. Installations will include the applicable Navy region in the distribution of IPM plans. Because pest management is typically addressed in the integrated natural resources management plan (INRMP), IPM plans shall
reference and implement goals and objectives of the INRMP. IPM plans shall be updated annually by the installation IPMC, approved by the responsible COMNAVFAENGCOM PMC, and revised at least every 5 years, including re-signing of the signature page.

24-3.10. Program Maintenance. Installations shall maintain programs and plans through technical on-site reviews by COMNAVFAENGCOM, performed every 3 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. Technical assist visits may also be performed, upon request, by BUMED PMCs addressing technical matters relating to disease vectors and other medically important pests.

24-3.11. Pesticide Storage and Facility Requirements. Installations shall store all pesticides in an area with sufficient spill containment. Installations shall install powered ventilation providing six changes of air per hour in pesticide storage areas containing pesticides that emit vapors, per reference (f). Pesticide applicators, both contractor and in-house personnel, shall perform all pesticide mixing in an area with adequate spill containment. Contract pesticide applicators may only mix on base if allowed by the contract and if adequate facilities are available. All new pesticide facilities shall undergo installation environmental review. The COMNAVFAENGCOM PMC should be requested during the review process to review plans and make recommendations for design changes to comply with pest control facility requirements. Reference (f) provides detailed information on the design and operation of pesticide facilities and workplace requirements.


   a. Disposal. Stringent regulations govern the disposal of pesticides, their containers, and related wastes. General guidance for HW applies to pesticide waste per references (g) and (h). Pesticide labels list general guidance on the disposal of pesticide containers. The cognizant PMC shall provide guidance for disposal on a case-by-case basis per reference (b).

   b. Spill Management. The installation IPM plan shall address a plan for pesticide spill management, coordinated with the installation's hazardous material and HW programs, and
included in the installation's oil and hazardous substance spill contingency plans. 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 who apply pesticides as a part of their service agreement shall be responsible for providing their own spill kits.

24-3.13. National Pollutant Discharge Elimination System Permits. Installations shall obtain National Pollutant Discharge Elimination System (NPDES) permits for all point source discharges to waters of the U.S. of biological pesticides and chemical pesticides that leave a residue from mosquito and other flying insect pest control, aquatic vegetation and algae control, aquatic nuisance animal control, or forest canopy or other area-wide pest control. Installations that conduct such activities on areas greater than thresholds listed in their respective EPA- or state-issued permit may be required to submit a notice of intent to obtain coverage. Installations will need to ensure contractors are covered under the permit or obtain their own permit if so required by state or EPA regulations. In many cases, installations will be able to have coverage under an EPA- or state-issued general permit. Reference (i) describes the NPDES program.

24-3.14. Wastewater Discharges. The discharge of any wastewater from any pesticide mixing or equipment cleanup area is prohibited. Rinsate from triple rinsed containers shall be applied to the application site per the pesticide label. HW and storage requirements apply per reference (g).

24-3.15. State and Local Requirements. Voluntarily comply with state and local pesticide management laws to the greatest extent practicable when doing so does not adversely affect military operations and missions or homeland security.

24-3.16. Pesticide and Pest Management Services Procurement. A COMNAVFACENGCOM PMC shall approve pesticide and pest management services procurement prior to purchase, except those pesticides used by military family 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 management, non-appropriated fund instrumentalities (MWR services), purchase card users, or any other pest management service provider. Purchase card use shall conform with policies in references (b), (c), and (j) regarding approval of contract scope and pesticide selection, application, and reporting.
24-3.17. Government-Owned, Contractor-Operated Facilities. Where pest management services are required as part of the maintenance management program on GOCO facilities, the Navy plant representative shall:

   a. Report all pesticide use,

   b. Ensure commercial pest control contractors are properly licensed and certified by applicable state agencies, and

   c. Review GOCO pest management programs every 3 years with the assistance of a COMNAVFACENGCOM PMC and with emphasis on the protection of real property and the environment.

24-3.18. Notices of Violation. Refer to chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) for specific Navy policy guidance on what actions should be taken upon receipt of any notice of violation (NOV) of federal, state, or local environmental laws or regulations, or assessment of fines or penalties.

24-3.19. Training Requirements. Personnel involved in pest management shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. COMNAVFACENGCOM-sponsored courses are listed on the Naval Civil Engineer Corps Officers School Web site and also on the Armed Forces Pest Management Board Web site (refer to appendix E (Web Sites) for the Web site addresses). Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

   a. Pest Control Performance Assessment Representatives. Pest control performance assessment representatives (PCPARs) who oversee contracts containing pesticide application shall receive, at a minimum, the following training:

      (1) PCPARs must successfully pass an initial PCPAR training course, and

      (2) PCPARs must maintain this qualification by successfully passing refresher training every 3 years or repeating the initial PCPAR training course.

   b. Integrated Pest Management Coordinators. IPMCs shall receive, at a minimum, the following training:
(1) IPMCs shall be trained in pest management technology at COMNAVFACENGCOM-sponsored courses within 1 year of appointment,

(2) IPMCs must successfully pass the initial PCPAR and IPMC training course (PCPAR plus ½ day following for IPMC-specific training), and

(3) IPMCs must maintain this qualification by successfully passing the refresher training courses sponsored by COMNAVFACENGCOM every 3 years or repeating the initial PCPAR and IPMC training course.

c. Pesticide Applicators

(1) Pesticide applicators shall receive, at a minimum, the following training:

(a) DoD-certified pesticide applicators must successfully pass an initial DoD-certified pesticide applicator training course for the appropriate categories. All in-house pesticide applicators shall be certified within 2 years of their employment;

(b) DoD-certified pesticide applicators must maintain this certification by attending and successfully passing refresher training every 3 years through completion of a COMNAVFACENGCOM or other appropriate military service component sponsored DoD recertification course. Army and Air Force recertification courses also meet this requirement. These alternate courses may be substituted with COMNAVFACENGCOM PMC approval; and

(c) State certified applicators must receive appropriate training for certification and recertification in the appropriate categories from the state where the installation is located.

(2) Federal or state commercial certification is required for all pesticide applicators per reference (k), with the exception of those applying ready-to-use pesticides under an approved self-help program, applying repellents for personal relief, or military family housing residents applying pesticides to their residence for personal relief. DoD- or state-certified pesticide applicators shall perform all pesticide applications
on Navy property (whether performed in-house or by contract) except:

   (a) 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, and

   (b) Uncertified pesticide applicators may apply self-help and personal relief pesticides once the installation IPMC and the regional COMNAVFACENGCOM PMC have approved the self-help program and proposed pesticides.

d. Pest Management Professionals. Pest management professionals are also required to be DoD-certified if they:

   (1) Work as PMCs and make recommendations for the use of pesticides or approve annual pesticide use proposals,

   (2) Approve the aerial application of pesticides on DoD installations,

   (3) Apply pesticides or directly supervise the application of pesticides,

   (4) Conduct demonstrations on the proper use and techniques of pesticide application or supervise such demonstrations, and

   (5) Conduct field research that includes using or supervising the use of pesticides.

e. Pest Management Performance Assessment Representatives. Pest management performance assessment representatives (PMPARs) shall be trained in contract performance, inspection, and pest management.

24-4 Responsibilities

24-4.1. Commander, Navy Installations Command (CNIC) and regions shall ensure adequate funding is available for the commanding officers (COs) of Navy shore installations to properly support their pest management programs.

24-4.2. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM), via its applied biology program, shall:
a. Provide on-site program planning and assistance to Navy shore installations in developing and maintaining IPM programs;

b. Maintain regional training and recertification programs in cooperation with BUMED for civilian applicator personnel and training programs for PMPARs and IPMCs;

c. Maintain a generic performance work statement for pest control services;

d. Provide contractual assistance to shore installations outsourcing commercial pest control services;

e. Provide support, including participation on technical review committees for source selections, which is the preferred acquisition strategy for large or regional pest management contracts;

f. Prepare IPM plans for regions or installations on a reimbursable basis;

g. Ensure outdoor pesticide applications on DoD land by private commercial partners, such as public private venture housing, are in compliance with standards for oversight and reporting delineated in reference (b) and with the lease agreement;

h. Ensure installation pest management programs are reviewed every 3 years;

i. Provide guidance and training on selection, procurement, storage, and use of preservative (pesticide)-treated wood commodities;

j. Cooperate with other organizations on applied research, development, testing, and evaluation (RDT&E) of pesticides; application equipment; and management procedures for applicability to shore installation programs;

k. Provide base realignment and closure support including caretaker IPM plans and specifications for affected shore installations;

l. Coordinate applied biology and pest management oversight with appropriate Navy region commands;
m. Monitor homeland security aspects of pesticides and pesticide dispersal equipment security;

n. Recommend programs, in compliance with reference (1), to remove feral cats and dogs from installations;

o. Assist installations in developing cooperative agreements with county or state mosquito abatement districts and coordinate these services with BUMED. Cooperative agreements with county or state abatement districts are the preferred method for obtaining mosquito control services, when practical; and

p. Provide installations with guidance on EPA notices canceling pesticides or pesticide uses.

24-4.3. 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 IPMC, 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;

c. Coordinate with the cognizant Army veterinarian on food inspections and vector-borne disease threats;

d. Conduct evaluation and testing studies in vector ecology, surveillance, prevention, and control, including ground and aerial dispersal methods, for contingency operations;

e. 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;

f. Provide specialized, area-wide operational services including emergency vector control plans, 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;

g. Define and coordinate RDT&E requirements for vector biology and control;

h. Assist (in collaboration with COMNAVFACENGCOM) the Navy Exchange Services Command and the Defense Commissary Agency in selecting, storing, and displaying pesticides in retail outlets; and

i. Provide an industrial hygienist, where requested, to thoroughly evaluate processes to accurately identify and quantify potential human health hazards due to pest management operations.

24-4.4. COs of Navy 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 IPMC 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, and forest outleasing; purchase card use; self-help; tenant command contracts; retail outlets (Navy exchange and commissary); and outdoor applications by privatization partners. The installation IPMC will work closely with preventive medicine authorities. The responsibilities of the IPCM do not overlap those of the PMPAR, whose responsibility is to oversee the pest management contract operations. PMPAR representatives coordinate with the IPMC if there is a problem or a new product or procedure is requested;

c. Fund, implement, and maintain a written IPM plan outlining IPM strategies and documenting pest management operations;

d. Maintain records of all pest management operations (excluding those used for personal relief) on the installation and electronically submit these data to a COMNAVFACENGCOM PMC monthly, at a minimum;
e. Obtain and comply with applicable permits (e.g., NPDES and depredation permits);

f. Report and manage FIFRA and Clean Water Act NOVs consistent with chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations);

g. Maintain a pesticide authorized use list (AUL) containing pesticides approved by COMNAVFACENGCOM for use by pest management service providers on the installation. Submit requests to add pesticides to the AUL to the COMNAVFACENGCOM PMC. Ensure that only authorized pesticides are used on the installation;

h. Ensure contract specifications and agricultural lease agreements that include the use of pesticides are approved by a COMNAVFACENGCOM PMC prior to advertisement for bid;

i. Ensure an installation IPM plan and program, minimizing pesticide use, is implemented and in compliance with all applicable environmental protection statutes. Significant legislation is included in section 24-2; and

j. Immediately report lost or stolen pesticide dispersal equipment through the chain of command, Federal Bureau of Investigation, and COMNAVFACENGCOM PMC.

24-5 Definitions

24-5.1. Applied Biology Program. The applied biology program is a network of COMNAVFACENGCOM PMCs in the environmental business line that assists Navy and Marine Corps installations with FIFRA and final governing standards-based compliance and provides IPM solutions that protect operations, warfighters, quality of life, property, materiel, and the environment from the adverse effects of living organisms.

24-5.2. Integrated Pest Management. IPM is a planned program incorporating education, continuous monitoring, recordkeeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, materiel, or the environment. IPM uses targeted, sustainable (e.g., 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.
24-5.3. **Integrated Pest Management Coordinator.** The IPMC is the individual officially designated by the CO to coordinate and oversee the installation pest management program and installation IPM plan. IPMCs must be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

24-5.4. **Integrated Pest Management Plan.** An IPM plan is a long-range, well-defined planning and operational document that describes the installation IPM program. Written pest management plans are required as a means of establishing and implementing IPM.

24-5.5. **Material Safety Data Sheet.** A MSDS is an Occupational Safety and Health Administration Form 174 or an equivalent authorized form containing identical data elements used by manufacturers of chemical products to communicate to users the chemical, physical, and hazardous properties of their products.

24-5.6. **Pest.** A pest is 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.

24-5.7. **Pest Management Consultant.** PMCs are degreed technical specialists, such as COMNAVFACENGCOM civilian entomologists (applied biologist) and BUMED-commissioned medical entomologists, who have command program oversight responsibilities and provide guidance and information on the management of pest management programs for commands and installations.

24-5.8. **Pest Management Performance Assessment Representatives.** PMPARs are installation personnel trained in contract performance inspection or quality assurance and pest management, whose duties include surveillance of commercial pest management services to ensure performance complies with contract specifications and legal requirements.

24-5.9. **Pesticide.** A pesticide is any substance or mixture of substances, including biological control agents, which may prevent, destroy, repel, or mitigate pests and is specifically labeled for use by EPA. It also includes any substance or mixture of substances used as a plant regulator, defoliant, desiccant, disinfectant, or biocide. On DoD installations, this does not include disinfectants or biocides.
24-5.10. *Pesticide Applicator*. Pesticide applicators are any individuals who apply pesticides.

   a. **DoD-Certified Pesticide Applicators.** DoD-certified pesticide applicators are military or civilian personnel certified per reference (m) in the pest management categories that are appropriate for their type of work.

   b. **State-Certified Commercial Pesticide Applicators.** State-certified commercial pesticide applicators are personnel certified per 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.** Uncertified pesticide applicators are those 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 PMC.

24-5.11. *Pesticide Facility*. The pesticide facility is the building and areas designated for handling and storing pesticides.
CHAPTER 25
TOXIC SUBSTANCES CONTROL ACT

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25-1 Scope. This chapter identifies requirements and Navy responsibilities applicable to the protection of human health and the environment from polychlorinated biphenyls (PCBs), radon, asbestos, and lead-based paint, which are all regulated under the Toxic Substances Control Act (TSCA).

25-1.1. Related Chapters. Chapter 22 (Clean Air Ashore) provides Navy policy guidance with respect to hazardous air pollutants, including asbestos. Chapter 34 (Overseas Environmental Compliance Ashore) provides Navy policy with respect to activities in foreign countries. Chapter 35 (Environmental Compliance Afloat) discusses PCB management aboard ships.

25-1.2. References

(a) 40 CFR 750-761

(b) DoD Directive 4140.1 of 22 April 2004
OPNAV M-5090.1
10 Jan 2014


(d) Occupational Safety and Health Administration Standard Interpretation Memo of 23 Dec 2002, Occupational Exposure Limits, Access Restrictions, and Posting Requirements for Airborne Radioactive Materials

(e) 29 CFR 1910.1096

(f) 40 CFR 763

(g) 40 CFR 61

(h) 29 CFR 1910.1001

(i) 29 CFR 1926.1101

(j) OPNAVINST 5100.23G. Navy Safety and Occupational Health (SOH) Program Manual

(k) 40 CFR 745

(l) 42 U.S.C. §4852

(i) 29 CFR 1910.20C(8)

25-1.3. Applicability. The PCB, lead-based paint, radon, and asbestos management policies below are applicable to Navy shore facilities within the United States, Commonwealth of Puerto Rico, U.S. Virgin Islands, American Samoa, and Commonwealth of the Northern Mariana Islands. Navy's Radon Assessment and Mitigation Program (NAVRAMP) applies to all Navy activities worldwide.

25-2 Legislation. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, and lead-based paint and the management of radon gas. Asbestos is also considered a hazardous air pollutant and as such is regulated under the Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAP). A summary of this legislation is included in appendix A (Laws and Regulations).

25-3 Requirements

25-3.1. Polychlorinated Biphenyls. Navy activities shall comply with the requirements of reference (a) and applicable state and
local PCB management requirements.

a. **Use.** Except as authorized in reference (a), Environmental Protection Agency (EPA) regulations ban the use of PCBs in any manner other than in totally enclosed systems.

b. **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).

c. **Spill Reporting.** Federal regulations list PCBs as a hazardous substance (HS). A spill of a reportable quantity (RQ) of "pure PCB" shall be immediately reported as required by regulation (refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response)). Installations shall 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 per gallon) to calculate the quantity of "pure PCB" spilled. The National Contingency Plan requires the reporting of all spills involving 1 pound or more of PCBs to the National Response Center (NRC) at 1-800-424-8802. Installations shall 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 hazardous material (HM) or hazardous waste (HW), may have a more stringent reporting requirement.

d. **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 parts per million (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 EPA or other authorized cleanup authority.

e. **PCB Transformers in Commercial Buildings.** PCB transformers in commercial buildings shall be registered with the building owner and PCB transformers in or near commercial buildings must be registered with owners of all buildings located within 30 meters of the PCB transformers. However, for Navy installations, compliance with the requirement is adequate if PCB transformers in or near commercial buildings are registered as follows:
(1) For Navy tenants, with the organization that prepares fire evacuation plans;

(2) For non-Navy tenants, with the tenant's host; and

(3) For Navy host installations, with EPA per reference (a).

f. Equipment Removal. Navy policy is to eliminate PCBs and PCB-contaminated material from all transformers, capacitors, and associated electrical equipment; all Navy-owned electrical distribution systems and equipment; hydraulic and lubricating fluids; and cooling and lubricating oils to the maximum extent practicable. This requirement applies to equipment owned and operated by installations and regions as well as utility systems owned and operated by Navy working capital fund entities.

(1) Transformers. Navy activities shall determine, by EPA-approved method, the PCB concentration for all pad-mounted and pole-mounted transformers. Transformers shall be marked per reference (a) and activity records shall note the PCB test results (in ppm) for each transformer.

(2) Capacitors. Navy activities shall maintain an accurate inventory of high and low voltage capacitors based on manufacturing information and mark them per reference (a). Activity records shall note the PCB classification of each large capacitor.

(3) PCB Elimination Plan. Any Navy activity that uses or possesses PCBs and PCB-contaminated equipment shall prepare a PCB elimination plan which includes the proposed date of removal and the requested source of funding for each PCB item. PCB elimination plans shall be submitted to the budget submitting office (BSO) for review and approval via the cognizant facilities engineering command and updated as needed until all regulatory requirements and Navy goals concerning the elimination of PCBs are met.

(4) Procurement. New transformers and related equipment are no longer manufactured with PCBs and no longer require permanent labels stating they are PCB-free (i.e., no detectable PCBs). Activities may still find it useful to mark the items non-PCB for inventory purposes.
g. Navy and Defense Logistics Agency Interface on PCBs. Reference (b) designates Defense Logistics Agency's (DLA) Disposition Services as the responsible agency for worldwide disposal of all PCBs and PCB items. Navy installations shall use the DLA Disposition Services 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. An installation using PCB disposal contract services other than DLA Disposition Services 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 DLA Disposition Services; and obtain concurrence by their BSO.

h. Contractors. Activities shall ensure contractors performing work for Navy on Navy property comply with all applicable PCB requirements while on-site, including Navy requirements.

i. Transboundary Shipments of PCBs for Disposal. In general, PCBs and PCB-containing items require an EPA exemption for importation to the United States or when exported to other countries for disposal. Other treaties and international agreements may also apply to export. Retrograde of U.S. manufactured PCBs from Navy activities outside the continental United States is not considered export or import of PCBs under TSCA.

25-3.2. Radon

a. Navy's Radon Assessment and Mitigation Program. NAVRAMP provides for compliance with the procedural requirements of TSCA related to radon. The EPA-approved NAVRAMP is the plan to identify the level of indoor radon in existing and new buildings, undertake mitigation measures in existing buildings, and incorporate preventive measures in new buildings to prevent buildup of indoor radon levels above 4 picocuries per liter (pCi/L) in Navy-occupied buildings. Accordingly, Navy installations shall implement NAVRAMP and institute the following provisions under NAVRAMP:

(1) Identify activities where indoor concentration of radon in occupied buildings exceeds the EPA-recommended action level of 4 pCi/L;
(2) Maintain a central data management system containing all validated monitoring results of Navy buildings (housing and non-housing, Navy-owned, or Navy-leased) tested for radon under NAVRAMP;

(3) Mitigate the indoor radon levels in buildings to below the EPA-recommended action level of 4 pCi/L;

(4) Perform periodic inspections and preventive maintenance as required on mitigation systems and periodic retesting of buildings with mitigation systems (at least every 2 years) per section 25-3.2.b.1.c to ensure subject systems are operating properly to reduce the building's radon levels below 4 pCi/L; and

(5) Ensure building designs include appropriate radon preventive measures where necessary such as sub-slab systems in new buildings to prevent buildup of indoor radon levels above 4 pCi/L, considering applicable regulatory requirements, historical radon monitoring data, and geological conditions at the location.

b. NAVRAMP Implementation. NAVRAMP implementation consists of testing, mitigation, and prevention as required by this section and per the most current implementation criteria established per section 25-3.2.b.4. The mitigation and prevention requirements below do not apply to non-Navy-owned buildings. Refer to section 25-3.2.c for additional information on how to proceed when dealing with Navy leases and overseas locations.

(1) Testing. Activities shall test occupied buildings to determine indoor levels of radon. Radon testing of buildings typically consists of the following phases:

(a) 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. Under normal circumstances, screening is performed only once, and therefore, should not be considered a recurring requirement.

(b) Assessment. If, during the screening process, activities detect radon and confirm the level exceeds the EPA-
recommended action level of 4 pCi/L, then the activity shall measure every occupied building in the activity for radon.

(c) Monitoring. As recommended by EPA, radon testing shall be performed after every renovation (e.g., weatherization, whole building replacement, additions); heating, ventilation, and air conditioning (HVAC) modification or replacement; or damage by any events such as earthquakes and storm weather that would alter the building envelope. Activities shall periodically perform maintenance and retest buildings where mitigation systems have been installed and retest structures that have been significantly modified or damaged to ensure levels are still below 4 pCi/L.

(2) Mitigation. Activities shall install a mitigation system in buildings determined to have indoor radon levels with validated monitoring results above the EPA-recommended action level of 4 pCi/L to reduce action levels below 4 pCi/L and shall schedule mitigation steps conforming to the following priority scheme:

<table>
<thead>
<tr>
<th>Cat.</th>
<th>Radon Levels (pCi/L)</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 &lt; 4</td>
<td>No action required</td>
</tr>
<tr>
<td>2</td>
<td>4 &lt; 20</td>
<td>Mitigation within 2 yr</td>
</tr>
<tr>
<td>3</td>
<td>20 &lt; 200</td>
<td>Mitigation within 6 mo</td>
</tr>
<tr>
<td>4</td>
<td>&gt; 200</td>
<td>Mitigation within 3 wk</td>
</tr>
</tbody>
</table>

(3) Prevention. Activities shall incorporate appropriate radon reduction techniques into the design and construction phases of new buildings 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 EPA-recommended action level of 4 pCi/L.

(4) Periodic Reevaluation and Revision of NAVRAMP. Not later than 1 October 2014 and no longer than 5-year intervals thereafter, Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) shall complete a thorough reevaluation of the effectiveness of NAVRAMP taking into account return on investment and developments in practices, processes, technologies, and regulatory requirements; and request approval from the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) of necessary revisions to testing, mitigation, and prevention requirements of section 25-3.2.b.
c. Navy Leases. Activities must evaluate all existing and new lease agreements (including buildings used at overseas facilities under international use agreements) to determine if it is clear who has the main responsibility to monitor and mitigate when required and to ensure Navy occupancy is, or will be, under similar radon exposure protection obtained by implementing NAVRAMP in Navy-owned buildings. Navy tenant commands of leased buildings, including housing public private ventures (PPVs) and buildings used at overseas facilities, in consultation with the appropriate Navy legal counsel, shall determine the feasibility of mitigation under current lease and international use agreements or through its renegotiation. They shall then initiate negotiations with the lesser (or appropriate authority at overseas locations) to mitigate when radon concentrations in non-Navy-owned buildings exceed the action level of 4 pCi/L. Navy commands should adhere to the prevention requirements in section 25-3.2.b.3 when considering the design and construction of new buildings for long-term leases (e.g., lease, limited partnerships, housing PPVs).

d. Occupational Exposure to Radon. Exposure to naturally-occurring radon is not considered occupational exposure unless this is the result of artificially-enhanced concentrations of radon in the workplace. The Occupational Safety and Health Administration (OSHA), per reference (c), considers the accumulation of naturally-occurring radon in workplaces inside of buildings or other types of enclosures constructed on or in the ground as artificially-enhanced concentrations of radon. Per reference (d), OSHA has indicated that workplaces in buildings where the presence of artificially enhanced concentration of radon exposes employees to hazardous concentration of airborne radiation (above permissible exposure limits) are subject to the requirements of reference (e).

e. Funding Requirements. Sponsorship of funding requirements by OPNAV (N45) for the implementation of NAVRAMP per section 25-3.2.b is limited to screening and assessment. All mitigation and periodic monitoring including workplaces when required per section 25-3.2.d should be funded under the sponsorship of the Chief of Naval Operations, Shore Readiness Division, OPNAV (N46).

25-3.3. Asbestos. Asbestos-containing materials (ACM) are commonly found in older building materials and related products such as building exterior surfaces; insulation walls and ceilings; floor tiles and adhesives; furnace, boilers, and
heaters piping and insulation; and interior surface walls and ceilings. When disturbed, ACM can become airborne posing a significant risk to human health. Asbestos is regulated by EPA under TSCA regulations in reference (f) and under the Clean Air Act NESHAP regulations in reference (g). Worker exposure to asbestos is also regulated by OSHA under references (h) and (i). Navy commands shall comply with the requirements of reference (f) and applicable state and local asbestos management requirements. Navy policy for use, handling, maintenance, and removal of ACM is contained in reference (j) to include the following:

a. Management. All Navy commands shall establish an asbestos management program to implement standards for the periodic inspection, sampling, control, evaluation, maintenance, and abatement of ACM. Installation commanding officers (COs) shall appoint an asbestos program manager (APM) who will be responsible for carrying out the asbestos management program ashore.

b. Removal and Abatement

(1) Commands shall not remove installed ACM which are in good condition, for the sole purpose of eliminating asbestos. ACM shall be managed in place, provided they are in good condition and will not be disturbed.

(2) A facility asbestos survey shall be conducted prior to any renovation, alteration, and repair or demolition project that will disturb building materials. Per reference (g), this survey shall identify all areas where asbestos will be disturbed. All abatement operations shall be performed with adherence to strict good housekeeping procedures and adequate control measures to minimize, to the greatest extent feasible, the release of asbestos fibers to the environment.

c. Substitutes. Navy policy is to eliminate asbestos hazards by substitution with asbestos-free material or, where this is not possible, through the use of engineering, administrative controls, and respiratory protection. Commands shall use only suitable asbestos substitute materials approved through identification and testing. Commands shall not use existing supplies of ACM whenever there are acceptable substitutes.

d. Cleanup. Commands shall establish procedures to minimize the accumulation of asbestos-containing waste, dust, and scrap materials. Dry sweeping, shoveling, or other dry cleanup of
asbestos-containing dust and debris is prohibited. ACM shall be adequately wetted and removed using a high efficiency particulate air (HEPA) filter vacuum.

e. Disposal. Commands shall promptly collect, seal in impermeable bags or containers, and dispose of asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing (consigned for disposal) which may produce in any foreseeable way airborne concentrations of asbestos fibers. In addition, asbestos waste must be properly labeled and sent to a disposal site that complies with subpart M of reference (g) and be accompanied by a waste shipment record. Upon receipt of the waste shipment, the disposal site operator will sign and return a copy of the waste shipment record to the generator. Subpart M of reference (g) includes time limits and reporting requirements associated with the returned copies of waste shipment records. The generator must keep copies of waste shipment records for at least 2 years.

25-3.4. Lead-Based Paint. TSCA requires owners of target housing and child-occupied facilities to notify occupants regarding lead-based paint risks. TSCA also regulates renovation practices, maintenance practices, sampling practices, and abatement practices for lead-based paint in target housing and child-occupied facilities. Navy commands shall comply with the requirements of reference (k) and applicable state and local lead-based paint management requirements.

a. Lead-Based Paint Notification Requirements

(1) Installations or activities providing target housing shall notify prospective occupants about the presence of any known lead-based paint or lead-based paint hazards. If the installation does not know whether or not lead-based paint hazards exist, the notification requirement does not impose a requirement to test for such hazards. Notification shall be given prior to signature of a lease and comply with references (k) and (l).

(2) Occupants of target housing or child-occupied facilities residential dwellings where renovations involving lead-based paint are going to occur shall be notified of the renovation no more than 60 days before renovation activities begin. An adult occupant must provide a written acknowledgement of receipt of notification. Notification of renovation in lead-based paint areas must also be provided for renovations in common area and child-occupied facilities.
b. Renovations. Renovations involving target housing or child-occupied facilities shall require the posting of warning signs, isolating the work area so no dust or debris leaves the work area while the renovation is being performed, maintaining the integrity of the containment by ensuring any plastic or other impermeable materials are not torn or displaced, and installing containment so that it does not interfere with occupant and worker egress in an emergency (section 745.85 of reference (k)).

c. Lead-Based Paint Abatement. EPA shall be notified of any abatement projects in target housing or child-occupied facilities. Personnel involved in the abatement project must be trained and certified from accredited programs per reference (k). Specific EPA-defined work practices in reference (k) must be followed if personnel are performing an inspection, a lead hazard screen, a risk assessment, or an abatement.

d. Disposal. Regions, installations, and commands shall dispose of lead-based paint containing materials per applicable federal, state, and local environmental requirements. Construction and demolition (C&D) debris containing lead-based paint may be sent to a C&D landfill for disposal under federal regulations, but state requirements may be more stringent. Lead-based paint waste containing primarily waste paint, strippers, paint chips, etc., is typically an HW. Disposal of such waste shall be per the requirements in chapter 27 (Hazardous Waste Management Ashore), including any exceptions or exemptions for residential waste that may apply. The cognizant environmental manager shall determine environmental requirements relating to lead-based paint disposal.

e. Contracts and Contractors. Construction projects with the potential to impact lead-based paint shall include appropriate references, clauses, or both necessary to ensure proper management, control (including dust control), abatement, and disposal of lead-based paint (reference (j)). PPV housing contractors may be responsible for lead-based paint notification, abatement, and disposal per the terms of their contract or lease.

25-3.5. Training Requirements. Personnel responsible for PCB, radon, asbestos, and lead-based paint management shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.
a. Environmental managers shall receive, at a minimum, the following training:

(1) Job-related environmental laws; E.O.s, and regulations, and

(2) Introductory HM. Completion of Naval Safety and Environmental Training Center Introduction to Hazardous Materials (Ashore) (A-493-0031) will satisfy this requirement.

b. PCB, radon, asbestos, and lead-based paint technicians and their supervisors shall receive, at a minimum, the following training:

(1) Hazard communication training; and

(2) Job-specific training on marking, inventorying, reporting, inspection, spill reporting, and any applicable installation-specific requirements.

c. Personnel involved in asbestos management, removal, project design, project review, maintenance and housekeeping, laboratory analysis, abatement, and sampling shall receive training per appendix B of reference (j);

d. Personnel and immediate supervisors who repair, maintain, replace, inventory, or test PCB, PCB-contaminated, or suspected PCB articles shall receive job-specific training on marking, inventorying, reporting, inspection, spill reporting, and any applicable installation-specific requirements; and

e. Other environmental staff and legal counsel with responsibilities related to PCBs, asbestos, radon, and lead-based paint management shall receive introductory or executive overview training commensurate with their job duties.

25-4 Responsibilities

25-4.1. OPNAV (N45) shall:

a. Assess the impact of proposed radon, PCB, asbestos, and lead-based paint legislation and regulations on Navy; and

b. Issue PCB, asbestos, lead-based paint, and radon policy guidance as needed.
25-4.2. BSOs shall:

a. Program, budget, and allocate funds for all identified installation TSCA requirements applicable to PCBs, radon, asbestos, and lead-based paint;

b. Identify and submit environmental compliance projects required to bring activities into compliance with applicable federal, state, and local regulations and Navy policy for TSCA requirements;

c. Ensure compliance with TSCA requirements applicable to PCBs, radon, asbestos, and lead-based paint at government-owned, contractor-operated facilities; and

d. Ensure subordinate commands develop and implement PCB elimination plans and that funding is programmed to comply with all applicable regulations for elimination of PCBs.

25-4.3. COMNAVFACENGCOM shall:

a. Provide technical assistance to commands in complying with applicable facilities-related federal, state, and local TSCA requirements for PCBs, radon, asbestos, and lead-based paint;

b. Evaluate alternatives to the use of PCBs in existing PCB equipment and transformers and provide such information to appropriate commands;

c. Ensure facility design criteria and operating instructions include applicable PCB, radon, asbestos, and lead-based paint requirements;

d. Manage NAVRAMP and designate within the COMNAVFACENGCOM organization a radon center of expertise;

e. Develop, maintain, and manage an integrated Navywide database and management information on radon testing data and mitigation projects planned and performed;

f. Produce an annual Navywide radon testing and mitigation summary report;

g. Reevaluate and revise, if necessary, NAVRAMP per section 25-3.2.b.4 and revise technical documents and manuals to reflect designs required to reduce indoor radon levels in buildings;
h. 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, and operation and maintenance plans for mitigation equipment;

i. Implement the requirements of NAVRAMP at Navy activities including training on radon risks and management, as requested;

j. Assist commands to ensure NAVRAMP is implemented per section 25-3.2.b and testing data meet the requirements of NAVRAMP (i.e., quality control and quality assurance (QA and QC));

k. Provide technical oversight of the facility Asbestos Management Program Ashore;

l. Maintain guide specifications per current regulations;

m. Provide advice and technical assistance concerning lead-based paint in Navy facilities, particularly housing, childcare facilities, hospitals, and any other child-occupied facilities;

n. Provide technical assistance for air pollution control per chapter 22 (Clean Air Ashore), upon request from engineering field divisions as required for compliance with any TSCA requirement affecting ambient air quality; and

o. Ensure contracting officers and contracting officers' technical representatives receive the appropriate level of training to adequately plan, design, oversee, and review lead-based paint renovation and repair contracts.

25-4.4. Commander, Naval Supply Systems Command shall include provisions in inter-service support agreements with DLA for DLA Disposition Services support of PCB requirements Navywide.

25-4.5. Region commanders and COs shall:

a. Identify to the BSO funding needed to support all TSCA requirements applicable to PCBs, radon, asbestos, and lead-based paint;

b. Ensure the training of personnel involved in PCB, radon, and lead-based paint management operations;
c. Sign and submit, as appropriate, reports and other required data associated with TSCA requirements to EPA, state, or local agencies;

d. Transfer accountability and custody of PCBs and PCB items stored for disposal to DLA Disposition Services, insofar as possible;

e. Handle, store, mark, inspect, and assess risks of PCBs and PCB items according to applicable federal, state, or local regulations;

f. With regard to PCB transformers and PCB contaminated transformers, inspect for and repair all PCB leaks, maintain records and provide notification to EPA;

g. Inventory or validate all PCBs and PCB items annually per procedures required by regulatory agencies;

h. 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);

i. Report PCB spills or incidents involving combustion as prescribed in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) when the spill exceeds the RQs established in federal regulations;

j. Report fire-related incidents involving PCB transformers immediately to the NRC, regardless of quantity;

k. Ensure all owners of PCB transformers, including those in storage for reuse, register their transformers with EPA per reference (a). Newly identified PCB transformers must be registered, in writing, with EPA no later than 30 days after they are 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;

l. Develop, implement, and maintain a current PCB elimination plan to comply with federal, state, and local PCB regulations and Navy policy on PCBs;
m. Apply control measures, monitoring procedures, and operations and maintenance plans to processes using asbestos or ACM;

n. Appoint an APM per reference (j);

o. Follow the notification, inspection, assessment, abatement, and work practices required by reference (k) during management of lead-based paint in government-owned target housing and child-occupied facilities;

p. Ensure NAVRAMP is implemented per section 25-3.2.b; and

q. Ensure the appropriate NAVRAMP implementation-related actions be maintained at the command. A copy of records of NAVRAMP testing and mitigation shall also be forwarded to COMNAVFACENGCOM's designated radon center of expertise for the production of an annual Navywide radon testing and mitigation summary report.

25-4.6. Chief, Bureau of Medicine and Surgery (BUMED) shall:

a. Assist COMNAVFACENGCOM in areas of radon public health assessment and communication, and

b. Evaluate the appropriateness of radon action levels and mitigation schedules for Navy installations.

25-4.7. Naval Education and Training Command shall develop and provide training on the occupational safety and health aspects of PCBs, asbestos, radon, and lead-based paint to Navy personnel, as appropriate. Where possible, this training should be integrated into existing required curricula.

25-4.8. Echelon 2 commands shall:

a. Ensure ACM is not procured or specified when a suitable substitute exists per paragraph 1702b of reference (j);

b. Review and purge current military specifications, technical manuals, contract guide specifications, and any other document or specification under Navy cognizance of requirements for ACM where a suitable non-asbestos substitute exists;

c. Provide advice and technical assistance, in coordination with BUMED, to define appropriate engineering and work practice
controls, and identify acceptable non-asbestos-containing substitute materials and lead-free substitute materials; and

d. Ensure program support by providing the resources required to meet the regulatory standards for the control of asbestos and lead-based paint.

25-5 Definitions

25-5.1. Asbestos-Containing Material. ACM is any material containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in appendix A, subpart F of reference (f).

25-5.2. Capacitor. A capacitor is a device for accumulating and holding a charge of electricity, consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

a. Small capacitors which contain less than 1.36 kilograms (kg) (3 pounds (lbs)) of dielectric fluid;

b. Large, high voltage capacitors which contain 1.36 kg (3 lbs) or more of dielectric fluid and operate at 2,000 volts (alternating capacitor (ac) or direct capacitor (dc)) or above; and

c. Large, low voltage capacitors which contain 1.36 kg (3 lbs) or more of dielectric fluid and operate below 2,000 volts (ac or dc).

25-5.3. Child-Occupied Facility. A child-occupied facility is a building, or portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least 2 different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours, the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day care centers, preschools, and kindergarten classrooms. Child-occupied facilities may be located in target housing or in public or commercial buildings. With respect to common areas in public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only those common areas that are routinely used by children under age 6, such as restrooms and cafeterias. Common areas that children under age 6 only pass through, such as hallways, stairways, and
garages are not included. In addition, with respect to exteriors of public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only the exterior sides of the building that are immediately adjacent to the child-occupied facility or the common areas routinely used by children under age 6.

25-5.4. Exposure. Per reference (m), 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."

25-5.5. High Efficiency Particulate Air Filter. HEPA filters are rated to trap at least 99.97 percent of all particles 0.3 microns in diameter or larger.

25-5.6. In or Near Commercial Buildings. In or near commercial buildings means 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:

a. Civilian or Navy personnel assembly buildings;

b. Educational properties;

c. Institutional properties (e.g., museums, hospitals, clinics);

d. Residential properties (e.g., living quarters);

e. Stores;

f. Office buildings (including administrative buildings);

and

g. Transportation centers (e.g., airport terminal buildings, bus stations, train stations).

25-5.7. Mitigation System. A mitigation system is any system or steps designed to reduce radon concentrations in the indoor air of a building.
25-5.8. **Occupied Building.** An occupied building is a building occupied more than 4 hours per day on average per year. For the purposes of this chapter, the term "building" includes both housing and non-housing structures.

25-5.9. **Polychlorinated Biphenyls.** PCBs are any chemical substances, limited to the biphenyl molecule, that have been chlorinated to varying degrees or any combination of substances which contain such substances. 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 HS and carry out the disposal accordingly.

25-5.10. **PCB Article.** A PCB article is any manufactured article, other than a PCB container, which 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.

25-5.11. **PCB Equipment.** PCB equipment is any manufactured item, other than a PCB container, which contains a PCB article or other PCB equipment. This may include appliances, electronic equipment, and fluorescent light ballasts and fixtures.

25-5.12. **PCB Item.** A PCB item is any PCB article, PCB article container, PCB container, or PCB equipment which deliberately or unintentionally contains any PCB or PCBs at 50 ppm or greater.

25-5.13. **PCB Leak.** A PCB leak is any instance in which a PCB item has any PCB on any portion of its external surface or surroundings.

25-5.14. **PCB Transformer.** A PCB transformer is a transformer which contains 500 ppm or greater PCB. The transformer classifications are:

   a. Non-PCB transformer (<50 ppm),

   b. PCB contaminated transformer (50 - <500 ppm), and

   c. PCB transformer (≥500 ppm).
25-5.15. Radon. Radon is a colorless, odorless, radioactive gas formed by the decay of radium. It 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.

25-5.16. Significantly Modified. A building occupied or to be occupied, altered, or renovated by either changing mechanical systems (e.g., HVAC) or by making modifications (e.g., changing the original number or type of windows, doors, ground slabs, walls) in any manner that significantly changed the air change or flow into and within the building.

25-5.17. Target Housing. Target housing is any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than 6 year of age resides or is expected to reside in such housing) or any zero-bedroom dwelling. Target housing has a high probability of the presence of lead-based paint that can endanger children.

25-5.18. Validated Monitoring Results. Validated monitoring results are radon tests that meet the requirements of NAVRAMP (e.g., a type of radon detection device; sampling strategies, procedures, and intervals; QA and QC).
CHAPTER 26

PROCEDURES FOR IMPLEMENTING THE EMERGENCY PLANNING AND COMMUNITY
RIGHT-TO-KNOW ACT

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26-1 Scope. This chapter implements the Emergency Planning and
Community Right-to-Know Act (EPCRA), Title III of the Superfund
Amendments and Reauthorization Act, and the requirements of
references (a) through (d).

26-1.1. Related Chapters. Chapter 1 (Organization and
Coordination) provides information on joint basing. Chapter 17
(Environmental Management Systems) provides information on facility pollution prevention planning. Chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) provides information on processing notices of violation (NOVs). Chapter 23 (Hazardous Materials Management Ashore) describes how incorporating materials into the installation authorized use list and reviewing non-hazardous and less hazardous substitutes improve EPCRA reporting efforts. Chapter 27 (Hazardous Waste Management Ashore) describes how hazardous wastes are managed and how information (e.g., manifests, waste profiles) can be useful in evaluation of EPCRA thresholds and preparation of required reports. Chapter 39 (Oil and Hazardous Substances Spill Preparedness and Response) describes Navy policy and planning in relation to an accidental release of a hazardous substance (HS). Appendix C (Message Formats) provides information on message formats.

26-1.2. References

(a) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance

(b) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management

(c) Council on Environmental Quality, Instructions for Executive Order 13423, March 2007

(d) USD Memorandum of 21 Sep 2006, Consolidated Emergency Planning and Community Right-to-Know Act (EPCRA) Policy for DoD Installations, Munitions Activities, and Ranges

(e) OPNAV (N45), Getting Started With the Emergency Planning and Community Right-to-Know Act (EPCRA), May 2009

(f) USD Memorandum of 15 Apr 2008, Department of Defense Supplemental Guidance for Implementing and Operating a Joint Base

(g) 40 CFR 355

(h) 40 CFR 302

(i) 40 CFR 370

(j) DoD Instruction 6050.05 of 25 August 2008
26-1.3. **Applicability.** This chapter provides EPCRA policies and procedures applicable to all Navy shore installation operations in any state of the United States, District of Columbia, Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. It shall not impose any requirements on Navy shore installation operations in foreign countries or directly upon ships. Any extremely hazardous substance (EHS), hazardous chemical (HC), or toxic chemical (TC) stored or used aboard a ship while in port does not become part of the shore facility's threshold calculations and is not reported by the shore facility even if reporting is triggered. Material maintained under the ship's custody is not subject to any EPCRA reporting requirements. However, where shore-based personnel perform maintenance or other activity on the ship and shore facility-owned materials are utilized, then the materials must be considered for purposes of EPCRA compliance efforts.

26-2 **Legislation**

a. The following legislation contains provisions that pertain to HS release reporting, emergency planning and response, and maintenance of material safety data sheets (MSDSs):

(1) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);

(2) EPCRA; and

(3) Occupational Safety and Health Act.
b. A summary of this legislation is included in appendix A (Laws and Regulations).

26-3 Requirements. 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. Navy installations shall follow executive orders (references (a) and (b)), implementing instructions (reference (c)), and Department of Defense (DoD) and Navy-specific guidance (references (d) and (e)) when implementing EPCRA. Where DoD and Navy guidance differ from EPCRA guidance provided by the Environmental Protection Agency (EPA), Navy installations shall follow DoD and Navy guidance.

26-3.1. Definition of Facility. All installations shall identify their covered facility or facilities, their boundaries, and processes subject to EPCRA. A facility is defined as all buildings, equipment, structures, and other stationary items located on a single site or on adjacent or contiguous sites, owned or operated by the same person (i.e., under common control).

a. Fenceline Activities. All activities within the fenceline of the installation must be examined to determine if they are considered part of the facility for EPCRA compliance. The host installation, as the fenceline owner, is considered the owner or operator of the facility for reporting purposes. All DoD activities within the fenceline, including contractor activities, are part of the EPCRA facility and are included in all reporting assessments.

b. Geographically Separate Portions. The owner of geographically separated portions of an installation shall treat each establishment it operates as a separate facility.

c. Non-DoD Activities. Non-DoD activities are not considered part of the facility.

d. Ships at Sea and Water Ranges. Ships at sea and water ranges (i.e., a water body that is not within the facility fenceline) are not considered a facility, and therefore, are not subject to EPCRA.

e. Regionalized Areas. 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 installation. For regionalized areas where components are not adjacent and contiguous (i.e., geographically separate), 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 Installation Name - Component Name."

f. Joint Basing. Where joint basing has occurred, the joint base will define the facility for purposes of EPCRA and determine and document reporting responsibility per reference (f).

g. Ranges. All ranges (including small arms ranges) on or adjacent to an installation are to be considered part of the installation and part of the facility as defined for EPCRA purposes. All assessments, including employee work hours and TC thresholds, shall be completed using the aggregate facility (i.e., installation plus adjacent or contiguous ranges). Where a range is not adjacent or contiguous to any other DoD property, the range itself is the facility for purposes of EPCRA. All assessments, including employee work hours and TC thresholds, shall be assessed for the range alone.

26-3.2. Reporting Responsibilities. Each Navy installation shall meet the reporting deadline requirement of EPCRA regulations. The fenceline owner shall file the necessary reports for the entire facility for each section of EPCRA requiring a report.

a. Agreements. Installations shall update inter-service support agreements (ISSAs), as well as any other host-tenant agreements, to reflect the data collection requirements of the tenants to the host installation.

b. Tenants. Navy tenants of non-DoD host installations are independently responsible for meeting Navy EPCRA reporting requirements.

c. State Emergency Response Commission and Local Emergency Planning Committee. The State Emergency Response Commission (SERC) and Local Emergency Planning Committee (LEPC) (or equivalent for its jurisdiction) have the authority to request a EPA Form 8700-30 Emergency and Hazardous Chemical Inventory
Form, 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 its jurisdiction), or local fire department with jurisdiction over the facility (i.e., the fire department routinely first alerted during an emergency) request a Tier II EPA Form 8700-30 not previously submitted, the installation shall submit the requested form within 30 days of receipt of the request, provided the request includes a written statement of need. The minimum threshold for reporting in response to a request for submission is zero.

d. Independent Owners and Contractors. Independent owners of contiguous or adjacent sites are individually responsible for complying with EPCRA requirements. For example, a Navy installation and an Army base that share a fenceline report as two separate facilities under EPCRA except in situations of joint basing where the joint base decides the approach, per reference (e). Private contract operations on Navy installations shall be accounted for in the facility calculations for purposes of EPCRA. Government-owned, contractor-operated (GOCO) facilities shall comply with all provisions of EPCRA to the extent that their operations meet threshold and other requirements of the statute and implementing regulations.

e. Public Availability. Navy's policy is to make EPCRA submissions readily available to the public upon request without requiring Freedom of Information Act requests.

26-3.3. Classified Information. Prior to the submission of any reports to the SERC, LEPC (or equivalent for its jurisdiction), non-Navy fire departments, or EPA, 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.

26-3.4 State and Local Requirements. References (a), (b), and (c) require Navy installations to comply with the federal EPCRA program. However, they do not require Navy installations to comply with state and local right-to-know requirements, such as lower thresholds or state specific reporting forms. It is Navy policy to comply with state programs unless the program poses a significant burden on staff or resources and provided such
compliance does not interfere with command mission accomplishments or other legal obligations.

a. Fees. Navy installations cannot pay state and local right-to-know fees and shall forward all state and local right-to-know fee invoices and reimbursement requests to their legal office for review.

b. Adjacent Properties. Navy installations that have adjacent properties in multiple states or in multiple local emergency planning districts should report to all applicable state and local EPCRA reporting authorities (i.e., all SERCs and LEPCs), unless there is an agreement with all applicable state and local EPCRA reporting authorities to the contrary.

26-3.5. Emergency Planning and Community Right-to-Know Act (EPCRA) Fines and Penalties. 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). Refer to chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) for specific Navy policy guidance on what actions should be taken upon receipt of any NOV of federal, state, or local environmental laws or regulations, or assessment of fines or penalties.

26-3.6. Documentation. Installations shall ensure documentation (e.g., calculations for threshold and release estimates) is in place to support EPCRA reporting efforts and inquiries, including the decision not to report. Installations shall maintain support documentation for a minimum of 5 years, unless a cross governing regulation (e.g., Resource Conservation and Recovery Act) requires the installation to retain the records for a longer period. This documentation is required for all installations subject to EPCRA and is not limited only to those installations that must submit a report.

26-3.7. EPCRA Sections 302 and 303 – Emergency Planning Notification. A Navy facility that meets or exceeds a threshold is subject to the reporting requirements of EPCRA for emergency planning and for providing information to support emergency planning.

a. Threshold Requirements. All installations shall determine whether they meet or exceed threshold requirements for any EHS present at the facility. Host installations (i.e.,
fenceline owners) shall calculate thresholds using the entire facility. The installation may apply any of the exemptions available in reference (g) and should document where and when they are applied. Munitions and munitions-related items containing EHS must be included in all facility calculations for threshold requirements and will be reported as required.

b. Notification

(1) A facility that has any EHS on-site, including those in munitions and munitions-related items, in a quantity equal to or in excess of its applicable threshold planning quantity (TPQ) at any one time, shall provide a one-time notification to the SERC and LEPC (or equivalent for its jurisdiction) that the facility is subject to the emergency planning requirements of EPCRA. The facility name, facility point of contact (who will serve as the facility emergency coordinator per EPCRA Section 303), and phone numbers shall be included.

(2) 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 its jurisdiction) to include the updated information within 30 days after the changes have occurred. If no notification has been required to date because a TPQ for an EHS was not met or exceeded and 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 an EHS present in excess of the TPQ for the first time, the facility shall submit the EPCRA Section 302 notification within 60 days of determining reporting is required based on the new information to the SERC and LEPC (or equivalent for its jurisdiction).

c. Participation in Local Emergency Planning. A covered facility is required 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. Each covered facility shall identify an installation representative who will participate in the local emergency planning process as a facility emergency response coordinator.

26-3.8. EPCRA Section 304 – Emergency Release Notification. Installations shall notify EPCRA authorities in the event of releases of EHS (reference (g)) or HS (reference (h)), including those from munitions and munitions-related items, in an amount
equal to or in excess of the reportable quantity (RQ) in a 24-hour period for that substance into any environmental media.

a. Verbal Notification. Immediate verbal notification and a written follow-up notice shall be given as soon as practicable to the SERCs and LEPCs (or equivalent for its jurisdiction) for all areas likely to be affected by the release. To expedite the verbal notification process, the installation shall prepare and use a checklist of required information to provide during the phone calls in the event of a reportable release.

b. Follow-Up Report. To expedite submission of the written follow-up report, the installation shall prepare and use a standard form that includes all required information and an approval chain in the event of a reportable release.

c. Releases Within Facility Boundaries. The installation is not required to notify the SERC or LEPC (or equivalent for its 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.

d. Exemptions. The installation shall apply any of the exemptions available in reference (g) and should document where and when they are applied. Notification to the SERC or LEPC (or equivalent for its jurisdiction) is not required for releases exempted per reference (g).

e. Other Reporting Responsibilities. These reporting requirements do not relieve the installation of any notification requirements covered under other environmental regulations. For example, 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). The installation shall also notify the cognizant budget submitting office (BSO) of the release in message form as soon as practicable after the release has occurred.

26-3.9. EPCRA Section 311 – Hazardous Chemical Material Safety Data Sheet Reporting. Installations are required to submit HC MSDSs or a list of HCs grouped by hazard category to the SERC, LEPC (or equivalent for its jurisdiction), and the local fire department with jurisdiction over the facility if they meet or exceed threshold levels for any HCs requiring an MSDS that is
present on-site at any one time (reference (i)). State and local regulators cannot waive Navy installation EPCRA reporting requirements by allowing EPCRA Section 312 annual HC inventory reporting to substitute for EPCRA Section 311 MSDS or list reporting.

a. **Threshold Requirements.** If the quantity of a HC is present at any one time in amounts equal to or greater than 10,000 pounds (lbs), it is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 lbs or its TPQ, whichever is less, it is reportable. Navy installations shall calculate thresholds using the entire facility.

b. **Munitions.** This section includes those HCs associated with munitions and munitions-related items. HC constituents of munitions and munitions-related items are subject to threshold calculations or reporting 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 for this section.

c. **MSDS or List Submission**

   (1) 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 its jurisdiction), and the fire department with jurisdiction over the facility. Installations should contact local agencies to identify their preferred method of data submission. DoD maintains a central repository of MSDSs via the Hazardous Material Information Resource System (HMIRS) that may be used to retrieve MSDS copies when a manufacturer's original MSDS is not available. Reference (j) includes information on obtaining MSDSs and reference (k) includes additional detail regarding Navy's implementation and operation of HMIRS.

   (2) If an installation submits a list, it shall contain those HCs (by chemical or common name as given on the MSDS) for which an MSDS is required under Occupational Safety and Health Administration (OSHA) regulations, grouped by hazard category. Installation shall only include those HCs (either in mixtures or in the pure form) that meet or exceed threshold levels.
d. Requests. 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 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.

e. New or Revised Submissions. Should a HC not previously reported become present in an amount equal to or greater than 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.

f. State Programs. Some states have adopted their own right-to-know provisions that may include lower thresholds or state-developed reporting forms. Navy installations shall comply with state programs to the extent described in section 26-3.4.

26-3.10. EPCRA Section 312 – Hazardous Chemical Inventory Reporting. All installations shall determine if they meet or exceed threshold levels for all HCs requiring an MSDS present on-site at any one time during the reporting year (i.e., calendar year) (reference (i)).

a. Reporting Requirements. Installations shall submit an annual EPA Form 8700-29 Emergency and Hazardous Chemical Inventory Form, Tier I or EPA Form 8700-30, Tier II, to the SERC, LEPC (or equivalent for its jurisdiction), and the local fire department with jurisdiction over the facility for all HCs that meet or exceed the threshold. Any HC requiring an MSDS under OSHA present on-site at any one time in amounts equal to or greater than 10,000 lbs is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 lbs or its TPQ, whichever is less, it is reportable.

b. Thresholds. Navy installations shall calculate thresholds using the entire facility. This section includes those HCs associated with munitions and munitions-related items. HC constituents of munitions and munitions-related items are subject to threshold calculation if 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.

c. Submission Deadline. The annual submission is due on or
before 1 March for the previous calendar year's inventory.

d. Tier I and II Submissions

(1) Installations may submit either the Tier I EPA Form
8700-29 or Tier II EPA Form 8700-30 reporting form. However,
they are not required to comply with requests to use any form
other than the federal Tier I EPA Form 8700-29 or Tier II EPA
Form 8700-30 forms. Most SERCs and LEPCs (or equivalent for its
jurisdiction) prefer the Tier II EPA Form 8700-30 or a state-
developed form. Navy installations may file EPCRA Section 312
inventory forms electronically using EPA's Tier2 Submit (or
other EPA software), state-specific software, or other
electronic means (e.g., a Web portal) where available. An
installation will need to obtain Navy Marine Corps Intranet
approval to download and use any EPA- or state-specific
software. If approval is not granted or cannot be obtained in
time for a reporting deadline, MS Word and Adobe formatted Tier
II form EPA Form 8700-30 templates are available for download on
EPA's EPCRA Web site.

(2) The SERC and LEPC (or equivalent for its
jurisdiction) have the authority to request a Tier II EPA Form
8700-30 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 its
jurisdiction), or local fire department with jurisdiction over
the facility request a Tier II form EPA Form 8700-30 not
previously submitted, the installation shall submit the
requested form within 30 days of receipt of the request,
(provided the request includes a written statement of need).
The minimum threshold for reporting in response to a request for
submission is zero.

(3) The North American Industry Classification System
(NAICS) code for Navy installations is "928110." No other or
additional NAICS codes shall be reported. If a state or local
form includes the Standard Industrial Classification (SIC) code,
the SIC code for the Navy installation is "9711." No other or
additional SIC codes shall be reported.
e. Signing Authority. The commanding officer (CO) of the Navy installation is not required to sign the Tier II EPA Form 8700-30, or state-equivalent, reporting form for EPCRA Section 312. Any responsible management official may sign the report.

26-3.11. EPCRA Section 313 - Toxic Chemical Release Reporting. For purposes of EPCRA Section 313, installations shall determine if they meet applicability criteria and exceed threshold levels for any TC that is manufactured, processed, or otherwise used at the facility during the reporting year (i.e., calendar year).

a. Reporting Requirements. Facilities shall submit EPA Form 9350-1 Toxics Release Inventory (TRI) Form R, for each reportable TC that triggers reporting if the facility:

(1) Has 10 or more full time employees; and

(2) Manufactures (defined to include imported) or processes any listed TC in quantities in excess of 25,000 lbs in a calendar year; or

(3) Otherwise uses any listed TC in a quantity over 10,000 lbs in a calendar year; or

(4) Manufactures, processes, or otherwise uses a persistent bioaccumulative and toxic (PBT) chemical in excess of the PBT chemical-specific threshold, given in reference (1), in a calendar year.

b. Definition of Facility for Ranges

(1) 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 toxics release inventory (TRI) TCs on the range.

(2) All ranges (including small arms ranges) on or adjacent to an installation are to be considered part of the installation and part of the facility as defined for EPCRA purposes. All assessments, including employee work hour and TC thresholds, will be assessed using the aggregate facility (i.e., installation plus adjacent or contiguous ranges). Where a range is not adjacent or contiguous to any other DoD property, the range itself is the facility for purposes of EPCRA. In this
case, all assessments, including employee work hours and TC thresholds, will be assessed for the range alone.

c. Full-Time Employee Threshold. Employee threshold calculations for ranges shall account for time spent physically on the range by personnel operating, maintaining, or managing the range. This assessment includes range operators and personnel, explosive ordnance disposal sweep and clearance personnel, target and maintenance crews, and environmental staff, when appropriate, 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 installation, 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.

d. TC Thresholds. Host installations shall ensure all thresholds are calculated using the entire facility. These thresholds are TC- and activity-specific, and do not include storage or the amount present at any one time. EPA Form 9350-1 Form R shall cover not only the triggering activity but all non-exempt uses of the TC at the facility.

(1) Manufacturing Threshold. The manufacture, processing, or otherwise use of TCs for use in munitions-related items is covered under this section. The manufacturing threshold shall include all TCs (including PBT chemicals) 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). The creation of TCs as a result of using munitions is considered manufacturing and is covered by this section. TCs (including PBT chemicals) created as a result of exempt activities (e.g., burning fuel for personal comfort and sanitary wastewater treatment) (refer to section 26-3.11.g for exemptions) will also be considered manufactured and must be included in a threshold determination.

(2) Processing or Otherwise Use Threshold. The processing or otherwise use of TCs from the production or use of munitions-related items is covered under 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. Demilitarization activities (i.e., open burning and open detonation, 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 (l) as clarified by DoD and Navy guidance may be applied to munitions activities.

(3) Range Activities. 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) and destruction of munitions on a range (e.g., range sweep, clearance 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 (l) as clarified by DoD and Navy guidance may be applied to range activities.

(4) Calculation of Threshold Quantities. To calculate TC 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. Navy installations should use the Toxics Release Inventory - Data Delivery System (TRI-DDS) reporting tool for calculating TC threshold and release data from munitions and range activities.

(5) Transfer of TCs. The transfer of a TC to or from a Navy ship is not considered to be 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 EPA Form 9350-1 Form R release calculations. Floating dry docks should be considered part of the shore installation and reported accordingly.
e. Submission Deadline. The annual submission deadline for EPA Form 9350-1 Form Rs covering releases for the previous calendar year (i.e., reporting year) is 1 July. Installations are responsible for submitting EPA Form 9350-1 Form Rs to EPA and the state in advance of the reporting deadline.

f. EPA Form 9350-1 Form R Submissions

(1) A separate and complete EPA Form 9350-1 Form R shall be submitted electronically by the reporting installation to EPA and the state for each TC meeting threshold requirements. EPA will only accept electronic submissions of EPA Form 9350-1 Form Rs using the Web-based TRI-Made Easy Web (TRI-MEweb) reporting tool. Navy installations shall use TRI-MEweb to report EPA Form 9350-1 Form Rs to EPA. Navy installations shall not use the alternative threshold certification statement option, EPA Form 9350-2 EPA TRI Form A.

(2) Most states are participating in TRI-MEweb and will automatically receive the EPA Form 9350-1 Form R submission when it is submitted to EPA. A separate submission to the state is not required in this situation. Where a state is not participating in TRI-MEweb, TRI-MEweb will generate electronic files to be sent via compact disc or other method specified by the state, accompanied by the required certification letter and signature.

(3) Installations shall provide their TRI-MEweb Access Key, TRI Facility Identification (TRIFID) information (if it is new or changed from the previous year), and list of EPA Form 9350-1 Form Rs submitted to the cognizant BSO by 15 July.

(4) The NAICS code for Navy installations is "928110." No other NAICS codes shall be reported.

(5) Navy installations shall not use range codes to report release estimates on the EPA Form 9350-1 Form R; numeric values shall be entered.

(6) The CO shall sign the EPA Form 9350-1 Form R report(s), unless the CO delegates this authority, in writing, to a subordinate.

(7) Where a range (or multiple ranges) is part of a Navy installation and reporting is required (i.e., EPA Form 9350-1 Form R must be submitted), two EPA Form 9350-1 Form Rs shall be
prepared and submitted such that operational range activities are reported separately (i.e., on a separate EPA Form 9350-1 Form R) from the installation non-range activities. One EPA Form 9350-1 Form R shall be submitted for the installation accounting only for releases from the non-range activities and a second EPA Form 9350-1 Form R shall be submitted for the range (or ranges) accounting only for releases from the range. On the EPA Form 9350-1 Form Rs, the installation shall report the installation name and the range shall report the installation name followed by "Range(s)." Both the installation and the range shall report the same TRIFID number. In addition, each facility would check "(b) Part of a Facility" and "(c) a Federal facility" in section 4.2 of EPA Form 9350-1 Form R to indicate they are two parts of a single facility.

(8) Navy installations shall submit EPA Form 9350-1 Form Rs to EPA covering GOCO information as required by reference (c) and this chapter. The installations shall provide U.S. Navy GOCO information on a separate government-submitted EPA Form 9350-1 Form R. The government EPA Form 9350-1 Form R submission shall list the U.S. DoD Navy as the "parent company" under section 5.1 of the form.

(9) When necessary to correct a prior submittal, Navy installations shall submit revised EPA Form 9350-1 Form R report(s) to EPA and the state (as necessary) and the BSO. Revised EPA Form 9350-1 Form Rs shall not be submitted where a Navy installation is following DoD and Navy guidance that differs from EPA guidance.

g. Exemptions. EPCRA Section 313 regulations provide a number of exemptions that exempt TCs from both threshold and release calculations. The four primary categories under the exemptions are de minimis, article, activity-related (i.e., structural use, routine janitorial and grounds maintenance, personal use, motor vehicle maintenance, intake air and water), and facility-related (i.e., laboratory activities, property ownership). In general, use exemptions do not apply to TCs manufactured or processed.

(1) De minimis Exemption

(a) Navy installations are 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 when a mixture contains:
1. A non-PBT TC at a concentration less than 1 percent by weight, or
2. A non-PBT TC that is an OSHA-defined carcinogen at a concentration less than 0.1 percent by weight carcinogen.

(b) 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. It does not apply to PBT TCs; any concentration of a PBT chemical must be considered in threshold quantity calculations and release reports.

(2) Article Exemption. Navy installations may exempt TCs contained in an article from threshold quantity determinations and release reporting under normal processing or otherwise use of that article. However, if the processing or otherwise use of a manufactured item generates fumes, dust, filings, or grindings which are released to the environment, that item does not meet the definition of article. For example, some sealed maintenance-free batteries do not release a TC (e.g., lead or sulfuric acid aerosol, mist) under normal conditions of use and may be exempted as articles. As another example, some components of military munitions items (e.g., casings, clips, pins) that are expended at the point of fire and do not travel down range can be considered articles. 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. The article exemption does not apply to article manufacture.

(3) Activity-Related Exemptions

(a) Structural Use Exemption

1. The structural component category exempts TCs that are:
a. Used as structural components of the facility (e.g., copper in copper piping used for the plumbing in the facility),

b. Used to ensure or improve structural or functional integrity,

c. Found in materials that are part of the facility's structure, or

d. Released from passive degradation that naturally occurs in structural components of a facility (e.g., small amounts of material passively abraded or corroded from pipes and other facility equipment).

2. Maintenance and repair activities (e.g., painting to maintain the physical integrity or function of the facility) performed by facility maintenance to the facility infrastructure (e.g., buildings, roads, runways, fencelines, utilities) are also consistent with the structural component exemption.

(b) Routine Janitorial and Grounds Maintenance Exemption. Navy installations may exempt the use of TCs contained in products for routine janitorial or other custodial maintenance and facility grounds maintenance 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, cleaning of kitchen areas or bathrooms, or pest control.

(c) Personal Use Exemption. Navy installations may exempt the personal use of listed TCs in products (e.g., foods, drugs, cosmetics, office supplies, other personal items including TCs in fuel and any other materials related to personal automobiles) used by employees or other persons at the facility. It also covers activities associated with facility-operated cafeterias; commissaries; DoD exchanges; hospitals and other installation medical facilities; facilities associated with morale, welfare, and recreation; and 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). The personal use exemption also covers TCs used strictly for reasons of
personal comfort, necessity, or other such purposes (e.g., heating and air conditioning units, lighting fixtures).

(d) Motor Vehicle Maintenance Exemption

1. Navy installations are exempt from reporting the use of TCs contained in products used for the purpose of maintaining motor vehicles (e.g., aircraft, staff cars, installation maintenance and support vehicles) owned or operated by the installation.

2. Installations are not exempt from reporting the TCs used at the intermediate- and depot-level for the maintenance of tactical vehicles, aircraft (including missiles), and other motor vehicles. In addition, large combined fleets of motor vehicles maintained at one central location and TCs used by shore-based maintenance in repairing and painting ships that are in port or in dry dock are not exempt.

3. Maintenance below intermediate- and depot-level (i.e., 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 are exempt from reporting their use of TCs. TCs used onboard by the ship's company for organizational-level maintenance are exempt.

4. TCs associated with fuel transfer from mobile fuel sources (e.g., tanker trucks) and vehicle fueling from stationary fuel sources and bulk fuel storage, including movable bulk storage tanks, are exempt. Specifically, refueling of motor vehicles owned or under operational or custodial control of a Navy installation remains exempt under the motor vehicle maintenance exemption. Similarly, releases from fuel transfer and fueling activities from both mobile and stationary sources remain exempt when the fuel is used for Navy installation motor vehicle refueling.

5. 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 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 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.

6. Emissions (i.e., exhaust) from all motor vehicles (both transient and non-transient) are exempt and include installation, military, and civilian motorized vehicles such as cars, trucks, cranes, forklifts, aircraft, ships, and locomotives.

(e) Intake Air and Water Exemption. Navy installations are exempt 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.

(4) Facility-Related Exemptions

(a) Laboratory Exemption

1. The laboratory exemption applies to those listed TCs manufactured, processed, or otherwise used in a laboratory for quality control (QC), research and development (R&D), and other laboratory activities under the supervision of a technically qualified individual. The manufacture, process, or otherwise use of TCs for the purpose of testing munitions and weapons systems, or qualifying munitions by personnel as part of the testing process is considered part of this exemption.

2. This exemption 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. Generally, bench-scale activities and the cleaning of equipment within a laboratory, as well as the standards and test samples that are necessary to set up and calibrate laboratory equipment, are considered exempt. Specialty chemical production, pilot plant scale activities, and activities that do not directly support R&D, sampling and analysis, or quality assurance and QC are not exempt.
3. 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 research, development, test, and evaluation (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.

(b) **Property Ownership Exemption.** The property ownership exemption excludes property owners from all EPCRA 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, temporary leases).

26-3.12. **DoD Strategic Sustainability Performance Plan Reporting Requirements.** As required by reference (a), DoD has established goals to reduce the use and release of chemicals of environmental concern. In support of DoD's Strategic Sustainability Performance Plan (SSPP), Navy has committed to reduce non-range TRI reportable quantities of on-site releases and off-site transfers by 15 percent by fiscal year 2020 relative to reporting year 2006.

26-3.13. **Training Requirements.** EPCRA managers shall have the appropriate, job-specific education, experience, and training to perform their assigned tasks. Emergency Planning and Community Right-to-Know Act (EPCRA) and Toxic Release Inventory (TRI) Reporting (A-4A-0082) is available through Naval Civil Engineer Corps Officers School. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

26-4 **Responsibilities**

26-4.1. BSOs shall:

a. Program, budget, and allocate funds for all identified installation EPCRA requirements;

b. Ensure GOCO contracts include provisions for submission of EPCRA data per reference (m);
c. Notify the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (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;

d. Review and forward the following data and information collected from Navy installations in support of the DoD SSPP and related chemical reduction goals to OPNAV (N45) annually by 1 September:

(1) Electronic copies of EPA Form 9350-1 Form Rs;

(2) Facility data regarding actual number and names of installations meeting reporting requirements under all sections of EPCRA;

(3) For all installations, detailed information on the processes and activities that contribute to installation TC and threshold emissions and reasons for non-reporting;

(4) TRI analysis including, but not limited to, data discrepancies and actions, processes, efforts, or events driving emissions changes; and

(5) Progress in meeting reduction goals outlined in the SSPP.

e. Compile and review all revised installation EPA Form 9350-1 Form Rs and provide to OPNAV (N45) as received.

26-4.2. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) shall:

a. Support EPCRA initiatives as tasked by BSOs;

b. Develop and implement standard procedures and guidance for collecting, managing, and analyzing EPCRA reports and related data required from Navy installations (refer to section 26-4.1.c) in support of the DoD SSPP and related chemical reduction goals; and

c. Provide technical assistance to shore installations to implement EPCRA policy.
26-4.3. Commander, Naval Supply Systems Command, in conjunction with COMNAVFACENGCOM, shall ensure the Navy Enterprise Resource Planning Single Supply Solution with Environmental Health and Safety functionality software used for hazardous material management will facilitate data gathering for EPCRA, including TRI reporting.

26-4.4. Naval Education and Training Command shall incorporate EPCRA guidance and policies into Navy training (refer to chapter 3 (Environmental Readiness Training)). Appropriate training courses shall include pollution prevention and source reduction initiatives as applicable to EPCRA requirements.

26-4.5. Region commands and COs of shore installations shall:

   a. Define the facility fenceline, including all tenants, to support EPCRA reporting requirements, and revise and update ISSAs to support these requirements;

   b. Identify an installation representative who will participate in the local emergency planning process as a facility emergency response coordinator;

   c. Calculate all thresholds using the entire facility inventory and meet all reporting requirements according to EPCRA for that facility;

   d. Review all publicly available data to prevent sensitive or classified information from being released;

   e. Sign the EPCRA Section 313 EPA Form 9350-1 Form R reports as the validating official or designate in writing an alternate validating official;

   f. Report annual EPCRA data per guidance provided by COMNAVFACENGCOM (refer to section 26-4.2.b);

   g. Provide the BSO with the reason and description for any EPA Form 9350-1 Form R revisions made to the most current or any prior year EPA Form 9350-1 Form R by 1 August;

   h. Provide the BSO with detailed information on the processes and activities that contribute to installation TC thresholds and emissions, events driving emissions changes, progress and accomplishment supporting SSPP reduction goals, and reasons for non-reporting by 1 August;
i. Honor public requests for EPCRA information in a timely and informative manner and ensure the public affairs office is in agreement with and aware of information; and

j. Identify to the BSO funding needed to support all EPCRA requirements.

26-4.6. COs of tenants and commands shall cooperate with and provide information to COs of host installations to satisfy EPCRA reporting requirements, as requested.

26-5 Definitions

26-5.1. Covered Facility. A covered facility is a Navy installation that meets one or more of the reporting requirements under any EPCRA section.

26-5.2. Depot-Level Maintenance. Depot-level maintenance is 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. It 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. It includes all aspects of software maintenance.

26-5.3. Extremely Hazardous Substance. An EHS is any substance listed in appendix A or B of reference (g).

26-5.4. Facility. A facility is comprised of 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," "host installation," or the "fenceline owner" for Navy installations. For the purposes of EPCRA Section 304, the term includes motor vehicles, rolling stock, and aircraft.

26-5.5. Hazardous Chemical. A HC is a chemical that is a physical or health hazard as defined in references (i) and (n).

26-5.6. Hazardous Substance. A HS is any substance listed in table 302.4 of reference (h).
26-5.7. **Intermediate-Level Maintenance.** Intermediate-level maintenance is material maintenance that is the responsibility of, and performed by, designated maintenance installations in support of using organizations. The intermediate-level 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.

26-5.8. **Organization-Level Maintenance.** Organizational-level maintenance is 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 full mission-capable status while continually improving the process. Group organizational-level maintenance falls under the categories of "inspections," "servicing," "handling," and "preventive maintenance."

26-5.9. **Persistent Bioaccumulative and Toxic Chemicals.** PBT chemicals are those listed under EPCRA Section 313 by EPA. EPA has established a subset of the TC list for those chemicals identified as being PBT chemicals in the environment after being released. PBT chemicals have assigned threshold levels that range from 0.1 grams to 100 lbs per year and the de minimis exemption may not be applied. PBT chemicals and their respective threshold levels for EPCRA Section 313 are identified in the TC list in reference (1).

26-5.10. **Range.** When used in a geographic sense, a range is a designated land or water area that is set aside, managed, and used for range activities of DoD. A range includes: (1) firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas; and (2) airspace areas designated for military use per regulations and procedures prescribed by reference (o).

26-5.11. **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, TC, or CERCLA HS.

26-5.12. **Reportable Quantity.** The RQ is the specified amount 
in pounds of any EHS or HS that, 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 (g) and table 302.4 of reference (h) list 
reportable quantities.

26-5.13. **Threshold Planning Quantity.** The TPQ is 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 (g) list TPQs.

26-5.14. **Toxic Chemical.** A TC is any substance listed in 
reference (l).

26-5.15. **Toxics Release Inventory - Data Delivery System.** TRI-
DDS is a Web-based reporting tool that supports threshold and 
release calculations for munitions and range activities in 
support of EPCRA Section 313. The tool provides the necessary 
information to calculate TC amounts for combinations with 
installation values or direct comparison with reporting 
threshold levels and to estimate releases associated with 
munitions and range activities.
CHAPTER 27

HAZARDOUS WASTE MANAGEMENT ASHORE

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27-1 Scope. This chapter identifies requirements and responsibilities for the management of hazardous waste (HW) and regulated medical waste (RMW) at Navy shore facilities within the United States and its territories.

27-1.1. Related Chapters. Chapter 17 (Environmental Management Systems) describes Navy’s environmental management system (EMS) implementation to include pollution prevention and green procurement. Chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) includes information on
processing notices of violation. Chapter 23 (Hazardous Materials Management Ashore) describes Navy's integrated logistics approach for effective hazardous material control and management (HMC&M). Chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act) describes requirements for release reporting. Chapter 28 (Solid Waste Management and Resource Recovery Ashore) provides policy guidance for non-hazardous solid waste (SW). Chapter 29 (Low-Level Radioactive Waste Disposal Program) provides policy guidance for HW mixed with radioactive waste. Chapter 31 (Storage Tanks) provides policy guidance for HW storage tanks. Chapter 34 (Overseas Environmental Compliance Ashore) provides Navy policy guidance with respect to Navy commands in foreign countries. Chapter 35 (Environmental Compliance Afloat) defines responsibilities for the management of hazardous material (HM) aboard Navy ships.

27-1.2. References

(a) DoD Instruction 4715.4 of 18 June 1996

(b) 40 CFR 262

(c) 40 CFR 260-279

(d) DoD 4160.21-M, Defense Materiel Disposition Manual

(e) 29 CFR 1910.1200

(f) SECNAVINST 5090.8A, Policy for Environmental Protection, Natural Resource, and Cultural Resources Programs

(g) 40 CFR 266

(h) DoD Policy to Implement EPA's Military Munitions Rule of 1 July 1998

(i) NAVSEA OP5 Seventh Revision

(j) BUMEDINST 6280.1B, Management of Infectious Waste

(k) BUMEDINST 6260.30A, Mercury Control Program for Dental Treatment Spaces

(l) BUMED Pharmaceutical Waste Management Guidelines of 30 May 2007
27-1.3. Applicability. The policies and procedures in this chapter apply to Navy installations in the United States, its possessions, and territories. 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.

27-2 Legislation

a. The following legislation contains provisions that pertain to HW management, recordkeeping, shipping, treatment, storage, disposal, cleanup, fees, assessments, fines, and penalties:

(1) Federal Facilities Compliance Act, and

(2) Resource Conservation and Recovery Act (RCRA).

b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, several laws including the Clean Air Act; Clean Water Act (CWA); Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Hazardous Materials Transportation Act; Occupational Safety and Health Act; and Toxic Substances Control Act also have provisions that impact HW management.

27-3 Requirements

27-3.1. Regulatory Compliance. It is Navy policy to comply with all applicable federal, state, and local HW laws, regulations, and permit requirements. Compliance with all aspects of an Environmental Protection Agency (EPA)-approved state HW management program is considered compliance with federal requirements. If a state has a program that is not approved by EPA, Navy commands shall comply with both state and federal program requirements. Contracting offices shall ensure
contractors performing work for Navy on Navy property comply with all applicable requirements while on-site.

27-3.2. Hazardous Waste (HW) Minimization

a. It is Navy policy to minimize HW generation for the protection of human health and the environment and to reduce the regulatory burden and cost associated with HW management per reference (a). HW minimization shall be accomplished by incorporating HW into the installation EMS and applying the following hierarchy to HW management:

(1) Eliminating or reducing the use of HM at the source by changing the process, equipment, requirement, or materials used;

(2) Substituting a less hazardous material into the process;

(3) Recycling or recovery and reuse of HM and HW (HW recycling may require a permit unless exemptions apply);

(4) Reducing or eliminating excess and expired shelf-life HM;

(5) Treating HW to reduce the volume or to reduce it to a less toxic or non-hazardous state (may require a permit);

(6) Destroying HW (may require a permit); and

(7) Disposal.

b. Navy's long-term goal is to eliminate HW disposal to the maximum possible extent by eliminating the use of HM and by implementing best management practices.

27-3.3. HW Generation. In general, the amount of HW generated determines the generator's status with respect to the regulatory requirements that apply. Navy installations and shore commands shall ensure their generator status is clearly identified in HW management plans (refer to section 27-3.7), abide by all regulatory requirements applicable to their generator status, and minimize waste generation to retain their status as non-permitted facilities, where applicable and feasible. The requirements stated in this section are based on federal regulations; state and local requirements may differ.
a. Large Quantity Generators. A monthly generation quantity of 1,000 kilograms (kg) or more of HW or 1 kg or more of acute HW confers large quantity generator (LQG) status. LQGs may accumulate HW on-site for 90 days or less provided certain waste management, contingency planning, and employee training requirements are met. An LQG that accumulates HW for more than 90 days becomes subject to RCRA permit requirements unless an exception has been approved by the appropriate federal or state regulatory agency.

b. Small Quantity Generators. A monthly generation quantity of 100 – 1,000 kg of HW and less than 1 kg of acute HW confers small quantity generator (SQG) status. An SQG may accumulate HW on-site for 180 days or less provided the quantity of waste accumulated on-site never exceeds 6,000 kg. If an SQG exceeds monthly generation limits or the total on-site accumulation limit, it will become subject to either LQG regulations or RCRA permit requirements, as appropriate.

c. Conditionally Exempt Small Quantity Generators. A monthly generation quantity less than 100 kg of HW and less than 1 kg of acute HW confers conditionally exempt small quantity generator (CESQG) status. There is no accumulation time limit for CESQGs; however, if a CESQG exceeds either the monthly generation limit or accumulates more than 1,000 kg of HW prior to disposal, it must comply with more stringent requirements for SQGs or LQGs, as appropriate. At a minimum, Navy CESQGs shall:

(1) Ensure staff are aware and properly trained to handle HM and HW;

(2) Make HW determinations and maintain monthly generation log and total quantity on-site (not to exceed 1,000 kg at any time) to demonstrate CESQG status. If exceeded, appropriate SQG or LQG requirements apply;

(3) Label HW containers and keep closed when not in use;

(4) Ensure HW containers are in good condition, free of leaks, and made of materials that will not react with the HW. Do not mix incompatible wastes or place HW in an unwashed container that previously held an incompatible waste or material;

(5) Keep HW containers holding waste that is incompatible with other nearby wastes and materials separated by means of a dike, berm, wall, locker, or other means;
(6) Prepare containers for transportation by packaging, labeling, and marking them accordingly per subpart C of reference (b); and

(7) Arrange for proper disposal at a facility properly permitted to manage HW as soon as practicable. This will normally be accomplished via Defense Logistics Agency (DLA) Disposition Services.

27-3.4. HW Management. It is the generator's responsibility to determine whether waste is an HW subject to regulation under federal RCRA requirements; applicable state and local laws; or a combination of federal, state, and local requirements. Knowingly diluting an HW for the purposes of avoiding HW regulations is prohibited.

a. Waste Stream Identification and Determination

(1) HW is either listed (specifically named in federal or state regulations or both) or exhibits any of four characteristics: ignitability, corrosivity, reactivity, or toxicity. Mixtures of an SW 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, or corrosivity. Such mixtures are excluded from regulation as HW once they no longer exhibit a characteristic.

(2) Navy installations and commands shall make an HW determination at the point of generation for all waste streams. Following the initial waste stream determination, Navy installations and commands shall review waste stream characterizations periodically to ensure each is correctly identified. If the results of the periodic review indicate a significant change, testing or other analysis may be conducted to validate the waste stream determination. Note that generator knowledge of the waste stream constituents can and should be used to minimize the need for laboratory testing for initial waste stream determinations and subsequent validation.

(3) Any waste stream excluded or exempt from the full range of HW management requirements in reference (c) must be documented. Records of all exclusions and exemptions shall be maintained along with waste stream determination documentation and periodically reviewed to ensure continued eligibility for exempt or excluded status.
b. **Satellite Accumulation.** Under RCRA, generators may accumulate up to 55 gallons of HW (or 1 quart of acute HW) at or near the point of generation and under the control of the operator of the process generating the waste. This is the cumulative amount of waste that may be accumulated regardless of the number of waste streams involved. Waste at a satellite accumulation area (SAA) must be dated on the day it exceeds 55 gallons and removed within 3 days to a central accumulation area or to a treatment, storage, and disposal facility (TSDF). Navy installations and commands shall clearly identify SAAs; strictly adhere to accumulation limits; and ensure all containers are in good condition, compatible with the waste generated, clearly labeled with "Hazardous Waste" and descriptive wording identifying the contents, and remain closed except when adding or removing material.

c. **Central Accumulation Areas.** LQGs may store HW at central accumulation areas that meet the standards in reference (c) for up to 90 days. SQGs may store HW at central accumulation areas for up to 180 days. Installations and commands with a RCRA permit must store HW per the provisions of the permit, typically up to 1 year. CESQGs are not subject to time limitations with respect to HW storage but they may not accumulate more than 1,000 kg at any one time prior to disposal.

27-3.5. **HW Permitting, Transportation, and Manifesting.** LQGs and SQGs must obtain an EPA generator identification (ID) number and send their HW, accompanied by a manifest, to a permitted TSDF or obtain a permit allowing them to conduct on-site treatment, storage, or disposal of HW. CESQGs are exempt from requirements to obtain EPA generator ID numbers and manifesting requirements, as well as most other RCRA requirements per reference (c). However, if required by state regulations or the TSDF accepting their waste, CESQGs may need to obtain an EPA generator ID number and utilize HW manifests.

a. **Permitting.** RCRA permits contain detailed, proscriptive requirements for operation of a TSDF including inspection, monitoring, corrective action, and closure and post-closure care of individual HW management units such as tanks, surface impoundments, container storage areas, and landfills. The need for a RCRA permit is usually dictated by the nature of the processes or wastes being generated and their subsequent handling. Navy installations shall abide by all conditions of the applicable RCRA permit. Region commanders and commanding officers (COs) of Navy installations are authorized to sign RCRA permits for active installations and may delegate authority to
sign RCRA permits to tenant commands when requested for mission critical aspects.

b. Transportation. Transporters must have an EPA generator ID number to pick up and haul HW to a TSDF. A transporter of HW is also subject to the HM transportation requirements of the Department of Transportation (DOT), including labeling, marking, placarding, use of proper containers closed per manufacturer specifications, spill reporting, and HM employee training. Transport of HW over a public highway requires the vehicle operator to have a commercial driver's license with an HM endorsement. Some states may require additional training beyond DOT requirements. Transportation of HW from SAAs to central accumulation areas shall be by authorized personnel only and per reference (c), local instructions, and permit provisions.

c. Manifesting. Generators offering HW for transport off-site must prepare EPA Form 8700-22 Uniform Hazardous Waste Manifest Form which must accompany HW transported over public roads. EPA Form 8700-22 must be purchased with the manifest tracking number pre-printed by an EPA-approved registrant. A number of States have additional requirements regarding the use of the EPA Form 8700-22. Some States require copies to be submitted to the State, and may require State-specific waste codes in addition to Federal hazardous waste codes. EPA Form 8700-22 does not replace DLA Disposition Services Disposal Turn-in Document DD Form 1348-1A Issue Release/Receipt Document.

(1) Manifest Preparation. The generator must certify to a statement on the manifest that there is a program in place to reduce the volume and toxicity of waste generated and the method selected for treatment, storage, or disposal is the best practicable method available to the generator that minimizes the present and future threat to human health and the environment. The manifest must also include a 24-hour manned duty telephone number in the "generator" block. Further, the generator or designated representative must sign the manifest certifying the shipment has been prepared according to applicable EPA and DOT regulations. Whether Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM), DLA Disposition Services, a support contractor, or in-house staff prepares the manifest, the generator, as the EPA generator ID holder, remains responsible for ensuring the manifest is correct and complete. Each designated signatory shall be qualified by appropriate DOT training to make such certifications and shall be authorized in writing to sign HW manifests on behalf of the installation commander. A generator who generates an HW subject to federal
land disposal restrictions (LDRs) must notify the receiving TSDF the waste is a restricted waste or certify the waste meets the requirements for land disposal.

(2) Manifest Distribution. Sufficient copies of the manifest shall be provided to allow the generator, each transporter, and the receiving TSDF operator 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).

d. Navy and DLA Interface

(1) DLA Disposition Services is designated as the responsible agency for worldwide disposal of all Department of Defense (DoD) generated HW. DLA Disposition Services is not, in most cases, the HW generator and assumes none of the HW generator's responsibility for ensuring wastes are correctly identified and that manifests and all required documentation provided by the generator are accurate and complete. If HM is turned into DLA Disposition Services for resale and is later determined to be HW, DLA Disposition Services will fulfill the generator requirements.

(2) DLA Disposition Services will accept HM and HW per the turn-in requirements in reference (d), including, but not limited to providing material safety data sheets (MSDSs) and Occupational Safety and Health Administration (OSHA)-compliant labels per reference (e). HM which does not have a MSDS or an OSHA-compliant label will be received as waste and the generating command must provide enough information to DLA Disposition Services to properly store and manage the property.

(3) In the event DLA Disposition Services does not manage a particular HW stream, or when necessary to get the combination of quality, responsiveness, and cost that best meets mission requirements and maintains compliance, Navy installations may request authority from their budget submitting office (BSO) to obtain contracting services for HW disposal per reference (a). If DLA Disposition Services is not the HW disposal agent, the installation shall ensure the contract requirements comply with federal, state, and local HW regulations; and ensure contract requirements and contract quality control procedures are at least as stringent as those used by DLA Disposition Services. Generator liability and
responsibilities are the same whether using DLA Disposition Services or any other HW contracting service.

27-3.6. Reporting and Recordkeeping. There are many recordkeeping requirements applicable to generators and TSDFs. Some records are specific to the generator or type of facility and others are required by law. In addition, RCRA permits may specify recordkeeping requirements that vary from those outlined in this section. Installations and commands shall comply with all applicable reporting and recordkeeping requirements. In addition, it is Navy policy to retain HW disposal records for a total of 50 years per reference (f). However, once legally mandated record retention requirements have been met, HW disposal records may be archived off-site for the remainder of the 50-year period. The following is a list of the most common reporting and recordkeeping requirements:

a. Biennial Reports. Generators and TSDFs 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). A copy of each biennial report shall be maintained for a period of at least 3 years from the due date of the report.

b. Manifests. Except as otherwise required by state law, copies of manifests signed by the generator, transporter, and TSDF owner or operator must be maintained by the generator for 3 years from the date the HW was accepted by the original transporter. If a TSDF accepts HW from an off-site source without an accompanying manifest, the TSDF operator must submit a report to the EPA regional administrator or appropriate state office within 15 days after receiving the waste.

(1) Large Quantity Generators. LQGs who have not received a signed manifest within 35 days of the date the HW was shipped must contact the transporter or designated TSDF 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 TSDF within 45 days of the date the HW was shipped must file an exception report with EPA or state, as appropriate. A copy of each exception report must be maintained for a period of at least 3 years from the due date of the report.

(2) Small Quantity Generators. SQGs 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 from
the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication the generator has not received confirmation of delivery, to the EPA regional administrator for the region in which the generator is located.

c. LDR Notifications and Certifications

(1) Generators of waste must determine whether 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 TSDF receiving the waste and place a copy in the generator's file. The notice should include the applicable notification and certifications per the LDR section of reference (c). No further notification is necessary unless the waste or TSDF change, in which case a new notification must be sent and a copy placed in the generator's file.

(2) Generators must retain an on-site copy of all notices, certifications, waste analysis data, and other documentation related to the LDRs for at least 3 years from the date 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.

d. Waste Determinations. 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.

e. Waste Analysis Plans. Generators managing and treating HW in less than 90-day tanks or containers 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) per the LDR requirements. The plan must be kept on-site in the generator's records. Generators managing HW in a CWA system must include a one-time note to the on-site file.

f. Training Documentation. Generators and operators of TSDFs shall develop a training plan and maintain personnel training records of those engaged in HW management, as required by federal, state, and local regulation. Federal RCRA regulations require 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
Training documentation requirements apply to the following types of training:

1. General awareness training,
2. 40-hour initial training for facility operators,
3. 24-hour supervisory operations for facility managers,
4. 8-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) refresher annual training, and
5. Annual spill response training.

g. HW Metric Reporting

(1) All Navy installations that manifest HW off-site, treat HW on-site, or hold a RCRA permit shall enter their annual calendar year HW data into the U.S. Navy Environmental Portal (Portal) HW module (refer to appendix E (Web Sites) for Web site address). A completed annual report for the previous calendar year, prepared per guidance provided via Naval Facilities Engineering Command shall be promoted to the next level within the Portal by 15 March. Host installation submittals shall include all Navy tenants that generate HW. Refer to chapter 4 (Environmental Performance Reporting) for a discussion of other metric reporting.

(2) Installation reports should include all Navy tenants that generate HW. CESQGs who are tenants shall be included in the report of their host installation. CESQGs not under a host command are not required to report. Refer to chapter 28 (Solid Waste Management and Resource Recovery Ashore) for a discussion of other SW reporting.

h. Other Records. Installations shall keep a written record of inspections such as that of waste accumulation and container storage areas to demonstrate compliance with reference (c) requirements. In addition, copies of correspondence with regulators, applications for permits and renewals, reports of releases, and documentation of response actions are all necessary records to have should questions arise.

27-3.7. HW Management Plans. Every Navy shore installation or command that generates HW shall develop and implement an HW management plan. This requirement may be satisfied by a stand-
alone document or incorporation of relevant requirements into other planning documents such as EMS documents. HW management plans may be developed and implemented on a regional basis as long as each installation or command covered by the plan is addressed in sufficient detail. Plans shall be updated as needed to stay abreast of regulatory and procedural changes affecting the installation or command and, at a minimum, include:

a. Identification of applicable federal, state, and local regulations pertaining to the generation and management of HW;

b. Identification of training requirements and procedures for obtaining training and maintenance of training records;

c. Assignment of responsibilities for the generation, designation, handling, storage, treatment, disposal, and all documentation of HW;

d. Description of all HW generation and management procedures including procedures for documenting any exemptions or exceptions;

e. HW minimization plans and goals;

f. Reference to applicable contingency plans and emergency response procedures; and

g. Management of explosive HW components and associated explosive wastes subject to subpart M of reference (g).

27-3.8. **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 the 24-hour toll free number 1-800-424-8802). Additional notification may be required by the facility spill response plan (refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) and chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act) for spill procedures and reporting requirements). Transporters shall report any discharge of HW in transit as specified in federal and state regulations.

27-3.9. **Ship-to-Shore Interface.** Shore commands shall manage used or excess HM and SW transferred from a Navy ship in compliance with applicable HM, HW, and SW regulations. For all
used or excess HM and SW determined by the shore command to be HW, the shore command 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 command for HW handling and disposal and for laboratory testing, if needed. Refer to chapter 35 (Environmental Compliance Afloat) for additional information on shipboard HM and SW management and offload procedures.

a. Segregation, Packaging, Handling, Safety, and Labeling. Ships' forces shall follow the requirements and policy guidance in chapter 35 (Environmental Compliance Afloat) regarding segregation, packaging, handling, safety, and labeling of used or excess HM. If the ship does not provide adequate identification and labeling, the receiving shore command may designate ship's excess or used HM and SW as waste based on laboratory analysis and charge the ships' or fleet accounts for laboratory testing and any additional handling, documentation, administrative, and overhead costs.

b. Decommissioning. A ship scheduled for decommissioning shall remove all HM prior to the date of decommissioning to the extent practical and appropriate. All HM removed from the ship shall be processed by the supporting shore command within 90 days after decommissioning.

c. Ship-to-Ship Transfers. Refer to section 35-3.16.c for requirements and policy governing transfer of used or excess HM from one ship to another.

d. HM and HW from Navy Ships in Private Shipyards. Refer to chapter 35 (Environmental Compliance Afloat) for requirements and policy regarding HW management under contracts, other than new construction, for work onboard Navy ships in shipyards.

e. 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 commands as well as contractors at Navy commands or contractor-owned facilities. Navy has not applied for, and ships have not been granted, EPA generator ID numbers for transport of HW.

27-3.10. Retrograde. Military sealift command (MSC) ships, U.S. naval ships (USNS), and U.S. ships (USS) may transport retrograde HW from U.S. facilities located outside the United States into the United States. Retrograde materials transported on a U.S. ship is handled per section 27-3.9 and is not
considered importation of HW under RCRA regulations. Following proper arrangements, including any required notifications to state or local regulators, Navy commands shall accept DoD shipments of retrograde HW from facilities outside the United States.

27-3.11. Military Munitions. Intentionally dumping or disposing of munitions at sea is prohibited except to safeguard life or safety of the ship (refer to chapter 36 (Permitted Ocean Disposition)). Subpart M of reference (g), and reference (h) define when military munitions become wastes subject to RCRA HW management requirements and how these waste military munitions (WMM) will be managed. Per subpart M of reference (g), munitions are waste when they are abandoned, removed from storage for disposal, damaged or deteriorated so badly they cannot be recycled or used for another purpose, or declared waste by the designated disposition authority. Military munitions are not a waste when used for their intended purpose and are not a waste when recycled following any required demilitarization, disposal, or treatment operations. Navy installations shall comply with the provisions of subpart M of reference (g) and reference (h) which include, but are not limited to:

a. Designation Decision. Assignment of munitions or ordnance to the Special Defense Property Account or Centralized Demilitarization Account does not by itself constitute a designation as an HW. Those munitions are, rather, awaiting a final decision of use, reuse, reclamation, sales, or demilitarization.

b. Demilitarization of WMM. RCRA HW requirements are applicable to the demilitarization process at the point where a determination is made in writing by an authorized DoD designated disposition authority that the munitions item shall be disposed of rather than retained. Any resultant products generated by a demilitarization process such as ash, sludge, or residue are subject to the full range of SW and HW regulation.

c. RCRA HW Permitting. Navy installations shall comply with appropriate RCRA permitting requirements for demilitarization, disposal, and treatment operations for military munitions. Permits obtained shall adhere to RCRA regulations and DoD procedures and provide for adequate protection of human health and the environment. They shall avoid unnecessary administrative burdens or operational
requirements that would limit DoD's flexibility in managing its demilitarization program.

d. **RCRA Subpart X Permitting for Open Burning / Open Detonation.** WMM and other explosive HW disposal is conducted by open burning / open detonation (OB/OD) under strict operating procedures at a RCRA Subpart X permitted unit and must comply with all applicable federal, state, and local environmental requirements. OB/OD is used to treat excess, obsolete, or unserviceable military munitions that are unsafe to disassemble further for recycling or cannot be destroyed safely on-site by other methods. OB/OD as a treatment method for HW is prohibited except for OB/OD of WMM and explosive HW.

e. **Explosive Ordnance Disposal Emergency Response.** Explosive ordnance disposal (EOD) emergency response is a non-routine operation conducted to abate an imminent and substantial hazard to public health, safety, or property from explosives of any type, including munitions. Such operations are not subject to regulation or permitting under RCRA (part 264.1, paragraph (g) of reference (c); part 265.1, paragraph (c)(11) of reference (c); and part 270.1, paragraph (c)(3) of reference (c)), but may result in residue and contamination subject to RCRA once the explosive hazard has been abated. RCRA Subpart X treatment permit requirements do not apply to EOD sites used solely for training or to sites used for emergency operations, or both. If, however, the site is used for OB/OD to dispose of or destroy munitions or ordnance not related to training or emergency operations, then such sites are subject to HW treatment permit regulations under RCRA.

f. **Training, Research, Development, Testing, and Evaluation.** Military munitions used for training, and research, development, testing, and evaluation (RDT&E) 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). Recovery, collection, and on-range destruction of military munitions (e.g., unexploded ordnance, munitions fragments, residue resulting from RDT&E operations) during range clearance activities on operational ranges are not subject to regulation under RCRA.

g. **Off-Specification Munitions.** Off-specification small arms ammunition of calibers up to and including 50 caliber shall not be considered reactive within the definition of RCRA unless they contain high explosives (i.e., hazard class division 1.1 or
1.2 material). They could, however, be HW for some other reason such as toxicity.

h. Material Potentially Presenting an Explosive Hazard. Material potentially presenting an explosive hazard (MPPEH) generated during training or RDT&E activities on operational ranges and other munitions-related activities must comply with explosives safety and environmental requirements. MPPEH is normally assessed and documented as safe and then recycled as scrap metal. Scrap metal (part 261.1, paragraph (c)(6) of reference (c)) and processed scrap metal (part 261.1, paragraph (c)(10) of reference (c)) are exempt or excluded from RCRA regulatory HW management requirements (part 261.4, paragraph (a)(13) and part 261.6, paragraph (a)(3)(ii) of reference (c)). However, if these materials are not properly managed and recycled, they may become HW. Applicable MPPEH explosives requirements are contained in reference (i).


a. Regulated Medical Wastes. Federal facilities that transport RMW across state lines are responsible for complying with the transport, disposal, and manifesting requirements for the state into which it is transported. RMW sometimes include an HW component regulated under RCRA, such as dental amalgam. Installations and commands managing RMW with an HW component shall coordinate waste management requirements with DLA Disposition Services and state and local regulators to ensure both RMW and HW criteria are met when disposing of these wastes. Reference (j) includes definitions and management procedures of RMW and enclosure 4 of reference (k) includes disposal requirements associated with dental amalgam.

b. Pharmaceutical Wastes. A number of pharmaceuticals and formulations of pharmaceuticals meet the definition of HW under RCRA. Some of these RCRA-regulated pharmaceuticals may also be classified as RMW. Installations and commands shall identify, segregate, contain, and appropriately label, store, transport, and dispose of RCRA-regulated pharmaceutical wastes in compliance with RCRA HW regulations. For pharmaceuticals that are also RMW, installations and commands shall coordinate waste disposal requirements with DLA Disposition Services and state and local regulators to ensure all regulatory requirements are
met. Reference (l) includes detailed guidance on pharmaceutical waste management, as well as a listing of pharmaceuticals of concern.

27-3.13. **Electronic Waste**

a. It is Navy policy to practice environmentally sound management of electronic waste (e-waste). Refer to chapter 28 (Solid Waste Management and Resource Recovery Ashore) for more information regarding handling of e-waste. Typically, e-wastes consist of used electronic items or components and shall be consigned to DLA Disposition Services as property for transfer, donation, or resale outside Navy when the owner has no further use for them.

b. Used electronics that cannot be consigned to DLA Disposition Services because they are damaged or broken, or are rejected by DLA Disposition Services, are SW subject to the full range of RCRA SW and HW regulations. This includes any exemption, exclusions, or universal waste provisions that may apply. Installations and commands shall manage such e-waste as HW, and shall assume responsibility as the HW generator for any e-waste that cannot be exempted or excluded from the full range of applicable HW regulations.


a. Reference (c) includes provisions that streamline federal HW regulations applicable to batteries, pesticides, mercury-containing equipment, and bulbs (lamps) as specified in part 273 of reference (c).

b. States may adopt the federal universal waste regulations or modify them to include other wastes via state legislation. The purpose of universal waste regulations is to promote recycling and resource recovery by easing the regulatory burden associated with common HW streams. Universal wastes have less stringent storage, accumulation, labeling, and tracking requirements than other HW. Navy installations and commands have the option of managing HW under universal waste provisions available and applicable in their state. Navy installations and commands may recycle universal wastes through qualified recycling programs (refer to chapter 28 (Solid Waste Management and Resource Recovery Ashore)) provided all applicable regulatory requirements are met.
27-3.15. **Weapon Systems.** HM and HW considerations, especially those relating to environment, safety, and health shall be incorporated into the earliest stages of integrated logistics system planning and acquisition. When requirements in technical directives or weapon system operation and maintenance procedures drive the use of HM and generation of HW, commands shall advise the cognizant echelon 2 command of the need for appropriate action.

27-3.16. **Fees, Assessments, Fines, and Penalties.** The full range of available enforcement tools, including fees, assessments, civil fines, supplemental environmental projects, and penalties is available to EPA, states, and local governments in enforcing HW laws and regulations. Agents, employees, and officers of the United States are exempt from personal liability for any civil penalty arising from acts or omissions within the scope of their official duties. There is no exemption from personal liability for criminal acts and any associated penalties. The installation or command whose activities most directly led to a violation is responsible for payment of any penalties using its operating budget or other available sources of funds. Navy installations and commands shall pay any non-discriminatory fees or service charges assessed in connection with a federal, state, interstate, or local HW regulatory program including 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.

27-3.17. **Training Requirements.** Personnel involved in HW management shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. Shore installations and commands that generate HW shall include training requirements in their HW management plans per section 27-3.7 and retain training records per section 27-3.6.f.

   a. Every person who produces, packages, handles, treats, or transports HW shall receive applicable hazard communication training per reference (e); and job-specific training regarding HW 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.

   b. Every person involved in HW management at naval shore commands shall receive the general environmental overview training specified in chapter 3 (Environmental Readiness
Training); specific comprehensive training on federal, state, and local HW regulations related to their job assignment; and be familiar with the provisions of this chapter. In addition, as summarized in table 27-1:

(1) Personnel with a role in emergency response shall receive appropriate training per paragraph (q)(6) of reference (m). Note that emergency response roles range from simply witnessing and reporting an incident to participating in or supervising a response;

(2) Personnel with a role at HW cleanup sites shall receive appropriate training per paragraph (e) of reference (m); and

(3) Personnel with a role at TSDFs shall receive appropriate training per paragraph (p)(7) of reference (m).

c. Every person who directly affects HW transportation safety in commerce, to include those with signature authority for HW manifests, shall receive training on compliance with applicable DOT requirements and HM transport safety.

d. Environmental professionals involved with HW responsibilities at COMNAVFACENGCOM commands, Navy regional environmental coordinator staff, BSO staff, and legal environmental staff shall receive the general environmental overview training specified in chapter 3 (Environmental Readiness Training), introductory or executive overview training in HW management, and be familiar with the provisions of this chapter.

e. All personnel involved in the management of WMM must receive the environmental training required by part 264.16 of reference (c) and Munitions Rule training as required by appendix D of reference (i).

27-4 Responsibilities

27-4.1. BSOs shall:

a. Ensure their commands comply with applicable federal, state, local HW laws and regulations, and Navy HW management and reporting requirements;
b. Ensure subordinate commands develop and use HW management plans or an HW management component of an EMS or P2 plan as required by section 27-3.7;

c. Budget and allocate sufficient resources to ensure shore commands 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, and transport and disposal of waste; and

d. Where warranted, upon request from the CO and in consultation with COMNAVFACENGCOM and the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), provide written authorization for the installation to contract directly for HW disposal services in lieu of DLA Disposition Services.
# Table 27-1. Health and Safety Training Requirements for HW and Emergency Response

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<th>Other Emergency Response Staff</th>
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<td>Level 1 - First responder</td>
<td>Level 4 - HAZMAT</td>
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<td>(awareness level)</td>
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<td>24 hrs of Level 3 and proven experience in specific competencies</td>
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<td>Annual refresher</td>
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<td>Level 5 - On-scene</td>
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<td>incident commander</td>
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<td>24 hrs of Level 2 and additional competencies</td>
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<td>Annual refresher</td>
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<td>Note: Paragraph (q)(6) of reference (m) includes additional information.</td>
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<td>1Witnesses or discovers a release of HM and who is trained to notify the proper authorities.</td>
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<td>2Responds to releases of HM in a defensive manner, without trying to stop the release.</td>
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<td>3Responds aggressively to stop the releases of hazardous substances.</td>
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<td>4Responds with and in support of HAZMAT technicians, but who has specific knowledge of various hazardous substances.</td>
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<td>5Assumes control of the incident scene beyond first responder awareness level.</td>
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</table>
### Treatment, Storage, and Disposal Sites

<table>
<thead>
<tr>
<th>Staff</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General site employees</strong></td>
<td>24 hrs initial or equivalent</td>
<td>8 hrs annual refresher</td>
</tr>
<tr>
<td><strong>Emergency response personnel</strong></td>
<td>Trained to a level of competency</td>
<td>Annual refresher</td>
</tr>
</tbody>
</table>

Note: Paragraphs (e) and (p)(7) of reference (m) includes additional information.
27-4.2. COMNAVFACENGCOM shall:

   a. As requested, provide technical assistance to BSOs and commands in complying with federal, state, and local HW laws and regulations and in the preparation of command HW management plans, HW elements of EMS documents, and HW section of P2 plans;

   b. Collect and consolidate Navy's annual HW metric data and other information as directed by OPNAV (N45);

   c. Assist ships, BSOs, and shore commands in reaching a long-range goal of elimination of HW disposal to the maximum extent possible;

   d. Designate and supervise facilities engineering commands and public works departments in receiving, storing, and transferring HW to DLA Disposition Services;

   e. Standardize COMNAVFACENGCOM HW operations under a single business model to include processes, procedures, metrics, software, budget formulation, and financial management;

   f. As requested, assist shore commands in preparing new applications as well as permit renewal applications for RCRA permits; and

   g. Include fees for applications and permits for construction of military construction-funded HW management facilities as part of the project cost.

27-4.3. Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) shall:

   a. Provide ship-to-shore off-load assistance for excess and used HM products;

   b. Make final disposition determination for all excess and used HM products received via the ship-to-shore off-load process;

   c. Facilitate all excess and used HM off-load dispositions and documentation requirements to reduce operational forces workload;

   d. Establish and maintain ship-to-shore off-load performance metrics to monitor Consolidated Hazardous Material
Reutilization and Inventory Management Program Afloat effectiveness for achieving HW minimization goals; and

e. Maintain and update procedures and instructions to ensure ship-to-shore transfer of used HM is accomplished per requirements and policies for HCM&M detailed in chapter 23 (Hazardous Materials Management Ashore).

27-4.4. Naval Education and Training Command (NETC) shall develop and provide training on the occupational safety and health aspects of HW applicable to Navy personnel.

27-4.5. Chief, Bureau of Medicine and Surgery (BUMED) shall:

   a. Ensure references (j) and (l) regarding RMW management and pharmaceutical waste management for Navy medical treatment facilities and reference (k) for dental treatment facilities are current; and

   b. Ensure subordinate commands comply with federal, state, and local requirements regarding the identification, generation, handling, storage, transport, treatment, and disposal of RMW and pharmaceutical waste.

27-4.6. COs of shore commands in coordination with the appropriate region commander shall:

   a. Develop and use an HW management plan or HW component of an EMS or P2 plan as required by section 27-3.7;

   b. Budget, fund, and manage HW in full compliance with applicable 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. Enter annual calendar year HW metric data into the Portal HW module and promote to the next level by 15 March of each year;

   f. Obtain and maintain applicable EPA generator ID number, if CO of a host command which serves as the HW generator for the site or facility as defined by the applicable regulatory agency;
g. If CO or officer in charge of a tenant command, comply with the policies of this instruction 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, provide capability to receive HM from ships and process it for reuse or disposal per applicable federal, state, and local regulations; and

j. If a generator of RMW or pharmaceutical waste:
   
   (1) Comply with the RMW management procedures specified in reference (j), the pharmaceutical waste guidelines in reference (l), and installation instructions;
   
   (2) Determine, evaluate, and comply with federal, state, or local requirements that are more stringent than the requirements in reference (j);
   
   (3) Request technical assistance, as required, from cognizant COMNAVFACENGCOM or BUMED activities in carrying out required actions; and
   
   (4) Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, treat, and dispose of RMW and pharmaceutical wastes per applicable federal, state, and local regulations.

27-4.7. COs of shore commands assigned to receive used or excess HM, SW, or RMW and pharmaceutical waste from ships and HW from other shore commands shall:

a. Receive ships' used or excess HM and SW and process it for reuse, recycling, or HW disposal per applicable federal, state, and local environmental laws and regulations;

b. Provide accessible facilities to receive and store HW per applicable federal, state, and local regulations until the material is disposed or transferred to DLA Disposition Services or other approved disposal contractor per section 27-3.5.d;

c. Provide accessible facilities to receive and store RMW per applicable federal, state, or local regulations until disposal of the materials; and
d. Provide for disposal of RMW per applicable federal, state, or local regulations.

27-4.8. Fleet commanders and type commanders, as appropriate, shall:

a. Reimburse Navy shore commands receiving ships' used or excess HM and SW for expenses incurred for laboratory analysis, HW handling, storing, and disposal; and

b. Reimburse Navy shore commands receiving ships' RMW and pharmaceutical waste for expenses incurred in handling, storing, and disposing of the material.

27-5 Definitions

27-5.1. Facility. A facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control.

27-5.2. Hazardous Waste. An HW is an SW, or combination of SW, 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.

27-5.3. Hazardous Waste Generator. An HW generator is any person, by site, whose act or process produces HW or whose act first causes an HW to become subject to regulation.

27-5.4. Open Burning and Open Detonation. OB/OD is a unique explosive HW disposal technology regulated under RCRA Subpart X of reference (n) and is used to treat excess, obsolete, or unserviceable military munitions that are unsafe to disassemble further for recycling, or cannot be destroyed safely on-site by other methods.

27-5.5. Solid Waste. An SW is 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 reference (o), or source, special nuclear, or byproduct material as defined by reference (p).

27-5.6. Universal Waste. A universal waste is any of the following HW subject to the universal waste requirements of reference (q): (1) batteries as described in part 273.2 of reference (q); (2) pesticides as described in part 273.3 of reference (q); (3) mercury thermostats as described in part 273.4 of reference (q); and (4) lamps as described in part 273.5 of reference (q). Note that many states designate additional wastes subject to state universal waste regulations.
CHAPTER 28
SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY ASHORE

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28-1 Scope. This chapter identifies solid waste (SW) and electronic waste (e-waste) management, waste prevention, and recycling policies.

28-1.1. Related Chapters. This chapter is applicable to other chapters in this manual which discuss topics pertinent to SW including pollution prevention (P2) and green procurement (chapter 17 (Environmental Management Systems)), management of hazardous material (chapter 23 (Hazardous Materials Management Ashore)), management of hazardous waste (HW) (chapter 27 (Hazardous Waste Management Ashore)), reclamation and recycling of used oils (chapter 30 (Oil Management Ashore)), Navy SW policy specific to overseas installations (chapter 34 (Overseas Environmental Compliance Ashore)), and handling of SW aboard ships (chapter 35 (Environmental Compliance Afloat)).

28-1.2. References
(a) NAVFAC UG-2084-ENV, Integrated Solid Waste Management Plan (ISWMP) Guide April 2009
(b) 40 CFR 243
(c) NAVMED P5010, Manual of Naval Preventive Medicine, August 1999

(d) 40 CFR 262.11

(e) 40 CFR 240

(f) 40 CFR 268

(g) 40 CFR 257

(h) 40 CFR 258


(j) 40 CFR 247

(k) 40 CFR 246

(l) NAVFAC NFESC UG-2039-ENV, Qualified Recycling Program (QRP) Guide

(m) 10 U.S.C. §2577

(n) DoD Instruction 4715.4 of 18 June 1996

(o) USD (AT&L) Memo of 23 Jun 2011, DoD Implementation Guidance for Commercial Sale of Expended Small Arms Cartridge Cases (ESACCS)

(p) 32 CFR 172

(q) 40 U.S.C. §571

(r) 41 CFR 102-38


(t) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management

(u) Council on Environmental Quality, Instructions for Implementing Executive Order 13423, March 2007
28-1.3. **Applicability.** Requirements and policies in this chapter derived from the Resource Conservation and Recovery Act (RCRA) and similar statutes apply to installations within the United States, Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, and Commonwealth of the Northern Mariana Islands. Policies regarding integrated solid waste management (ISWM), green procurement, and recycling apply to all installations worldwide.

28-2. **Legislation.** The Solid Waste Disposal Act (SWDA) requires federal facilities to comply with all federal, state, interstate, and local requirements concerning the disposal and management of SW, including permitting, licensing, and reporting. SWDA encourages beneficial reuse of wastes through recycling and incineration for energy recovery. A summary of this legislation is included in appendix A (Laws and Regulations).

28-3. **Requirements.** All Navy installations worldwide shall follow an ISWM hierarchy of source reduction, diversion, and as a last resort, disposal of SW generated in support of Navy's mission, and shall incorporate green procurement and recycling into their ISWM program. Those installations generating 1 ton or more of SW per day must prepare written integrated solid waste management plans (ISWMPs) and report ISWM metrics as outlined in this chapter.

28-3.1. **Integrated Solid Waste Management.** Installations shall utilize the guidance in reference (a) when developing and
implementing written ISWMPs. They may satisfy this requirement by participation in a regional ISWM program with a written plan that specifically addresses the installation's ISWM requirements. It is Navy policy to use ISWM to pursue Department of Defense (DoD) diversion goals established by executive order (E.O.) or DoD and Navy policy. Navy ISWM programs shall implement the following practices:

a. **Compliance with Federal, State, and Local Requirements.** Navy installations and commands shall comply with all applicable federal, state, and local regulatory requirements concerning collection, storage, handling, recycling, and disposal of SW (references (b) through (i)) and ensure any SW that is also an HW is managed per reference (d) and chapter 27 (Hazardous Waste Management Ashore). SW generated by Navy operations and actions on a Navy installation is government property for purposes of disposal. Non-government-owned SW may not be brought aboard Navy installations for disposal at government expense. Contractors, including public-private venture housing contractors, shall manage SW generated on a Navy installation as specified in their contracts. Refer to chapter 34 (Overseas Environmental Compliance Ashore) for regulatory requirements applicable to installations located outside the United States.

b. **Source Reduction.** Source reduction through P2 and green procurement shall be practiced per chapter 17 (Environmental Management Systems) to reduce generation of SW. RCRA amendments require federal agencies to procure Environmental Protection Agency guideline products containing recovered materials to the maximum extent possible (refer to chapter 17 (Environmental Management Systems) and reference (j)). Examples of source reduction include using electronic documents in lieu of printed materials; dual-sided printing; take-back provisions for packing materials; and purchasing items that are reusable, have extended service life, reduced packaging, or recyclable packaging materials.

c. **Diversion.** It is Navy policy to reuse or donate unneeded but usable property and to recycle or compost SW to minimize the amount of material sent to landfills and incinerators. Navy installations shall strive to meet any diversion goals established by E.O. or DoD and Navy policy. If existing reuse, donation, recycling, and composting practices are not sufficient to attain diversion goals, the installation shall plan, program, and budget necessary resources to achieve those goals in a cost-effective manner. Installations shall implement the following diversion practices:
(1) Reuse and Donation. Property no longer needed may be internally reassigned from one Navy command to another. If there is no potential Navy recipient for such property, it must be consigned to the Defense Logistics Agency (DLA) Disposition Services for other DoD reutilization, transfer to other federal agencies, donation to state or local agencies, or sale to the public, per reference (i). Installations and activities anticipating large quantities of unneeded property (e.g., furniture during a building renovation) shall coordinate with DLA Disposition Services as early as possible to arrange for a reuse customer. Navy installations and commands shall take reasonable steps to provide interim storage for such items to be held in place until DLA Disposition Services can take custody or arrange for customer pick up. DLA Disposition Services may elect to issue a certificate of abandonment and destruction (A/D) in accordance with reference (i) for property with little or no value. Items covered by a certificate of A/D must be recycled for their scrap value or disposed of as SW. Navy installations and commands are not authorized to transfer, sell, or donate usable property outside the Navy except through DLA Disposition Services as described in this paragraph. Scrap sold via the QRP or otherwise recycled or diverted is not considered usable property.

(2) Recycling. All Navy installations shall incorporate recycling into their ISWM program. Tenants, except for commissaries, exchanges, or working capital fund (WCF) activities, are not authorized to operate their own recycling program and shall participate in the host's recycling program and reimburse the cost, if any, associated only with legally mandated recycling requirements. Commissaries and exchanges have the option of participating in the installation’s recycling program, operating a program of their own, or both. Working capital funded activities must operate their own recycling programs for WCF scrap turned into DLA Disposition Services, but shall participate in installation recycling programs for municipal waste streams. Recycling programs may operate on a regional basis in conjunction with regional ISWM programs. Where regional programs are in effect, the region commander may require installations to participate in the regional program. It is Navy policy to:

(a) Recycle all commodities in the solid waste stream for which federal, state, or local regulations require recycling, regardless of the cost relative to the revenue obtained from recycling or economics of other disposal options.
Note that reference (k) makes the recycling of certain paper and cardboard products (including high grade office paper and corrugated containers) mandatory at most Navy installations;

(b) In addition to any legally mandated recycling requirements, recycle all commodities in the solid waste stream for which the cost of recycling is less than or equal to the cost of disposal;

(c) Establish qualified recycling programs (QRPs) (refer to section 28-3.2), where economically feasible, to retain the proceeds from the sale of recyclable materials per the guidance in reference (l). QRPs are the only authorized mechanism for an installation to receive funds from the sale of recyclable materials and augment overall recycling efforts. They are not intended to be the sole means of achieving compliance with regulatory mandates or diversion goals;

(d) Participate in external recycling programs. Where warranted, Navy installations may participate in existing or planned civilian community or commercial resource recovery facilities or systems. Such participation may include funding a pro rata share of a community facility; and

(e) Limit recycling to authorized materials only. Scrap paper, office paper, cardboard, wood, glass, and other obvious scrap may be recycled by the installation. QRPs (refer to section 28-3.2) are prohibited from recycling excluded items as defined in references (m) and (n). Useable items are not to be recycled unless the item has no value aside from its inherent material content. In such cases, the item(s) may be downgraded to scrap and recycled (but not transferred outside Navy, donated, or sold as a usable item). Installations may not accept non-government-owned property for recycling.

(3) Composting, Chipping, and Mulching. Navy installations shall compost, chip, or mulch landscaping cuttings, yard and green waste, limbs, branches, and other suitable organic materials at an installation, municipal, or private facility. Installations or regions may establish their own facilities for these processes if municipal composting facilities are not available or feasible. Note that some state and local regulations may require permitting of composting facilities. Incineration or landfill disposal shall only be used if allowed by state and local regulations; and composting, chipping, or mulching are not available, cost-effective, or
feasible at the installation. Note that many jurisdictions prohibit yard waste from landfills.

d. Disposal. Navy installations shall follow all federal, state, and local regulations for the protection of human health and the environment when disposing of SW. Incineration with energy recovery is preferred over landfill disposal, but does not count toward diversion rates. Burn pits and open burning are prohibited except in very limited circumstances as defined in section 28-3.1.d.3. Navy installations shall construct new SW facilities such as transfer stations, incinerators, and landfills only when there is a clear and compelling need that cannot be met with existing DoD, Navy, or public infrastructure.

   (1) Incineration with Energy Recovery. Incineration with energy recovery at municipal or Navy-owned facilities may be used for disposal of SW that cannot be diverted from the waste stream. When disposing of SW via incineration, installations shall utilize only appropriately permitted, designed, constructed, and operated facilities. Incinerators must be operated in conjunction with a final land disposal facility for residues from the incineration operation and those non-hazardous wastes that cannot be incinerated for reasons of health, safety, or technological limitation per reference (e). Navy-owned incinerators shall be designed, constructed, and operated per the most stringent of federal, state, or local regulations.

   (2) Landfill Disposal. Landfill disposal at municipal or Navy-owned facilities may be used for disposal of SW that cannot be diverted from the waste stream. When disposing of SW via landfill, installations shall utilize only appropriately permitted, designed, and constructed landfills. Navy-owned landfills shall be designed, constructed, and operated per the most stringent federal, state, or local regulations.

   (3) Burn Pits and Open Burning. Disposal of SW via burn pits and open burning is prohibited except in emergencies for health or safety considerations. Approval from cognizant state and local regulators is required for every instance of burn pit and open burning.

e. Recordkeeping and Reporting. Installations shall keep records of SW generation, diversion, and disposal by actual waste measurement including weight (in tons), type of waste, and method of diversion or disposal. Installation reporting shall include all tenant commands, including commissaries and
exchanges. Tenant commands shall support the host command's ISWM data collection efforts.

(1) Reuse, Transfer, and Donation Accomplished via DLA Disposition Services. Installations shall keep records of the total weight of materials consigned to DLA Disposition Services and the amount diverted through reuse, transfer, sale, or donation.

(2) Diversion. Installations shall keep records of all diversion activities whether by QRP (refer to section 28-3.2) or other recycling operation, disposal contracts or other contracts generating SW, WCF operation, consignment to DLA Disposition Services, or any other method. Commissaries, exchanges, and WCF activities operating recycling programs independent of the host installation shall report SW and diversion data to the host.

(3) Construction and Demolition. Installations shall maintain records of all construction and demolition (C&D) waste generated and diversion via recycling, reuse, or other methods (refer to section 28-3.4).

(4) Reporting. All Navy shore installations worldwide that generate more than 1 ton of SW per day shall prepare an annual report following the fiscal year end using guidance provided by Naval Facilities Engineering and Expeditionary Warfare Center (EXWC). Each year, detailed guidance for installation SW reporting is provided in a data call package from EXWC. Information obtained from the installation SW annual report is used to track diversion rates and prepare Navywide reports to Congress and the Office of the Federal Environmental Executive.

28-3.2. Qualified Recycling Programs. References (m) and (n) authorize installations to establish QRPs to receive proceeds from the sale of recyclable materials. An installation may not retain proceeds from the sale of recyclable materials via contract, consignment to DLA Disposition Services, direct sales, or any other means without first establishing a QRP. In the absence of a QRP, any proceeds from recycling will be deposited to the U.S. Treasury.

a. Establishment. Installations shall request authorization from their budget submitting office (BSO), via letter, for approval to establish and operate a QRP. BSOs shall authorize only one QRP per installation. All or part of a region's QRP operations may be conducted on a regional basis to
reduce costs or improve efficiency. Installations or regions that generate 1 ton or more of SW per day and operate a QRP shall include a written QRP business plan as part of their ISWMP (refer to section 28-3.1). Reference (1) includes detailed guidance on establishing and operating QRPs.

b. Administration. The host usually administers the QRP; however, administration may be delegated to a tenant command at the installation. Installations and regions shall charter and establish QRPs via directive or instruction. QRP charters shall include provisions for a QRP committee to make recommendations regarding capital expenditures for equipment and recycling infrastructure; improvements and corrective actions based on financial and environmental compliance audits; and disposition of excess recycling funds, if any. Region commanders and commanding officers (COs) of Navy installations shall appoint QRP managers, in writing, to oversee day-to-day operation of the QRP.

c. Operation. QRPs shall operate in compliance with all applicable environmental and occupational safety and health regulations.

(1) Authorized Recyclable Materials. In general, only obvious scrap materials may be recycled by the QRP. There are strict prohibitions against sale of excluded materials via QRPs (refer to section 28-3.2.c.2). QRP-recyclable materials can include, but are not limited to:

(a) High quality paper and paper products, mixed paper, newspaper, cardboard, plastic, metal cans, glass, used oil, batteries, tires, and other obvious scrap;

(b) Universal waste (subject to oversight by installation environmental personnel);

(c) Scrap metal (ferrous and non-ferrous scrap), excluding precious metals; and

(d) Expended small arms cartridge casings (ESACCs) and unrecognizable metal scrap gleaned from ranges. ESACCs and range scrap must be certified safe prior to acceptance by the QRP (refer to section 28-3.5). Reference (o) includes DoD guidance for QRP sale of ESACCs.

(2) Excluded Materials. QRPs are prohibited from selling excluded materials as defined in references (m) and (n).
QRP managers shall consult with DLA Disposition Services regarding any questionable item or waste stream considered for recycling. QRP authority may be restricted, suspended, or revoked by the BSO for selling excluded materials.

(3) Sales. All QRP sales shall be conducted per references (i), (m), (n), (p), (q), (r), and volume 11A, chapter 5 of reference (s). QRP managers may sell recyclable materials via any combination of the following strategies:

(a) Direct sales of recyclable materials by competitively selling materials to a vendor without utilizing DLA Disposition Services. BSO authorization to operate a QRP confers direct sales authority;

(b) Consignment of recyclable materials to DLA Disposition Services, with net proceeds allocated to the QRP; or

(c) Indirect sales through contractors or partners, with net proceeds allocated to the QRP.

(4) Financial Management. All QRP financial operations are subject to audits, inspections, and other oversight. QRPs shall account for all financial transactions per reference (s). QRPs shall deposit all proceeds from the sale of recyclable materials to **F3875 "Budget Clearing Account (suspense) or other approved account established by the installation comptroller and authorized by the BSO."

(5) Reimbursement of Recycling Operations. QRPs may be used to recycle commodities that have a net cost to recycle (the cost of recycling exceeds the revenue obtained from recycling) when there is a regulatory requirement for recycling or the cost of recycling is less than the cost of disposal. Installations may reimburse QRPs for recycling commodities that have a net cost to recycle. Reimbursement is limited to the difference between the cost of recycling and the revenue from the sale of the commodity or waste stream (Reimbursement = Recycling Cost – Recycling Revenue). Reimbursement is prohibited when the proceeds from recycling equal or exceed the cost of recycling.

(6) Recordkeeping and Reporting. QRPs shall maintain accountable, auditable financial records and records of SW diversion to substantiate reporting requirements identified in section 28-3.1.e.
(7) **Recycling Proceeds.** Fiscal year (FY) end does not affect the accumulation of funds in the **F3875 "Budget Clearing Account (suspense),"** so balances may carry forward up to the statutory limit of $2M at the end of each FY. Per references (m) and (n), disposition of proceeds from the sale of recycled materials shall be as follows:

(a) Navy installations and regions shall first use sales proceeds to cover the costs directly attributable to QRP operations, including, but not limited to, manpower, facilities, collection, transportation, equipment, overhead, and other capital investments. In addition, sufficient proceeds shall be held in reserve to sustain fiscal viability of the QRP, based on historic and projected income and loss;

(b) After QRP costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, P2 (including other recycling efforts), composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects. All such projects must be reviewed by the same chain of command that would normally review such projects if funded from normal appropriations. Installations not meeting established diversion goals shall give first consideration to P2 projects designed to improve diversion rates; and

(c) Installations may transfer any remaining proceeds to the non-appropriated morale, welfare, and recreation account for any approved programs, or hold them in reserve to sustain fiscal viability of the QRP (subject to the $2M limit in reference (m)). Per references (t) and (u), proceeds may not be used to offset the cost of ordinary SW disposal activities (e.g., trash collection, landfill disposal, incineration).

28-3.3. **Electronic Waste.** It is Navy policy to practice environmentally sound management (ESM) of e-wastes. Landfill disposal and incineration of e-waste are prohibited due to potentially hazardous constituents that may be released to the environment by these disposal methods. E-waste shall be handled per references (i) and (v). The Navy's goal is to maximize reuse, donation, transfer, sale, and recycling of e-wastes. Per reference (v), DLA Disposition Services is the primary agent for ESM of e-waste generated by DoD components.

a. **Enterprise and Leased Electronics.** Per reference (w), ESM and disposal costs, if any, for enterprise (i.e., Navy
Marine Corps Intranet or Next Generation Enterprise Network) assets are the responsibility of the respective enterprise program. Leased electronic equipment is the responsibility of the contractor or vendor providing the equipment per provisions of the lease or contract. If the lease or contract transfers ownership to Navy, the items shall be treated as Navy-owned electronics.

b. Navy-Owned Electronics

(1) Useable Electronics. Most e-waste consists of useable electronics that must be handled per property management regulations per references (i) and (v). Note that usable electronics may not be in working condition, but may still be candidates for reuse, donation, transfer, sale, or recycling. Navy-owned usable electronics may be reassigned to new owners within the Navy or consigned to DLA Disposition Services for reuse, transfer, donation, sale, or disposal. DLA Disposition Services assumes responsibility for ESM of e-waste upon turn-in.

(2) Non-Useable Electronics. E-waste items that cannot be consigned to DLA Disposition Services must be handled in an environmentally sound manner. Because e-waste typically includes hazardous constituents such as lead, cadmium, mercury, and other metals, non-useable electronics shall be handled per the HW management requirements in chapter 27 (Hazardous Waste Management Ashore) including a preference for reuse or recycling where feasible.

c. Non-Government-Owned Electronics. Installations shall prohibit landfill disposal of personally-owned electronics generated on Navy property by personnel assigned to Navy housing or quartered aboard Navy vessels. The provisions of section 28-3.1.c.2(e) notwithstanding, installations shall facilitate cost-effective certified, e-waste recycling opportunities via e-waste turn-in events, regularly scheduled collections, partnering with local recyclers, or other mechanisms to prevent landfill disposal of e-waste. QRPs may participate in or facilitate such events, including actual recycling of personally owned electronic items, at the discretion of the installation integrated SW manager. Shore installations shall support afloat units as needed per section 35-3.2.

28-3.4. Construction and Demolition Waste. All C&D projects awarded to contractors at Navy installations shall include a construction waste management plan for C&D debris, per reference (x), to support E.O. or DoD and Navy diversion goals.
Recyclable C&D waste may be processed through installation QRPs for in-house projects or contracted projects if appropriate provisions are included in the contract and coordinated with the QRP.

28-3.5. Operational Range Waste. Waste generated from operational range clearance, including ESACCs and firing range scrap, shall be certified safe in writing by trained personnel designated by the CO prior to recycling or disposal. Once certified safe, ordnance, munitions, and any other items requiring demilitarization, trade security controls, or both shall be processed accordingly, then recycled or disposed of by the range clearance contractor or transferred to DLA Disposition Services for recycling or disposal. The only exceptions to this requirement are ESACCs and unrecognizable scrap gleaned from ranges that, once certified as safe, may be transferred to QRPs for recycling. QRPs in the United States may consign brass to DLA Disposition Services for sale or conduct direct sales for brass that has been shredded, crushed, or mutilated. QRPs outside of the United States must crush, shred, or mutilate all brass regardless of whether it is sold directly or via DLA Disposition Services. Note that some waste generated from operational ranges may be HW subject to the munitions rule requirements in chapter 27 (Hazardous Waste Management Ashore). Navy commands responsible for range clearance shall ensure reporting requirements for diversion data are incorporated into range clearance contracts and provided to the host installation per section 28-3.1.e.

28-3.6. Foreign Source Garbage. Foreign source garbage includes goods, food wastes, wrappers, containers, and disposable materials originating outside the United States and Canada. Navy installations in the United States that receive foreign source garbage from ships, aircraft, or any other source shall maintain appropriate U.S. Department of Agriculture compliance agreements and process and dispose of foreign source garbage per reference (y). Refer to chapter 35 (Environmental Compliance Afloat) for shipboard procedures to minimize foreign source garbage transferred from U.S. Navy vessels to shore installations.

28-3.7. Training Requirements. Environmental personnel involved in the SW program shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. SW media managers and QRP managers shall receive, at a minimum, recycling program management training within 1 year of appointment to their position. Completion of
Air Force Institute of Technology Qualified Recycling Program Management Course (WENV 160) will satisfy this requirement. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources.

28-4 Responsibilities

28-4.1. Commander, Navy Installations Command (CNIC) shall:

a. As program manager for ISWM, ensure regions and installations comply with applicable federal, state, and local regulatory requirements concerning collection, storage, handling, recycling, and disposal of SW via an ISWM approach;

b. Monitor regions and installations for progress toward any SW diversion goals established by E.O. or DoD and Navy policy;

c. Ensure underperforming regions and installations develop and implement plans to improve diversion rates;

d. Upon request, authorize regions and installations to establish QRPs for the receipt of proceeds from the sale of recyclable materials;

e. Establish procedures to restrict, suspend, or revoke QRP authority in the event of mismanagement of recycling proceeds or recycling of excluded materials;

f. Establish detailed guidance for installations and regions to use when evaluating the cost of recycling versus disposal, identifying and calculating the costs attributable to QRP operations, assessing overall cost-effectiveness of ISWM programs, reimbursing QRPs per section 28-3.2.c.5, and determining reserve proceeds required to sustain future QRP operations;

g. Ensure regions and installations periodically audit ISWM programs, including QRPs, for both fiscal and regulatory compliance with applicable requirements. Fiscal audits shall reconcile financial transactions and verify that ISWM programs including QRPs are operated in a cost-effective manner. Regulatory audits shall include evaluation of progress toward any diversion goals established by E.O. or DoD and Navy policy; and
h. Ensure that regions provide both facilities management and environmental representatives to participate in meetings and activities of the Navy Integrated Solid Waste Management Working Group.

28-4.2. Commander, Naval Facilities Engineering Command shall:

   a. Execute regional and installation level ISWM programs and serve as the technical focal point for ISWM issues;

   b. Maintain appropriate technical directives, design manuals, and operation manuals concerning ISWM;

   c. Develop and maintain ISWM reporting and information collection systems;

   d. Collect and consolidate Navy's annual ISWM data from installations and other information as directed by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division;

   e. Include ISWM considerations in execution of green procurement program (GPP) responsibilities outlined in chapter 17 (Environmental Management Systems);

   f. Incorporate ISWM diversion goals into environmental management system and environmental quality audit programs;

   g. Incorporate diversion requirements into contracts that generate C&D waste and contracts for collection and disposal of non-C&D waste; and

   h. Maintain ISWM cost data for both in-house and contract actions in sufficient detail to support business case analyses using guidance developed by CNIC under section 28-4.1.f.

28-4.3. Commander, Naval Supply Systems Command shall:

   a. Investigate and develop methods to reduce packaging of materials supplied to Navy;

   b. Develop specifications for the purchase of items manufactured with recyclable materials; and

   c. Include ISWM considerations in execution of GPP responsibilities outlined in chapter 17 (Environmental Management Systems).
28-4.4. Region commanders and COs of shore installations shall:

   a. Comply with all applicable federal, state, and local regulatory requirements concerning collection, storage, handling, recycling, and disposal of SW;

   b. Appoint ISWM program managers and QRP managers;

   c. Develop ISWMPs and programs that maintain regulatory compliance and meet diversion goals in a cost-effective manner;

   d. Include recycling as part of all ISWM programs, including QRP's when cost-effective to retain proceeds from the sale of recyclable materials;

   e. Recycle or otherwise divert all materials for which the cost of disposal (via landfill or incineration) equals or exceeds the cost of diversion;

   f. Strive to meet any SW diversion goals established by E.O. or DoD and Navy policy and develop and implement plans to achieve these goals if they have not yet been met;

   g. Cooperate with the designated metropolitan statistical area (MSA) lead agency, if in a listed MSA (Note: MSAs are defined by the U.S. Office of Management and Budget and used by the U.S. Census Bureau and other U.S. government agencies for statistical purposes);

   h. Report annual ISWM information per guidance provided by EXWC, including C&D data from local contracts; and

   i. Include ISWM considerations in execution of GPP responsibilities outlined in chapter 17 (Environmental Management Systems).

28-4.5. COs of tenant commands shall cooperate with the installation, host, or lessor providing ISWM services, report required ISWM data, and reimburse the cost of those services, including recycling costs if any, per host-tenant agreements.

28-4.6. COs of fleet activities shall cooperate with the host command while in port and comply with the command's ISWM requirements.

28-5 Definitions
28-5.1. **Diversion Rate.** The diversion rate is the rate at which non-hazardous SW is diverted from disposal via landfill or incineration. Reuse, donation, composting, mulching, and recycling are generally accepted waste diversion methods. Diversion rates are tracked for both C&D debris and non-C&D SW. Refer to reference (1) for calculation details.

28-5.2. **Electronic Waste.** E-waste consists of electronic items and components, not requiring demilitarization, that have reached the end of their service life. E-waste typically consists of commercial off-the-shelf electronic items or consumer grade electronics that are still useable and suitable for transfer, donation, or sale through DLA Disposition Services. E-waste sometimes includes non-useable items that are damaged, broken, or inoperable items and must be handled as HW due to constituents regulated under RCRA Subpart C.

28-5.3. **Environmentally Sound Management.** ESM ensures e-waste is managed in a manner that conserves natural resources and is protective of human health and the environment. This includes a prohibition on landfill disposal of e-waste, prevention of e-waste export to third world countries, and requirements that resellers and refurbishers include take-back provisions for their products.

28-5.4. **Excluded Items.** Excluded items are materials that may not be sold through a QRP. These materials are listed in reference (m).

28-5.5. **Integrated Solid Waste Management Plan.** An ISWMP is a comprehensive study and plan for SW management and diversion.

28-5.6. **Qualified Recycling Program.** A QRP is a recycling operation authorized to retain proceeds from the sale of recyclable materials originally obtained with appropriated funds.

28-5.7. **Qualified Recycling Program Committee.** A QRP committee is a committee established by the CO of the Navy installation that makes recommendations regarding approval of the QRP FY budget, capital expenditures for equipment, and recycling infrastructure; improvements and corrective actions based on financial and environmental compliance audits and internal monitoring and reviews; and disposition of excess recycling funds, if any. Membership includes, but is not limited to, the installation QRP manager, installation executive officer, and
representatives from the comptroller's office; major installation commands and units; facilities and public works; environmental; safety; and morale, welfare, and recreation.

28-5.8. Recyclable Material. A recyclable material is a material that can be transformed into a new, useable product through the process of recycling.

28-5.9. Recycling. Recycling is 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.

28-5.10. Resource Recovery. Resource recovery is the recovery of materials or energy from SW.

28-5.11. Solid Waste. Per reference (z), SW is 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, semi-solid, 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 reference (aa), or source, special nuclear, or byproduct material as defined by reference (bb).

28-5.12. Source Reduction. Source reduction is 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, sale, transfer, or donation of materials, items, or products prior to recycling or disposal.
CHAPTER 29
LOW-LEVEL RADIOACTIVE WASTE DISPOSAL PROGRAM

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29-1 Scope. This chapter establishes policy guidance and
procedures for the Navy and Marine Corps Low-Level Radioactive
Waste (LLRW) Disposal Program.

29-1.1. Related Chapters. There are no related chapters.

29-1.2. References

  (a) E.O. 12344, Naval Nuclear Propulsion Program

  (b) 42 U.S.C. §7158 et seq.

  (c) OPNAVINST 5100.23 G, CH-1, Navy Safety and Occupational
      Safety and Health Program

  (d) OPNAVINST 6470.2C

  (e) 42 U.S.C. §2011-2259

  (f) DoD 4715.6-R, Low-Level Radioactive Waste Disposal
      Program, January 2001

  (g) OPNAVINST 6470.3A, Naval Radiation Safety Committee
29-1.3. Applicability

a. The policies of the Department of the Navy (DON) LLRW Disposal Program apply to all DON commands that generate radioactive waste and dispose of:

   (1) LLRW, which includes naturally occurring radioactive material (NORM) waste, naturally occurring and accelerator-produced radioactive material waste, technologically enhanced naturally occurring radioactive material (TENORM) waste, and mixed waste;

   (2) Nuclear Regulatory Commission (NRC) regulated and non-regulated materials; and

   (3) Unwanted items containing or contaminated with radioactive materials (RAM).

b. It does not apply to LLRW generated by the Naval Nuclear Propulsion Program under the authority of references (a) and (b).

29-2 Legislation

a. The following legislation contains provisions that pertain to the generation and disposal of LLRW:

   (1) Atomic Energy Act,

   (2) Low-Level Radioactive Waste Policy Act, and

   (3) Resource Conservation and Recovery Act (RCRA).

b. A summary of this legislation is included in appendix A (Laws and Regulations).

29-3 Requirements

29-3.1. DON LLRW Disposal Program

a. The DON LLRW Disposal Program provides a means to minimize the storage of unwanted DON RAM worldwide, reduce the potential for radioactive contamination and personnel radiation
exposure, and ensure proper disposal of LLRW. All DON commands are required to dispose of LLRW through the DON LLRW Disposal Program.

b. Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) has specific program management for ionizing radiation, including LLRW, per reference (c) and (d), and has delegated program management of the DON LLRW Disposal Program to Naval Sea System Command, Director of Radiological Controls (NAVSEA 04N). Naval Sea Systems Command Detachment, Radiological Affairs Support Office (NAVSEADET RASO) provides day-to-day management of the DON LLRW Disposal Program. DON commands shall submit requests for LLRW disposal to NAVSEADET RASO who will then coordinate all disposals through Department of Defense LLRW Executive Agency (DoDEA) in full compliance with federal and state regulations, as well as the LLRW compact regulations of section 2021 of reference (e). Reference (f) establishes the LLRW disposal policies and procedures for all applicable Department of Defense (DoD) activities.

29-3.2. Naval Radiation Safety Committee. Reference (g) establishes the Naval Radiation Safety Committee (NRSC), chaired by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), to manage the safe use of RAM within DON, including disposal of LLRW.

29-3.3. Training Requirements. Personnel involved in the LLRW Disposal Program shall receive the appropriate, job-specific education, experience, and training to perform their assigned tasks. Refer to chapter 3 (Environmental Readiness Training) for Navy environmental training requirements and approved Navy training resources. Any questions regarding training should be referred to NAVSEADET RASO.

29-4 Responsibilities

29-4.1. OPNAV (N45) shall:

a. Provide policy guidance, oversight, and guidance for the DON LLRW Disposal Program;

b. Be the routine point of contact between DON and NRC concerning the disposal of NRC-licensed material;

c. Assign a member to represent DON on the DoD LLRW Program Disposition Advisory Committee;
d. Serve as the chair to NRSC; and


e. Issue appropriate directives, in coordination with the Commandant of the Marine Corps, in support of the Secretary of the Navy's safety and occupational health programs and ensuring implementation of the directives by all commands and personnel (reference (h)).

29-4.2. NAVSEA 04N is the Naval LLRW Disposal Program Manager and shall:

a. Provide management oversight of the operation of the DON LLRW Disposal Program;

b. Provide funding to DoDEA for management and disposal of routine DON LLRW;

c. Establish an inter-service support agreement (ISSA) with DoDEA for disposal of DON LLRW; and

d. Provide resources for day-to-day management of the DON LLRW Disposal Program by NAVSEADET RASO.

29-4.3. NAVSEADET RASO shall:

a. Act as the technical support center for OPNAV (N45) and NAVSEA 04N;

b. Be responsible for execution of the DON LLRW Disposal Program;

c. Manage the day-to-day operation of the DON LLRW Disposal Program;

d. Dispose of DON LLRW through DoDEA;

e. Act as liaison between DON commands and DoDEA and its contractors;

f. Develop and maintain current operating procedures for the management and disposal of DON LLRW;

g. Execute the ISSA between NAVSEA 04N and DoDEA;

h. Provide information to DoDEA on the types, quantity, and locations of DON LLRW awaiting disposal;
i. Ensure DoDEA maintains permanent records of each DON LLRW disposal transaction;

j. Ensure funding for emergent non-programmatic DON LLRW is transferred to DoDEA from the DON command responsible for generating the LLRW; and

k. Provide information to DoDEA as needed to operate and support the DON LLRW Disposal Program.

29-4.4. DON commands shall:

a. Dispose of LLRW only through the DON LLRW Program unless an alternate method is authorized by NRSC and DoDEA;

b. Submit formal requests for disposal of DON LLRW inventories to NAVSEADET RASO and provide quarterly updates of LLRW inventories until a disposal action is completed by DoDEA or its contractors (inventories only need updating if the inventory changes);

c. Comply with instructions and guidance issued by NAVSEA 04N, NAVSEADET RASO, or DoDEA for LLRW disposal transactions;

d. Be fiscally responsible for disposal of emergent DON LLRW;

e. Manage activities to limit the amount of radioactive waste produced;

f. Not accept LLRW from other DON commands, outside agencies, or the public sector;

g. Upon approval from NAVSEA 04N or NAVSEADET RASO, only transfer or return RAM to the manufacturer or another command or facility that has a use for it and is authorized to possess the material;

h. Contact NAVSEADET RASO for handling and disposal instructions if an orphan source is discovered or delivered to the command;

i. Not ship any LLRW to OPNAV (N45), NAVSEA 04N, or NAVSEADET RASO; and
j. Not use RAM or conduct any demilitarization or decontamination operations in such a manner that LLRW is generated without the specific authority of NAVSEADET RASO.

29-5 Definitions

29-5.1. **Low-Level Radioactive Waste.** LLRW is RAM that is not high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 2014, paragraph (e)(2) of reference (e); and which NRC, consistent with existing law and per reference (e), classifies as LLRW.

   a. Types of LLRW include, but are not limited to:

   (1) Any NORM waste, naturally occurring and accelerator-produced radioactive material waste, TENORM waste, and mixed waste;

   (2) Any materials, including orphan sources, containing or contaminated with LLRW;

   (3) Surplus, unwanted, or unserviceable devices, commodities, instruments, and articles readily identifiable as containing RAM;

   (4) RAM for which there is no longer a useful purpose;

   (5) Property contaminated with RAM to the extent that decontamination is economically unfeasible;

   (6) Radioactive residue from decontamination activities;

   and

   (7) Animal tissue contaminated with RAM.

   b. LLRW does not include:

   (1) Byproduct material as defined in section 2014, paragraph (e)(2) of reference (e);

   (2) 0.05 microcurie, or less, of hydrogen-3 or carbon-14 per gram of medium used for liquid scintillation counting;

   (3) 0.05 microcurie, or less, of hydrogen-3 or carbon-14 per gram of animal tissue, averaged over the weight of the entire animal;
(4) Excreta from individuals undergoing medical diagnosis or therapy with RAM; and

(5) RAM which is held for disposal by decay-in-storage or transferred to a commercial contractor authorized to receive the material for disposal by decay-in-storage.

29-5.2. Low-Level Radioactive Waste Disposal. LLRW disposal involves the packaging, handling, manifesting, transportation, treatment, recycling, or disposition of LLRW.

29-5.3. Mixed Waste. RCRA hazardous waste sometimes becomes mixed with radioactive waste, creating a combination that is regulated under both RCRA and the Atomic Energy Act. Director, Naval Nuclear Propulsion Program is responsible for all policy and other matters pertaining to radioactive mixed waste resulting from naval nuclear propulsion work, and Deputy Chief of Naval Operations, Fleet Readiness and Logistics is responsible for all other Navy mixed waste. RCRA generator requirements apply to mixed waste.

29-5.4. Naturally Occurring and Accelerator-Produced Radioactive Material. Materials produced by a sub-atomic particle accelerator and NORM waste are naturally occurring and accelerator-produced radioactive materials.

29-5.5. Naturally Occurring Radioactive Material. NORM is material whose natural radioactivity has been enhanced by some human process or activity. NORM waste is a subset of naturally occurring and accelerator-produced radioactive material waste.

29-5.6. Orphan Source. An orphan source is a source of RAM or radioactively-contaminated material that is:

   a. In an uncontrolled condition that requires removal to protect public health and safety from a radiological threat;

   b. Controlled or uncontrolled, but for which a responsible party cannot be readily identified;

   c. Controlled, but the material's continued security cannot be assured. If held by a licensee, the licensee has few or no options for, or is incapable of providing for, the safe disposition of the material;

   d. In the possession of a person not licensed to possess the material who did not seek to possess the material; or
e. In the possession of a state radiological protection program for the sole purpose of mitigating a radiological threat because the orphan source is in one of the conditions described in (a) through (d) above and for which the state does not have a means to provide for the material's appropriate disposition.

29-5.7. Technologically Enhanced Naturally Occurring Radioactive Material. TENORM is produced when radionuclides that occur naturally in ores, soils, water, or other natural materials are concentrated or exposed to the environment by activities such as uranium mining or sewage treatment.
CHAPTER 30
OIL MANAGEMENT ASHORE

30-1 Scope

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.

30-1.1. Related Chapters. Chapter 27 (Hazardous Waste Management Ashore) identifies requirements and responsibilities for the management of hazardous waste (HW). Chapter 31 (Storage Tanks) describes management of storage tanks. Chapter 34 (Overseas Environmental Compliance Ashore) provides Navy policy guidance with respect to activities in foreign countries. Chapter 35 (Environmental Compliance Afloat) addresses shipboard oil pollution abatement and the requirements for ships including the handling of oil and associated waste products. Chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) describes Navy's response to oil and hazardous substance spills under reference (a) and includes compliance requirements under reference (b) including facility response plans.

30-1.2. References
30-1.3. **Applicability.** This chapter primarily addresses policy related to shore facilities. Requirements apply in all areas within the United States, Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Trust Territory of the Pacific Islands.

30-2 **Legislation**

a. The following legislation contains provisions that pertain to oil discharge, spill prevention, and recycling:

   (1) Clean Water Act,

   (2) Military Construction Codification Act, and

   (3) Oil Pollution Act of 1990 (OPA 90).

b. A summary of this legislation is included in appendix A (Laws and Regulations).

30-3 **Requirements**

30-3.1. **Oil Storage Facilities**

a. **Transportation-Related Facilities.** Transportation-related facilities serving vessels are subject to current U.S.
Coast Guard (USCG) regulations under references (c) and (d). These regulations, which apply to facilities capable of transferring oil or hazardous materials (HM) (in bulk) and to all Department of Defense (DoD) components, address aspects of the design and operation of onshore and offshore facilities engaged in the transfer of bulk oil to and from vessels. They require facilities to develop operations manuals and spill contingency plans, provide personnel training, and conduct testing of transfer equipment. Additionally, the Pipeline and Hazardous Materials Safety Administration (PHMSA) under reference (e) that requires prevention, containment, and response planning requirements of the Department of Transportation, is applicable to transport of oil by motor vehicles and rolling stock that leave naval facilities.

b. Non-Transportation-Related Facilities. Reference (f), promulgated by the Environmental Protection Agency (EPA) to comply with OPA 90 for non-transportation-related facilities, 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 storage tanks (ASTs) 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.

30-3.2. Operations Manuals

a. Through reference (c), USCG requires operations manuals for applicable marine transportation-related facilities. Navy shore installations that conduct bulk oil transfers to or from a vessel and meet the requirements in reference (d) are required to prepare and implement operations manuals per USCG regulations in references (d) and (f) and any applicable state regulations. These operations manuals must be submitted to USCG for approval and amended whenever a change in operations occurs. In some states, operations manuals are also subject to review and approval by the local state authority.

b. The manual should describe how the facility will comply with operating rules and equipment requirements of references (c) and (d). Additionally, specifics of the facility's transfer operations and personnel responsibilities should be discussed.
Examples are types and hazards of fuel transferred, descriptions of communications systems, descriptions of emergency shutdown systems, personnel training requirements, and maximum allowable working pressure.

c. USCG will periodically inspect regulated facilities to ensure operations manuals, equipment, and personnel meet all oil transfer requirements. Facilities need to ensure any deficiencies are corrected and documentation is provided to USCG. USCG has the authority to suspend operations at any facility that does not comply with these requirements. Facilities need to be cognizant of all applicable requirements and ensure they are in compliance.

30-3.3. Spill Prevention, Control, and Countermeasure Plans

a. Plan Preparation

(1) Non-transportation-related facilities that meet the applicability requirements of part 112.1 of reference (f) will prepare an SPCC plan per reference (f) that establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil into or upon navigable waters. The plans shall also comply with appropriate state and local regulations which may have more stringent requirements. EPA, through reference (f), requires spill prevention plans for applicable onshore non-transportation-related facilities.

(2) SPCC plans are 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. In addition, EPA requires facilities with the potential to affect certain natural resources to prepare an SPCC plan. They are not required if the facility has an aggregate aboveground oil storage capacity (ASTs 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 an underground storage tank (UST) that is subject to all requirements of reference (g)). 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. Construction contractors who intend to use and store temporary fuel storage tanks on Navy facilities must comply with applicable SPCC regulations. All contracts and requests for proposals with construction contractors should include a clause requiring SPCC regulatory compliance.
b. **Plan Approval and Content.** Plans must be approved by the installation commanding officer (CO). Plans must assess the potential for discharge of oil, as well as existing containment procedures and equipment to prevent oil spills into or upon a navigable waterway or shoreline of the United States.

c. **Plan Certification.** A licensed professional engineer (PE) must initially review and certify the SPCC plan and any technical amendments. Qualified facilities (smaller oil storage facilities that have a total of 10,000 gallons or less of aggregate aboveground storage) as defined in part 112.3, paragraph (g) of reference (f) and which meet the applicability requirements of part 112.6 of reference (f), can self-certify without a PE.

d. **Plan Amendments.** 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, certified, and implemented within 6 months following preparation of the amendment.

e. **Plan Revisions.** Notwithstanding compliance with the above requirement, facilities must review and evaluate their SPCC plans at least once every 5 years. Based on the review and evaluation, facilities shall revise their SPCC plans within 6 months and implement any amendment within 6 months of its preparation. PE certification is required if there are technical amendments to the SPCC plan as an outcome of review. Administrative changes to the plan do not need to be certified.

f. **Documentation of Review.** Facilities must also document completion of the review and evaluation and must sign a statement as to whether the facility will amend the plan. The plan shall, preferably, follow regulatory sequence. If the specified sequence is not followed, an equivalent plan must be prepared and supplemented with a section cross-referencing the location where each element of the SPCC regulation has been addressed and discuss how it is met. Additional details, such as procedures, methods, or equipment not yet fully operational must be discussed in separate paragraphs.

g. **Training Requirements**

(1) All facility oil handling personnel must be given initial SPCC training as well as annual SPCC briefings as
specified in part 112.7, paragraph (f) of reference (f). Training should include, at a minimum:

(a) Procedures to respond to discharges of oil;

(b) Operation and maintenance of equipment to prevent the discharge of oil; and

(c) Applicable pollution control and oil spill response laws, rules, and regulations.

(2) Annual briefings should ensure adequate understanding of general facility operations and the contents of the SPCC plan.

h. Plan Availability. Facilities will maintain a complete copy of the SPCC plan at the site if the facility is normally attended at least 4 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.

30-3.4. Used Oil Recycling. Oil shall be recycled and reused within Navy whenever technically feasible and environmentally acceptable. Navy policy is to recycle used oil per federal, state, and local regulations.

30-3.5. Used Oil Fuels Burned for Energy Recovery.

a. If recycling of used lubricating oil is not feasible for economic reasons, the lubricating 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 (refer to chapter 22 (Clean Air Ashore)) and HW regulations (refer to chapter 27 (Hazardous Waste Management Ashore)). In addition, prior to burning, used oil shall meet the requirements of reference (h).

b. Facilities burning used oil for energy recovery must test it. Used oil is subject to regulation under reference (h) unless the constituents and properties of the used oil do not exceed the allowable limits specified in part 279.11 of reference (h). Reference (h) includes standards for used oil generators, transporters, transfer facilities, processors, marketers, and burners burning off-specification used oil for
energy recovery. It also includes specific spill prevention and contingency planning requirements for used oil storage, transfer, and processing facilities.

c. Mixtures of used oil and HW listed in part 261, subpart D of reference (i) or which solely exhibit HW characteristics as listed in part 261, subpart C of reference (i) are subject to regulation as HW. Reference (h) prescribes specific provisions regarding the applicability of Resource Conservation and Recovery Act (RCRA) regulations to the management and use of used oil. Burning used oil that is an HW solely because it exhibits a characteristic of HW is subject to standards set forth in reference (h). The management and use of used oil, whether or not the used oil exhibits any characteristics of an HW, are regulated under reference (h). Synthetic oils, fluids, and lubricants must be segregated from the crude-oil-derived used oil.

d. Persons marketing or burning HW fuel must notify EPA regarding their used oil activity per reference (h). The sale of regulated fuels by the Defense Logistics Agency (DLA) Disposition Services is considered marketing, while the transfer of regulated fuels between various DoD components and activities is not considered marketing.

30-3.6. 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.

30-3.7. Oily Waste/Waste Oil Management. The cost and potential environmental compliance problems associated with oily waste/waste oil (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, provide necessary support to ships and submarines, and consider circumstances unique to specific ports, including state and local regulations.

a. Use of Oil and Water Separators by Ships in Port. 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. Ships equipped with oil and water separators (OWSSs) and oil content monitors may discharge to surface waters via those systems in port. Discharged effluent may not exceed 15 parts per million of oil in water, cause a
sheen, or violate any other applicable water quality standard, local law, or regulation. Before discharging via an OWS, chapter 35 (Environmental Compliance Afloat) requires ships to consult with the supporting shore facility host command for discharge requirements.

b. Collection, Treatment, and Disposal of OW/WO. The responsible commands should examine all options to maximize use of current facilities including functional transfer of OW/WO facilities, funding, and operating responsibilities to achieve the most economical method of OW/WO management for Navy.

c. OW/WO as HW

(1) Under normal circumstances, bilge water or OW/WO does not exhibit the characteristics of an HW and does not typically contain listed HW. However, under certain circumstances, such as when an event or a source introduces an HW identified under reference (i), bilge water discharged to shore reception facilities can become HW. Also, some states define bilge water as HW, even though it may not be contaminated with a listed HW. Therefore, state regulations shall also be consulted prior to determining whether bilge water is an HW or not. Chapter 35 (Environmental Compliance Afloat) requires ships to notify shore receiving facilities before off-loading bilge water or any other OW/WO if oily waste is contaminated from other than routine sources, such as aqueous film-forming foam, solvents, antifreeze, or other HM. Shore installations shall handle, store, transport, treat, and dispose of such OW/WO per applicable HW regulations as described in chapter 27 (Hazardous Waste Management Ashore).

(2) Wastes onboard Navy vessels are not regulated as HW under RCRA until off-loaded, received, and determined to be HW 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. This does not relieve the ship of its responsibility to inform the receiving shore facility of any HM or hazardous contaminants within the materials being off-loaded. Designation is based upon information supplied by the ship and sampling and testing of the bilge water or other OW/WO. Sampling and testing should be done periodically to see if the waste is a "characteristic" HW under part 261.24 of reference (i), meets the toxicity criteria of part 261.11 of reference (i), or exceeds state HW limits. Installations shall determine the frequency of testing by
considering characteristics of historical samples and the level of confidence in sampling results.

d.  Compensating Fuel Ballast Water Systems and OW/WO. Under normal circumstances, compensating fuel ballast water is neither OW/WO nor HW. Chapter 35 (Environmental Compliance Afloat) requires ships to strictly comply with fuel transfer and ballasting procedures to ensure ballast water does not become contaminated with oil or any other material. Ships using self-compensating fuel tanks are required 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.

30-4 Responsibilities

30-4.1. Budget submitting offices shall:

a. Ensure 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 shore activities meet USCG requirements related to the preparation and implementation of operations manuals; and

c. Ensure subordinate commands update area or regional instructions.

30-4.2. Type commanders and immediate supervisors in command shall:

a. Ensure subordinate commands are familiar with the requirements of section 30-3.7, and

b. Ensure subordinate units consult with the supporting shore facility host command for discharge requirements prior to performing operations that may release material into the environment.

30-4.3. Commander, Naval Facilities Engineering Command shall:

a. Provide technical advice to assist shore activities in the preparation of SPCC plans;

b. Provide technical and administrative guidance associated with the collection, segregation, and disposal of used lubricating oil and used contaminated fuels;
c. Provide technical advice and prepare appropriate manuals or other forms of guidance for used oil management;

d. Provide input in updating the Office of the Chief of Naval Operations (OPNAV), Energy and Environmental Readiness Division and OPNAV, Shore Readiness Division instructions and policies related to oil management requirements;

e. Provide technical advice and assistance to shore installations and regional environmental coordinators in the preparation of environmental program requirements (EPR) and required program objective memorandum (POM) exhibits for all compliance projects and requirements and in the preparation of operations manuals; and

f. Ensure staff prepares EPR and required POM exhibits for shore installations without access to the EPR database. Note that submissions for environmental compliance at defense fuel support points (DFSPs) use the DLA environmental compliance system and not the EPR or POM system.

30-4.4. COs of shore activities shall:

a. Prepare activity SPCC plans per federal, state, and local requirements and implement and review the plans within prescribed periods;

b. Ensure training specified in the operations manuals and SPCC plan is conducted for the appropriate personnel and at the appropriate frequency and training records are maintained;

c. For activities with access to the EPR database, ensure staff prepares EPR and required POM exhibits. Note that submissions for environmental compliance at DFSPs use the DLA environmental compliance system and not the EPR or POM system;

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 with EPA regulations for non-transportation-related facilities; and
g. Ensure operations manuals are prepared, implemented, maintained, approved, and submitted per USCG guidance under reference (d).

30-5 Definitions

30-5.1. Aboveground Storage Tank. ASTs are bulk storage containers or storage tanks not clearly identified as USTs and that are normally placed on or above the surface of the ground. Containers in vaults, bunkeried tanks, or partially buried tanks are considered ASTs or aboveground storage containers. A tank defined as a UST in reference (g) may also be defined as an AST in reference (f).

30-5.2. Completely Buried Tank. A completely buried tank is any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkeried tanks, or partially buried tanks are considered aboveground storage containers in reference (f). Bunkeried tanks and partially buried tanks are typically considered underground storage tanks under reference (g).

30-5.3. Lubricating Oil. Lubricating oil includes crankcase oil, cutting oil, gear lubricant, metalworking lubricant, hydraulic oil, and transmission fluid.

30-5.4. Navigable Waters. As defined in reference (j), "navigable waters" means the waters of the U.S., 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:

(1) That 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; and

(3) 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 definition;

e. Tributaries of waters identified in sections a-d above, including adjacent wetlands; and

f. Wetlands adjacent to waters identified in sections a-e above. Note that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the U.S.

30-5.5. Off-Specification Used Oil. Off-specification used oil is 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 part 279.11 of reference (h), table 1.

30-5.6. Oil. Oil is defined as 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.

30-5.7. Oil-Filled Operating Equipment. Oil-filled operating equipment contains oil that is used "operationally." Examples of oil-filled operational equipment covered by SPCC regulations may include oil-filled electrical transformers, switches, constant current regulators, lathes, mills, metalworking machines, or hydraulic lifts (e.g., elevators). Only oil-filled operating equipment containing 55 gallons or more of oil is regulated under reference (f).

30-5.8. Partially Buried Tanks. A partially buried tank is 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.

30-5.9. Processing. Processing is 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, and chemical or physical separation.

30-5.10. **Reclaimed.** A material is reclaimed if it is processed to recover a usable product, or if it is regenerated.

30-5.11. **Recycled.** A material is recycled if it is used, reused, or reclaimed.

30-5.12. **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.

30-5.13. **Used Oil.** Used oil is 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.

30-5.14. **Used Oil Generator.** A used oil generator is any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.
CHAPTER 31
STORAGE TANKS

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31-1 Scope. This chapter provides information and guidance applicable to the regulation of both underground storage tanks (USTs) and aboveground storage tanks (ASTs) containing petroleum products, hazardous substances (HS), or hazardous waste (HW).

31-1.1. Related Chapters. This chapter is applicable to all other chapters in this manual involving storage tanks including chapter 27 (Hazardous Waste Management Ashore) for responsibilities and requirements pertaining to the management of HW; chapter 30 (Oil Management Ashore) for information on spill prevention, control, and countermeasure (SPCC) plan requirements; chapter 34 (Overseas Environmental Compliance Ashore) for overseas environmental compliance ashore; and chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) for spill reporting and notification requirements.

31-1.2. References
31-2  Legislation

a. The following legislation contains provisions that pertain to the design, operation, inspection, and monitoring of storage tanks:

(1) Clean Water Act (CWA),

(2) Energy Policy Act,

(3) Federal Facility Compliance Act,
(4) Hazardous and Solid Waste Amendments,

(5) Oil Pollution Act of 1990, and


b. A summary of this legislation is included in appendix A (Laws and Regulations).

31-3 Requirements

a. Navy's storage tank program policy is to comply with all applicable federal, state, and local regulations pertaining to the management of ASTs and USTs. Aboveground or underground bulk petroleum tanks on Navy installations are generally part of Department of Defense's (DoD's) bulk petroleum distribution system which provides fuel in support of worldwide DoD fuel requirements and, in some cases, other federal agency requirements. Fuel storage facilities on Navy installations are designated defense fuel support points (DFSPs) when Defense Logistics Agency (DLA) fuel is stocked for distribution to multiple military end user operations and maintenance accounts.

b. Per DoD policy established in reference (a), Navy, DLA Energy, and DLA have interrelated responsibilities for operation, maintenance, military construction, repair, and environmental compliance of DFSPs on Navy installations. For government-owned DFSPs operated by Navy, DLA Energy retains responsibility for planning, programming, budgeting, and funding projects related to maintenance, repair, minor construction, and environmental compliance. Navy has responsibility for planning, programming, budgeting, and funding the operating costs of such DFSPs located on Navy property. Navy installations retain complete responsibility for all aspects of programming, designing, budgeting, and funding all operations, maintenance, repair, environmental compliance, and construction for petroleum storage facilities on Navy installations which are not part of the DLA system. Installation and regional environmental personnel shall work closely with DLA Energy personnel to ensure clear and unambiguous understanding of environmental compliance responsibilities assigned to the installation, DLA Energy, and DLA for government-owned, government-operated (GOGO) DFSPs on Navy installations.
31-3.1. Tank Management Plans. Navy installations with storage tanks shall have a tank management plan with the following information.

   a. A listing of all storage tanks at the installation, including USTs, ASTs, integral emergency generator tanks, mobile tanks, and oil-filled operational equipment tanks that have an oil capacity of at least 55 gallons. All fixed position tanks should be labeled with a unique facility identification number which matches the SPCC plan tank inventory. This does not apply to 55 gallon drums or mobile tanks;

   b. Regulatory requirements for each storage tank;

   c. A plan of action for achieving and maintaining compliance through monitoring, testing, inspection, removal, repair, retrofit, and replacement of storage tank systems;

   d. Testing, inspection, maintenance, and repair schedules for storage tanks; and

   e. Inclusion or reference to compliance inspection records of storage tanks.

31-3.2. General Operation and Maintenance. Navy installations shall observe the following operation and maintenance (O&M) requirements for storage tank systems:

   a. Ensure procedures are in place so spilling or overflowing does not occur;

   b. Maintain overfill protection equipment to prevent releases;

   c. Ensure continuous operation of corrosion protection systems for tanks that routinely contain product;

   d. Maintain and inspect corrosion protection measures, including coatings and cathodic protection systems. Cathodic protection systems will be tested by qualified technicians within 6 months of installation or repair and at least every 3 years thereafter, according to federal, state, and local laws and regulations;

   e. Inspect impressed current cathodic protection systems (the rectifier) every 60 days to ensure the equipment is working properly;
f. Install storage tank systems and make repairs to existing storage tank systems according to federal, state, and local requirements;

g. Conduct temporary or permanent closure of storage tanks in a manner ensuring protection of soil, surface water, and groundwater and per federal, state, and local regulations;

h. Maintain written records demonstrating compliance with operational and closure requirements;

i. Operate, monitor, and test release detection systems according to federal, state, and local laws and regulations;

j. Replace, wherever practicable, older, unprotected steel tanks with state-of-the-art ASTs or state-of-the-art double wall fiberglass reinforced plastic UST systems (tank and piping) with continuous interstitial monitoring;

k. Refer any new request for user fees to legal counsel for a determination of applicability; and

l. Label any bulk storage tanks, piping, vats, or similar vessels using the, DD Form 2521, Hazardous Chemical Warning Label (8-1/2 X 11) and DD Form 2522, Hazardous Chemical Warning Label (4 X 6) when other means, such as placards, are not available or adequate to meet hazardous communication requirements.

31-3.3. Petroleum, Alternative Fuels, and Hazardous Substance Aboveground Storage Tanks. Navy's ASTs shall comply with all applicable federal, state, and local regulations. Per reference (a), DLA Energy shall, upon request, provide support in interpreting applicable environmental regulations and developing projects to bring government-owned DFSPs into compliance and, upon request and approval, provide funding and support.

a. Spill Prevention, Inspection, and Reporting. ASTs will have overfill prevention devices or operating procedures in place that prevent overfilling the tank. To prevent a discharge, appropriate containment or diversionary structures or equipment should be provided 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 3 years.
b. **Release Detection, Testing, and Inspection.** Whenever possible, installations will install release detection systems on ASTs containing petroleum systems per references (b) and (c). Such release detection devices, storage 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 3 years.

   c. **Release Reporting, Investigation, and Confirmation.** Installations will report releases of petroleum or HS from ASTs according to the guidance in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) and 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 previously known to be contaminated, then installations shall conduct a release investigation of suspect ASTs per Environmental Protection Agency (EPA) or respective state regulations.

   d. **Out-of-Service and Closure.** Installations will maintain ASTs and other tanks regulated by reference (b) unless they have been permanently closed per part 112.2 of reference (b).

31-3.4. **Petroleum, Alternative Fuels, and Hazardous Substance Underground Storage Tanks**

   a. **General Operating Requirements.** Installations may be required to replace or upgrade existing USTs per the installation's SPCC plan, per best management practices, or as required by state regulators in an EPA-approved state UST program.

   b. **Release Detection, Testing, and Inspection.**

      (1) Any UST system that stores fuel solely for emergency power generators is deferred from the requirements of reference (d); however, these USTs are covered by the SPCC regulations (reference (b)). Some state or local regulations may be more stringent. 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) All USTs storing fuel blends with alternative fuel content in excess of 10 percent must be constructed of compatible materials, engineered to ensure system reliability and integrity.
for the life of the system assuming continued recommended preventive maintenance, and certified by the component manufacturer or nationally recognized third-party independent test laboratory.

(3) Installations will ensure all UST systems have corrosion protection, spill and overfill prevention equipment, and 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. Installations will maintain records demonstrating compliance with release detection, testing, and inspection requirements.

c. Release Reporting, Investigation, and Confirmation. Installations will report releases and suspected releases from USTs to EPA or the appropriate state agency within 24 hours of discovery and will report petroleum and HS releases into surface waters from USTs according to guidance in chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response). Installations will immediately investigate suspected releases from USTs by reviewing storage records, conducting integrity testing, and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties, then EPA or the state agency can require an installation to conduct a release investigation of suspect storage tanks.

d. Release Response and Corrective Action

(1) The installation must stop further releases from the UST; mitigate fire, explosion, and vapor hazards through the emptying of the UST system; and take steps to prevent further migration of any aboveground or exposed below ground releases. If the source of an underground release is not known, the installation must conduct subsurface sampling to determine the source, investigate the possible presence of free product, and recover free product as soon as practicable. Surface water releases require installations to take the response actions described in chapter 23 (Hazardous Waste Management Ashore) or chapter 39 (Oil and Hazardous Substance Spill Preparedness and
(2) UST releases require an initial abatement report, initial site characterization report, and free product recovery report to be submitted to EPA or the state agency per their respective regulations. In addition, a release investigation report or corrective action plan may be required. Installations will clean up soil and groundwater contamination resulting from UST releases per approved corrective action plan or as otherwise authorized or requested by EPA or the state agency. Prior to any cleanup, the installation will notify EPA or the state agency. Installations will remove free-floating product to the maximum extent practicable. If the fuel is provided or sponsored by DLA, the site must also report a spill to the DLA Energy Environmental Management Office which will trigger the appropriate action by DLA. DLA action may include reimbursement for sampling, performance of the initial assessment, or cleanup of the contaminated area.

e. Out-of-Service UST Systems and Closure. Navy installations shall observe the following requirements for out-of-service UST systems and closure:

(1) Installations will maintain corrosion protection systems during temporary closure of UST systems (even if the system is empty) and continue to operate release detection systems unless the system is emptied of all product and sludge;

(2) When temporarily closing USTs for 3 months or more, installations will leave vent lines open and functioning and cap all other lines, pumps, manways, and ancillary equipment;

(3) Installations will either meet UST standards by upgrading or replacing them or will permanently close USTs that do not meet the standards within 12 months of temporary closure unless EPA or the state agency grants an extension;

(4) The preferred method of permanent UST system closure is removal from the ground with removal of associated piping and ancillary equipment, which some states require. All UST removal actions must also comply with National Emission Standards for Hazardous Air Pollutants notification for demolitions due to potential presence of asbestos. Installations will notify EPA or the state agency at least 30 days in advance of UST permanent closure. Installations shall leave a UST system in the ground only when extenuating circumstances preclude the removal of the
UST. USTs left in the ground shall be empty, clean, and must be filled with a solid inert material such as sand. Associated piping and ancillary equipment shall be emptied, capped, and blank flanged. All records of actions taken during closure shall be kept for at least 50 years to protect Navy from potential liability;

(5) The installation shall conduct a site assessment at the time of permanent closure per federal, state, and local regulations. If contamination is encountered during closure, the installation will initiate corrective action. Completely buried tanks regulated under reference (b) cannot 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, all 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;

(6) Converting a regulated UST system to store a non-regulated substance is considered a change-in-service. A change-in-service requires the installation to empty and clean out the UST, perform a site assessment, and notify EPA or the state agency 30 days in advance of a change-in-service;

(7) EPA or the 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; and

(8) Installations will retain permanent closure, site assessment, site characterization, and corrective action records for at least 50 years to protect Navy from potential liability.

31-3.5 Hazardous Waste Storage Tanks

a. General Operating Requirements. HW is generated at nearly every Navy facility (refer to chapter 27 (Hazardous Waste Management Ashore) for requirements and policy guidance on HW management). An HW storage tank may be either aboveground or underground. Navy's HW storage tanks shall comply with all applicable federal, state, and local regulations. Contracting offices shall ensure contractors performing work for Navy on Navy property comply with all applicable requirements while on-site. Section 264, subpart J of reference (e) covers the federal requirements for tank systems.
b. Spill Prevention, Inspection, and Reporting. HW storage tanks are operated using appropriate controls and practices to prevent spills and overflows. HW may not be placed into a tank if it will cause the tank or its secondary containment system to rupture, leak, corrode, or otherwise fail. Special precautions are taken for ignitable, incompatible, or reactive wastes. Periodic inspections should be conducted to detect spills, corrosion, leaks, and operator error. A secondary containment system that meets the federal (part 264 of reference (e)), state, and local requirements will be in place for each HW storage tank. 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 3 years.

c. Release Detection, Testing, and Inspection. Whenever possible and as required by reference (e), installations will install release detection systems on HW storage tanks. Data gathered from monitoring and leak detection equipment will be inspected at least once each operating day to ensure the storage tanks are operating properly and are in good condition. Inspections will be documented and inspection records kept for at least 3 years. Navy facilities shall control air pollutant emissions from each HW storage tank per standards specified in parts 264.1084 through 264.1087 of reference (e) and applicable state and local regulations.

d. Release Reporting, Investigation, and Confirmation. 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. Installations will immediately investigate suspected releases from HW storage tanks by reviewing storage records. A tank system or secondary containment system from which there has been a leak or spill or which is unfit for use must be removed from service immediately. The flow of HW must be immediately stopped and the tank must be immediately inspected to determine the cause of the release.

e. Out-of-Service and Closure. At closure, all HW and residues, contaminated containment system components (e.g., liners), contaminated soils, and structures and equipment contaminated with waste tank system residues must be removed or decontaminated and, when required, managed as HW. Installations
will conduct permanent closure of HW storage tanks per part 264.197 of reference (e) and applicable state or local regulations.

31-3.6. **Spill Prevention, Control, and Countermeasure Plans.** Installations which determine an SPCC plan is required will ensure a plan is in place that complies with EPA SPCC regulations (refer to chapter 30 (Oil Management Ashore)).

31-3.7. **Training Requirements.** Commanders of shore installations shall ensure all personnel involved in design, construction, installation, management, and operation of storage tanks receive appropriate storage tank training including, as applicable:

   a. Contents of the installation SPCC plan;

   b. Federal, state, and local regulations pertaining to storage tank inspection and maintenance requirements;

   c. Spill response procedures and other training per all federal, state, and local requirements;

   d. Standard operating procedures for transfers of oil or filling tanks;

   e. Corrosion protection measures;

   f. Compliance records;

   g. Release detection reporting, investigation, and confirmation;

   h. General awareness training;

   i. American Petroleum Institute class A, B, and UST operator training;

   j. 40-hour initial Hazardous Waste Operations and Emergency Response (HAZWOPER) training for facility operators;

   k. 24-hour HAZWOPER supervisory operations for facility managers;

   l. 8-hour HAZWOPER refresher annual training;

   m. Biannual manifest training;
n. Corrective action plans; and

o. Closure, site assessment, monitoring, removal, repair, retrofit, replacement, remediation, leak detection, and product inventory requirements, recordkeeping, and operation of monitoring systems.

### 31-4 Responsibilities

31-4.1. Budget submitting offices and subordinate commands shall include requests for resources to meet storage tank compliance requirements in program objective memorandum (POM) budget submittals.

31-4.2. Commander, Navy Installations Command shall:

a. Establish policies and guidance for, and provide oversight of, environmental compliance of USTs and ASTs containing petroleum products, HS, or HW located on Navy shore installations;

b. Plan, program, budget, and fund environmental compliance for USTs and ASTs, with the exception of environmental compliance for GOGO DFSPs located on Navy installations which, as noted in reference (a), are funded by DLA Energy; and

c. Coordinate all requests for assistance in interpreting applicable environmental regulations and developing projects to bring DFSP terminals into compliance through Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) Energy Office and DLA Energy. DLA is responsible for planning, programming, budgeting, and funding the environmental compliance of its GOGO DSPSs.

31-4.3. Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) shall:

a. Assist Navy installations in the preparation of storage tank management plans, SPCC plans, and environmental program requirement (EPR) reports;

b. Provide technical advice and assistance to Navy installations for leak detection requirements;

c. Update technical directives and design manuals to reflect the latest regulatory requirements for storage tanks, including
underground piping, leak detection devices, and other ancillary equipment;

d. Provide assistance to major commands and their installations for estimation of resource requirements;

e. Provide funding and execution of storage tank corrective actions that qualifies for Environmental Restoration, Navy funding and is within current priorities;

f. Ensure funding is available to train various COMNAVFACENGCOM personnel involved with storage tanks; and

g. Provide input in updating the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division and the Office of the Chief of Naval Operations, Shore Readiness Division instructions and policies related to storage tank requirements.

31-4.4. COMNAVSUPSYSCOM shall:

a. Provide technical input and assistance to COMNAVFACENGCOM concerning leak detection, installation of sustainment, and disposal of storage tanks; disposition of petroleum recovered during site restoration; and environmental compliance and restoration;

b. Maintain and update procedures and instructions to ensure transportation, storage, and handling of HS and HW fully complies with applicable regulations; and

c. Maintain an energy office to serve as a liaison between DLA Energy and the sites to determine requirements and seek DLA funds.

31-4.5. Commanding officers of shore installations shall:

a. Assemble and collate storage tank data including 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 notification forms are completed for regulated storage tanks and submitted to the appropriate federal, state, or local agency;
c. Prepare and maintain storage tank management plans and SPCC plans if required with assistance from COMNAVFACENGCOM. The storage tank management plan shall include at a minimum, the requirements identified in section 31-3.1;

d. Accomplish leak detection, inspection, maintenance, and product inventory requirements, recordkeeping, and operation of monitoring systems required by federal, state, and local storage tank laws and regulations;

e. Request sufficient resources to replace or repair storage tanks, 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 storage tank systems;

g. Except for government-owned DFSPs, prepare EPR and required POM exhibits for all storage tank compliance projects mandated by Navy policy. DLA Energy retains responsibility for planning, programming, budgeting, and funding projects related to maintenance, repair, minor construction, and environmental compliance for DFSPs on Navy installations;

h. Ensure actions involving upgrading, removing, and replacing tanks comply with health and safety requirements per reference (f). 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;

i. Ensure operations, maintenance, and repair of USTs and ASTs, including GOGO DFSPs located on the installation, comply with applicable environmental regulations and DoD and Navy policy; and

j. Review the need for the temporarily out-of-service tanks and ensure proper closure if no longer needed.

31-5 Definitions

31-5.1. Aboveground Storage Tanks. ASTs are bulk storage containers or storage tanks not clearly identified as USTs and that are normally placed on or above the surface of the ground. Containers in vaults, bunker tanks, or partially buried tanks
are considered ASTs. A tank defined as a UST in reference (d) may also be defined as an AST in reference (b).

31-5.2. Alternative Fuel. Alternative fuel as defined in reference (g) means methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more (or such other percentage, but not less than 70 percent, as determined by the Secretary, by rule, to provide for requirements relating to cold start, safety, or vehicle functions) by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas, including liquid fuels domestically produced from natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); and any other fuel the Secretary determines, by rule, is substantially not petroleum and would yield substantial energy security benefits and substantial environmental benefits.

31-5.3. Bulk Oil Storage Containers. Bulk oil storage containers are any containers 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. Oil and water separators and grease traps used for wastewater treatment are exempted from all requirements of reference (b). Oil and water separators used to provide secondary containment required by reference (b) must meet relevant design standards such as capacity and permeability. Under reference (b), only bulk storage containers of 55 gallons or more in capacity are regulated. Oil-filled electrical, operating, or manufacturing 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.

31-5.4. Defense Fuel Support Points. Storage facilities are designated DFSPs wherein DLA-owned fuel is stocked for distribution to multiple military end user O&M accounts (e.g., aircraft, vehicles, ships, or tanks for which fuel is purchased through multiple O&M accounts). DFSPs range in size and scope from a single tank to a pipeline system with a network of multiple terminals.

31-5.5. Hazardous Substance

a. HS are defined as:

(1) Any substance so designated by CWA;
(2) Any element, compound, mixture, solution, or substance so designated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The CERCLA list of hazardous substances can be found in reference (h);

(3) Any solid waste (SW) having the characteristics identified under or listed pursuant to the Solid Waste Disposal Act (SWDA). This does not include any waste suspended by an act of Congress;

(4) Any hazardous air pollutant listed under the Clean Air Act; or

(5) Any imminently hazardous chemical substance or mixture upon which the EPA Administrator has acted under the Toxic Substances Control Act.

b. The term does not include substances regulated as HW under reference (i); petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as an HS under CERCLA, CWA, or SWDA; and natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel.

31-5.6. Hazardous Waste

a. An HW is an SW, or combination of SW, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

(1) Cause or significantly contribute to an increase in mortality, or an increase in serious irreversible or incapacitating reversible illness or

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

b. State regulations may be more stringent and take precedence over federal regulations.

31-5.7. Oil. An oil is an 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.
31-5.8. **Permanently Closed.** Permanently closed means any container or facility for which (1) all liquid and sludge has been removed from each container and connecting line, and (2) all connecting lines and piping have been disconnected from the container and blanked off, all valves (except ventilation valves) have been closed and locked, and signs have been posted conspicuously on each container stating that it is a permanently closed container and noting the date of closure.

31-5.9. **Petroleum.** Petroleum, including crude oil or any fraction thereof, is a substance that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

31-5.10. **Regulated Substance.** A regulated substance is any HS or extremely hazardous substance (EHS) regulated under CERCLA and the Emergency Planning and Community Right-to-Know Act respectively. Exclusions include any substances regulated as HW under RCRA Subtitle C 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; installations should refer to their respective state regulations.

31-5.11. **Release.** A release is any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of HW, HS, EHS, or petroleum from a storage tank into groundwater, surface water, or subsurface soils.

31-5.12. **Storage Tanks.** Storage tanks are all tanks and bulk storage containers (both above and underground) containing HW, petroleum products or HS that are regulated under either reference (b), which regulates containers of 55 gallon capacity or larger, or reference (d), which only regulates non-exempted or deferred tanks.

31-5.13. **Tank Management Plan.** A tank management plan is a document, for installation-level use, which stresses AST and UST spill prevention, planning, regulatory compliance, and recordkeeping.

31-5.14. **Underground Storage Tanks.** As defined in reference (j), the term UST means any tank or combination of tanks (including underground pipes connected thereto) used to contain an accumulation of regulated substances, 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:

a. Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;

b. Tanks used for storing heating oil for consumptive use on the premises where stored;

c. Septic tanks;

d. Pipeline facilities (including gathering lines) regulated under reference (k) or an intrastate pipeline facility regulated under state laws;

e. Surface impoundments, pits, ponds, or lagoons;

f. Stormwater or wastewater collection systems;

g. Flowthrough process tanks;

h. Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;

i. Storage tanks 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;

j. Any UST system, including sumps, less than or equal to 100 gallons;

k. UST systems storing HW that are regulated under reference (l);

l. Wastewater treatment tanks and oil and water separators that are part of a wastewater treatment facility regulated under section 402 or section 307(b) of reference (m);

m. USTs containing de minimis concentrations of regulated substances;

n. Emergency spill or overflow containment UST systems that are expeditiously emptied after use; and

o. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks.
CHAPTER 34

OVERSEAS ENVIRONMENTAL COMPLIANCE ASHORE

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34-1 Scope. This chapter provides environmental guidance for Navy installations outside the United States, its territories, and possessions, but not to ships, aircraft, and operational and training deployments outside the United States.

34-1.1. Related Chapters. There are several related chapters which are identified in the requirements section. Chapters referenced are chapter 3 (Environmental Readiness Training), chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114), chapter 12 (Natural Resources Conservation), chapter 13 (Cultural Resources Compliance and Management), chapter 17 (Environmental Management Systems), chapter 18 (Environmental Compliance Audits Ashore), chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations), chapter 20 (Clean Water Ashore), chapter 21 (Safe Drinking Water Act Compliance Ashore), chapter 23 (Hazardous Material Management Ashore), chapter 24 (Pesticide Compliance Ashore), chapter 25 (Toxic Substances Control Act), chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act), chapter 27 (Hazardous Waste Management Ashore), chapter 28 (Solid Waste Management and Resource Recovery Ashore), chapter 29 (Low-Level Radioactive Waste Disposal), chapter 30 (Oil Management Ashore), chapter 31 (Storage Tanks), chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response), and chapter 42 (Environmental Restoration).

34-1.2. References

(a) DoD Instruction 4715.05 of 01 November 2013

(b) E.O. 12344, Naval Nuclear Propulsion Program

(c) 42 U.S.C. §7158

(d) Final Governing Standards (FGS) for each country where the Undersecretary of Defense, Acquisition, Technology and Logistics (USD(AT&L)) has directed FGS establishment (NOTAL)
34-1.3. Applicability

a. The policies and procedures in this chapter apply to Navy shore activities, facilities, and installations located outside the United States, its territories, and possessions. Applicability is limited to shore activities, facilities, and installations provided by the United States and under the jurisdiction of the Navy.

b. The policies and procedures in this manual do not apply where excluded under paragraph 2.a.(2) of reference (a); or to U.S. military ship and aircraft operations governed by other Department of Defense (DoD) policies and directives and applicable international agreements; facilities and activities covered under reference (b) and the Naval Nuclear Propulsion Program, and conducted under reference (c); and to facilities located in Antarctica.

34-2 Legislation

a. The following legislation contains provisions that pertain to overseas Navy commands as detailed in the scope:

   (1) National Historic Preservation Act, and

   (2) Toxic Substances Control Act.
b. A summary of this legislation is included in appendix A (Laws and Regulations).

34-3 Requirements. Navy shore activities, facilities, and installations provided by the United States and under the jurisdiction of the Navy in foreign nations will comply with applicable country-specific final governing standards (FGS) (reference (d)). Where FGS have not been issued, Navy installations will comply with reference (e), host nation substantive pollution control laws of general applicability (as required by reference (f)), U.S. law with extraterritorial effect, and applicable treaties (including the status of forces agreement (SOFA) and bilateral agreements). Reference (f) requires, in part, the head of each executive agency constructing or operating Federal facilities outside the United States ensure such construction or operation complies with environmental pollution control standards of general applicability in the host nation or jurisdiction.

34-3.1. Funding of Capital Improvements for Environmental Compliance at Overseas Installations. When capital improvements are required at overseas installations or facilities to comply with either the FGS (reference (d)) or references (e) and (f), 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. Unless otherwise provided in the pertinent SOFA and bilateral agreements, the host nation is expected to fund environmental compliance projects at facilities 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:

a. Pollution abatement improvements may be accomplished as a result of inclusion in bilateral or multilateral negotiations on programs not directly involving environmental compliance;

b. In some cases, host nation provided facilities have been significantly modified by the United States to meet operational requirements. When capital improvements are required to meet the environmental standards of general applicability in the host nation or jurisdiction, Navy may negotiate shared contributions for such improvements. Shared contributions may be done, after consultation with the ambassador, when it is in the best interest of Navy and does not establish a precedent. The contribution should normally be no more than the proportion of modification attributable to the United States. Project funding request
documents shall indicate the results of negotiations to include the basis for determination of the U.S. share; or

c. If the host nation declines to provide funds for required capital improvements or if negotiations with the host country for shared contributions are unsuccessful, Navy may program for required pollution control capital improvement projects when it is in the best interest of Navy and does not establish precedent. Project funding request documents shall indicate the circumstances under which the projects are submitted.

34-3.2. Facility Visits and Inspections. Federal law and executive orders (E.O.) on information and physical security matters, as implemented in Navy regulations, SOFA, and bilateral agreements, shall govern access of host nation environmental officials to U.S. controlled fixed facilities.

   a. Sovereign Immunity Policy. U.S. military aircraft, warships, and naval auxiliaries (including Navy 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 naval auxiliaries for purposes of environmental inspections or examination. Commanding officers (CO), masters, and aircraft commanders may certify compliance with host nation environmental requirements which 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 aboard for the purpose of accepting the certification of compliance, but under no circumstances may they be permitted to exercise governmental authority, nor may they inspect military aircraft, warships, or naval auxiliaries or act as an observer while U.S. personnel conduct such inspections.

   b. Pre-Establishment of Procedures for Access to Navy Facilities and Installations. U.S. region, installation, and facility commanders shall consult with legal counsel, U.S. embassy officials, the DoD lead environmental component (LEC) for the host nation, or with the combatant commander where no LEC has been appointed, to pre-establish procedures for access by host nation officials to Navy facilities and installations. These procedures shall comply with the applicable SOFA and bilateral agreements. Since most U.S. facilities are tenants of host nation military installations, host nation authorities will control access to the host nation installation with COs of U.S. tenant facilities controlling access to U.S. facilities.
Commanders of U.S. facilities shall comply with access procedures so established.

c. Additional Access Requests. Where host nation official's access request is not covered by the facility or installation's pre-established access procedures, the U.S. installation or facility commander shall immediately notify the Navy component commander in theater, the LEC (if applicable), and the Deputy Chief of Naval Operations for Fleet Readiness and Logistics (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 environmental regulation, 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 United States. Unless otherwise directed, the installation commander may permit access after completing consultation with the LEC, component commander, and CNO (N4), or 3 working days after providing notification, whichever is earlier. If access is denied, the U.S. installation commander shall notify the same parties and shall ensure the chief of mission with the U.S. ambassador to the host nation has been notified as well.

d. Access to Propulsion Plant Spaces or Nuclear Propulsion Information. Access by foreign officials to propulsion plant spaces of nuclear powered ships or to naval nuclear propulsion information is governed by reference (g) and is not authorized without approval by Director, Naval Nuclear Propulsion Program.

34-3.3. Notices of Violation. For Navy installations outside the United States, its territories, and possessions, a notice from regulatory authorities that the installation has violated an applicable environmental standard may take a number of different forms. To be considered an NOV, the notice should cite the relevant standard or criteria to be met and request the installation take corrective action. An NOV does not include warning letters that do not cite a violation of specific environmental law or regulation, informal notices of deficiencies, or notices of deficiencies to permit applications. Warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws, standards, and regulations are considered NOVs. One written notice, regardless of the number of individual violations, findings, or citations listed in it, counts as one
NOV if all violations cited relate to a single environmental media. If the NOV cites violations in more than one environmental media area (e.g., air, water, hazardous waste, drinking water), then it counts as multiple NOVs, one under each of the applicable media area. Items found to be out of compliance during an internal or other DoD component review, or a compliance review or audit, are not NOVs (i.e., are not included in the definition of NOV). Upon receipt of an NOV as defined in this section, installations shall follow the procedures set forth in chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations).

34-3.4. Mobile Sources. Reference (d) shall govern the operation and maintenance of mobile sources based in a host nation where such provisions have been issued, except for vessels and aircraft. If no FGS has been issued, the operation and maintenance of mobile sources, with the exception of aircraft and vessels, based in a host country shall be governed by applicable provisions of the SOFA and bilateral agreements, and references (e) and (f) per reference (a). In particular, reference (f) requires compliance with substantive host nation pollution control laws of general applicability. In most instances, the relevant host nation pollution control laws 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 the host country's standards for the terms and conditions set forth in the visit clearance. 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 follow environmental protection standards used by the host nation's military forces to the extent practical.

34-3.5. Waivers of Overseas Environmental Standards at Naval Installations

    a. A U.S. installation commander should seek a waiver from standards in reference (d), or when reference (d) has not been issued, from reference (e), host nation laws of general applicability (as required by reference (f)), and applicable treaties (including SOFAs and bilateral agreements) if compliance with that particular standard would:
(1) Seriously impair its mission,

(2) Adversely affect relations with the host nation

(3) Require substantial expenditure of funds for physical improvements at an installation for which public notification for return has been made, or

(4) Apply to an installation that has been identified for closure or realignment and will no longer be subject to the FGS requirement upon closure or realignment.

b. Waiver requests shall include budget submitting office (BSO) endorsement prior to processing via procedures outlined in reference (a). Navy policy is to minimize requests for waivers and limit the duration of waivers. Requests for waivers are appropriate, for example, where the cost of the project to achieve compliance at an installation slated for closure is grossly disproportionate to the period during which environmental benefits would be derived from the project. Where this manual or instructions by Navy component commanders require measures more protective than the applicable FGS, COs shall request a waiver from the LEC before requesting project funding.

c. Waiver requests will not be granted if the waiver would result in a breach of applicable U.S. law with extraterritorial effect or breach of an applicable international agreement.

34-3.6. Environmental Planning. The National Environmental Policy Act does not apply overseas. Navy activities shall comply with the applicable requirements of references (h) and (i) that address environmental effects abroad of major federal actions. Refer to chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) for applicable environmental planning requirements.

34-3.7. Environmental Management Systems. Navy environmental management system (EMS) appropriate facilities shall implement a comprehensive EMS, including pollution prevention and green procurement elements, per chapter 17 (Environmental Management Systems).

34-3.8. Emergency Planning and Community Right-to-Know Act. References (j) and (k) require Federal agencies to comply with the Emergency Planning and Community Right-to-Know Act (EPCRA). These requirements apply to federal facilities in any U.S. state,
District of Columbia, Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. EPCRA does not impose any requirements on Navy shore installation operations in foreign countries or directly upon ships or aircraft.

34-3.9. Hazardous Materials Management. Navy activities shall manage hazardous materials per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). In addition, activities shall implement the Consolidated Hazardous Material Reutilization and Inventory Management Program in the same manner and to the same extent as that delineated in chapter 23 (Hazardous Materials Management Ashore).

34-3.10. Hazardous Waste Management Ashore. Navy activities shall manage their hazardous waste (HW) per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). Refer to chapter 29 (Low-Level Radioactive Waste Disposal Program) for policy on mixed waste. Waste that is considered hazardous under reference (d) or reference (e) will not be disposed of in the host nation without an agreement as described in Enclosure (3) of reference (a).

34-3.11. Clean Air Ashore. Navy activities shall manage their air programs per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.12. Ozone-Depleting Substances. Navy activities shall manage their ozone-depleting substances as directed in chapter 22 (Clean Air Ashore) and per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).
34-3.13. **Polychlorinated Biphenyls (PCBs) Management Ashore.** Navy activities shall manage their PCBs per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.14. **Radon.** Navy activities shall manage their radon program per the Navy Radon Assessment and Mitigation Program as outlined in chapter 25 (Toxic Substances Control Act).

34-3.15. **Water Programs Ashore**

   a. Navy activities shall manage their water programs per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

   b. Commander, Navy Installations Command (CNIC) serves as executive agent for drinking water quality matters for all Navy facilities and installations worldwide. The executive agent responsibilities are outlined in section 21-3.1 and are applicable worldwide.

34-3.16. **Drinking Water**

   a. Navy activities shall manage their drinking water systems for human consumption as defined in chapter 21 (Safe Drinking Water Act Compliance Ashore) per reference (d) and provide drinking water that meets or exceeds U.S. water quality standards. When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). In addition, Navy activities shall monitor for lead in priority areas as specified in section 21-3.3.c.2. All non-continental U.S. water systems serving greater than 25 DoD consumers shall develop a water system vulnerability assessment (WSVA) and emergency response plan (ERP) update (if required) for internal use only (reference (l)).
b. U.S. Navy overseas installation water systems, including leased facilities (including Navy housing) or under a U.S. Navy base operating support contract shall be subject to oversight by regional water quality boards (RWQB) and must receive a certificate to operate (CTO) in accordance with requirements established by the executive agent for drinking water. All drinking water treatment and distribution system operators shall be trained per references (d) or (e), as appropriate.

c. All Navy installations including outlying facilities and leased government properties (including Navy housing) shall develop and provide a copy of their water quality consumer confidence reports to the regional water quality board. Copies of public notification reports shall also be provided when applicable.

34-3.17. Oil Management. Navy activities shall manage their oily wastes and waste oils per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.18. Oil and Hazardous Substances Spills and Contingency Planning. Navy activities shall manage oil and hazardous substance spills and contingency planning per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). Navy shore commands shall implement the requirements of chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) regarding internal reporting, drills, and exercises.

34-3.19. Pesticide Compliance Ashore. Navy activities shall manage their pesticides per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). Activities responsible for pesticide application shall develop integrated pest management plans and ensure the program addresses pesticide applicator certification and re-certification training, pesticide storage, handling and
disposal practices, and pest management operations recordkeeping and reporting.

34-3.20. **Solid Waste Management and Resource Recovery Ashore.** Navy activities shall ensure compliance with solid waste standards per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). In addition, integrated solid waste management requirements, including those pertaining to recycling and qualified recycling programs in chapter 28 (Solid Waste Management and Resource Recovery Ashore), apply worldwide.


34-3.22. **Cleanup and Restoration.** The Installation Restoration Program is limited to the United States, its territories, and possessions and does not apply to foreign countries. However, current and past DoD activities can result in the need for emergent environmental cleanup and restoration overseas. The decision to conduct and execute cleanup actions shall comply with the provisions of reference (m).

34-3.23. **Storage Tanks.** Navy activities shall manage their above and underground storage tanks per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.24. **Environmental Compliance Audits Ashore.** Overseas installations shall implement an internal compliance assessment program and be subject to external compliance assessments per chapter 18 (Environmental Compliance Audits Ashore) and reference (a). Internal and external environmental audit checklists shall be derived from the applicable FGS. Checklists are required to be developed into official forms. Prior to the establishment of the FGS, audit criteria shall be based on reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, applicable treaties (including SOFAs and bilateral agreements), and applicable provisions of this manual.
34-3.25. Natural Resources Management. Navy activities shall program, budget for, and ensure compliance with reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). In addition, natural resources managers may use applicable elements from chapter 12 (Natural Resources Conservation) as a framework for natural resources management, subject to concurrence by the DoD LEC. Integrated natural resource management plans at installations outside the United States are not typically subject to E.O. 12114 analyses because they do not result in significant harm to the host nation. The decision not to perform E.O. 12114 analysis shall be documented in a record of negative decision per chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).

34-3.26. Historic and Archeological Resources Protection. Navy activities shall manage their historic and archeological resource management program per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.27. Training Requirements. Navy activities shall comply with the training measures outlined in chapter 3 (Environmental Readiness Training) and other chapters as applicable. Navy commands shall comply with the training requirements per reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements).

34-3.28. Lead Environmental Component. LECs are responsible for environmental matters in foreign countries where DoD installations are located and where USD (AT&L) determines that DoD presence justifies establishment of FGS. Specific LEC responsibilities are delineated in reference (a). Heads of military departments designated as LECs normally delegate LEC authority to the theater component commanders after coordination with the relevant combatant commander. Note that due to the unique construct and influence of the European Union (EU), the
Commander, USEUCOM, is designated as the DoD Theater Environmental Coordinator (TEC) for Europe. As such, the Commander provides specific oversight to ensure consistent application of this instruction at installations in host-nation countries within the EU and geographically located within the USEUCOM area of responsibility.

34-4 Responsibilities

34-4.1. The Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) shall:

   a. Ensure BSOs allocate the resources required to achieve and maintain compliance with reference (d). When reference (d) has not been issued, Navy facilities and installations will comply with reference (e), host nation laws of general applicability (as requested by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). Where Navy has been delegated by DoD as the LEC per references (a) and (m), ensure BSOs allocate the resources required to execute these responsibilities; and

   b. Provide policy guidance needed to establish and maintain a program for the management of environmental concerns overseas.

34-4.2 CNIC shall serve as executive agent for drinking water quality matters for all Navy shore facilities and installations worldwide per sections 21-3.1 and 21-4.2.

34-4.3. BSOs shall:

   a. Ensure compliance with reference (d). When reference (d) has not been issued, ensure compliance with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements);

   b. Conduct (or oversee the conduct of) environmental compliance audits at overseas installations to ensure compliance with reference (d). When reference (d) has not been issued, conduct EQAs to ensure compliance with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). EQAs shall be conducted per the requirements of reference (a) and chapter 18 (Environmental Compliance Audits Ashore);
c. Program and budget for environmental compliance projects;

d. Ensure contracts for services or construction where performance takes place outside the United States and DoD contracts for the disposal of HW include provisions requiring contractors to comply with reference (d). When reference (d) has not been issued, contractors shall be required to comply with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements). The BSO shall also ensure contracts are administered to enforce such compliance;

e. Ensure host-tenant agreements are per, and address compliance with, reference (d). When reference (d) has not been issued, host-tenant agreements will address compliance with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements);

f. Communicate with LECs regarding the compliance status of activities or installations, waiver requests, proposed host nation regulations, and environmental issues impacting their installations and commands; and

g. In consultation with Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) and OPNAV (N45), endorse waiver requests from Navy activities or installations per section 34-3.4.

h. Provide to CNIC any information needed for the annual drinking water quality report to VCNO required by section 21-3.1 and section 21-4.2.

34-4.4. COMNAVFACENGCOM shall:

a. Support CNIC on all aspects of drinking water system management per section 21-4.3;

b. Develop standard processes for issuance of consumer confidence reports to Navy personnel at overseas installations; and

c. In consultation with Chief, Bureau of Medicine and Surgery, provide independent oversight of RWQBs.
34-4.5. Navy components, when delegated authority to act as LECs, shall execute the LEC responsibilities assigned in reference (a) for their assigned area of responsibility. Note: In the absence of formal diplomatic relations (e.g., Cuba), the requirement to consult with the host nation in development of FGS is waived.

34-4.6. Region commanders and installation and facility COs shall:

a. Comply with reference (d). When reference (d) has not been issued, comply with reference (e), host nation laws of general applicability (as required by reference (f)), U.S. laws with extraterritorial effect, and applicable treaties (including SOFAs and bilateral agreements);

b. Develop and conduct training and education programs to instruct required personnel in the environmental aspects of their job;

c. Perform and document internal installation environmental compliance audits annually to determine the overall compliance assessment status of the installation or facility, and support the performance of, and corrective actions required by, external environmental compliance audits;

d. Communicate following the Navy chain of command with the Navy region commander, if present, on the LECs environmental issues; and

e. Ensure their installations provide drinking water that meets or exceeds U.S. water quality standards and sign and issue CTOs for installations in their area of responsibility.

34-4.7 BUMED shall:

a. Establish and publish appropriate medical surveillance guidance for overseas Navy water systems;

b. Provide consultative services to CNIC and Navy commands for drinking water quality per section 21-4.4.b and 21-4.4.c;

c. Provide public health advice to Navy shore installations and facilities outside the U.S. in carrying out their responsibilities for drinking water quality and distribution;
d. In consultation with COMNAVFACENGCOM, provide independent oversight of RWQBs.

34-5 Definitions

34-5.1. Department of Defense Lead Environmental Component. The DoD LEC is the secretary of a military department, combatant commander, or subunified commander specifically designated as described in reference (a). The DoD LEC executes responsibilities prescribed in Enclosure (2) of reference (a) associated with DoD installations within a specified foreign nation. LECs are responsible for environmental matters in foreign countries where DoD installations are located and where DUSD(I&E) determines that DoD presence justifies establishment of FGS. Secretaries of military departments designated as LECs may delegate LEC responsibilities through the chain of command to an appropriate general-level or flag-level commander. The LEC establishes FGS for DoD installations within its geographic area of responsibility and performs other functions per reference (a).

34-5.2. Drinking Water System. An assemblage of natural and or man-made infrastructure by which water is captured, collected, stored, treated, and delivered to end users. Components of drinking water systems include raw water supplies (e.g., reservoirs, lakes, rivers, and groundwater), water purification facilities, water storage facilities, water pressurization components, and distribution piping networks.

34-5.3. Environment. Environment refers to the natural and physical environment and excludes social, economic, or other environments.

34-5.4. Final Governing Standards. A comprehensive set of country-specific substantive environmental provisions; typically technical limitations on effluent, discharges, etc., or specific management practices developed in accordance with reference (a). FGS are developed using the Overseas Environmental Baseline Guidance Document (OEBGD) unless the OEBGD is inconsistent with applicable host nation environmental standards or standards under applicable international agreements and these other applicable standards provide more protection to human health and the environment. In the case of inconsistency, the more protective standard is normally used to establish the FGS unless a specific international agreement with the host nation establishes a different standard applicable to U.S. installations and commands. The DUSD(I&E) maintains a list of countries requiring FGS. (See
the appendix to enclosure 3 of reference (a) for the list of countries requiring FGS and the corresponding LECs).

34-5.5. Foreign Nation. A foreign nation is a geographic area (i.e., land, water, airspace) under the territorial jurisdiction of a government other than the United States, or a geographic area under the territorial jurisdiction of the United States alone, or jointly with any other government, by virtue of military occupation.

34-5.6. Navy Facilities and Installations. For determining overseas environmental compliance requirements, naval facilities and installations are real property under the control of or used by U.S. Navy, including tenant facilities and installations on host nation installations, non-contiguous leased portions such as military housing and family support activities, and non-contiguous installations, piers, and ports operated under the auspices of the North Atlantic Treaty Organization by the host nation.

34-5.7. Overseas Environmental Baseline Guidance Document. The OEBGD is a current compendium of criteria based on consideration of laws generally applicable to similarly-situated DoD installations within the United States designated to protect the environment at DoD installations outside U.S. territory.

34-5.8. United States. United States means all states, territories, and possessions of the United States and all waters and airspace of which the natural resources are under the exclusive management authority of the United States.
CHAPTER 35

ENVIRONMENTAL COMPLIANCE AFLOAT

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35-1 Scope. This chapter defines environmental compliance policies and procedures applicable to shipboard operations. The chapter is organized according to the various environmental media potentially affected by the operation of Navy and Military Sealift Command (MSC) ships.

35-1.1. Related Chapters. Ships generally need only refer to this chapter and chapter 36 (Permitted Ocean Disposition) for environmental compliance. If differences in policy guidance exist between this chapter and any other chapter in this manual, this chapter takes precedence. Chapter 3 (Environmental Readiness Training) includes additional training requirements.

35-1.2. References

(a) DoD 4715.6 R-1 January 2005

(b) Naval Ships' Technical Manual (NSTM)

(c) NAVSEA S9510-AB-ATM-010/(U), Nuclear Powered Submarine Atmosphere Control Manual (NOTAL)

(d) OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

(e) DoD Ozone Depleting Substances Reserve Requisition and Turn-in Procedures, June 2009

(f) NAVSEA Catalog S6161-Q5-CAT-010

(g) 40 CFR 63

(h) NAVFACENGCOM MO 909, Oil Ship Waste Offload Barge (NOTAL)


(j) DoD Instruction 4715.4 of 18 June 1996

(k) NAVSEA PCB Advisories (NOTAL)
35-1.3. Applicability. This chapter applies to U.S. Navy ships and floating dry docks worldwide and, as appropriate, to boats and other craft carried by these ships. This chapter also applies to U.S. naval ship (USNS) vessels operated by Commander, Military Sealift Command (COMSC) and vessels chartered by COMSC, except for time and voyage chartered vessels. Unless otherwise specified, "commanding officer" (CO) as used in this chapter includes masters of public vessels owned or operated by MSC.

35-2 Legislation

a. The following legislation contains provisions that pertain to environmental compliance policies and procedures applicable to shipboard operations:

(1) Act to Prevent Pollution from Ships (APPS),
(2) Clean Air Act (CAA),
(3) Clean Water Act (CWA),
(4) Endangered Species Act (ESA),
(5) International Convention for the Prevention of Pollution from Ships (MARPOL),

(6) Marine Mammal Protection Act (MMPA),

(7) National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding and Ship Repair,

(8) Noise Control Act,

(9) Ocean Dumping Act,

(10) Resource Conservation and Recovery Act (RCRA),

(11) Toxic Substances Control Act, and

(12) U.S. Public Vessel Medical Waste Anti-Dumping Act.

b. A summary of this legislation is included in appendix A (Laws and Regulations). In addition, various other statutes authorize the U.S. Department of Agriculture (USDA) to regulate the handling of foreign food and foreign source garbage entering the United States via ship and aircraft. Refer to section 35-3.17.g for requirements applicable to U.S. Navy ships.

35-3 Requirements. Navy policy is to comply fully with all applicable Federal, State, local, and international requirements.

35-3.1. 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 and its resources.

35-3.2. Shoreside Support to Ships. Compliance with local environmental requirements often requires specialized knowledge, expertise, or capability that afloat units may not possess. To the maximum extent possible, shore commands, Navy regional environmental coordinators (REC), and Commander, Navy Installations Command (CNIC) shall provide assistance to afloat units to ensure environmental compliance.

35-3.3. Training Requirements

a. All hands shall receive environmental training upon reporting aboard (I Division or School of the Boat) and annually thereafter. This training shall include:
(1) Navy's commitment to environmental protection;

(2) The command environmental program. This training should include a summary of the ship's policies and practices established to ensure pollution prevention (P2); solid waste (SW) handling and minimization; plastic management; protection of marine mammals and endangered marine species; recycling; air pollution (including ozone-depleting substances (ODS)); water pollution; and oil and hazardous substance (OHS) management, handling, minimization, and spill response; and

(3) The individual's responsibility with regard to this program.

b. Watch officers responsible for authorizing the overboard disposal of shipboard wastes shall receive training on the discharge restrictions for shipboard wastes as part of their watch qualification procedures.

c. Ships may accomplish this training with videotapes for general subject matter and by ship's instructors for command specific topics.

d. Personnel assigned as the afloat environmental protection coordinator (AEPC), per section 35-3.8, shall attend the Naval Safety and Environmental Training Center (NAVSFENVTRACEN)-offered Afloat Environmental Protection Coordinator course (A-4J-0021). If unable to attend classroom training, a self-paced online course is available through the Naval Postgraduate School Web portal (refer to appendix E (Web Sites) for Web site address). Students may obtain a quota and login instructions by contacting NAVSAFENVTRACEN by e-mail (refer to appendix E (Web Sites) for e-mail address). The assigned AEPC shall normally receive the training and liaise with the outgoing AEPC prior to turnover of the program; however, the assigned AEPC shall ensure completion of all requirements above within 6 months of assignment. For MSC ships, COMSC shall specify AEPC training requirements.

35-3.4. Environmental Inspection of Navy Ships Within the United States. Navy ships shall be available for inspection by U.S. environmental officials, subject to the requirements to protect national security information, provided the inspector demonstrates a legitimate basis for requesting access.

a. Access to Ships and Release of Information During Navy
Oil Spills. Effective oil spill planning and response is an important issue for Navy, regulatory agencies, and the public. Navy ships may receive requests from non-Navy entities for access or information pertaining to Navy oil spill planning and response. COs shall consider several factors in responding to these requests. First, they shall quickly provide officials and agencies responsible under law and regulation for responding to an actual spill with the necessary access 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 initial information released about oil spills is as accurate as possible and is characterized as preliminary and subject to later verification. Refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) for a comprehensive overview of the Navy's shore planning and response requirements and ship support in the event of an OHS release.

(1) Oil Spill Response Emergencies. During oil spill response emergencies, although not mandated by law, COs and masters should allow federal on-scene coordinator (FOSC) representatives access to their ships if requested, consistent with information security requirements. The U.S. Coast Guard (USCG) is designated as the FOSC for oil spills in the coastal regions of the United States.

(2) Non-Emergency Situations. During non-emergency situations, Navy ships are not subject to inspection by USCG, state, or local officials in connection with oil spill planning. However, COs shall cooperate with USCG and civilian authorities regarding oil spill planning and prevention consistent with information security requirements without impeding mission accomplishment. COs, at their discretion, may invite USCG, 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 coordinator (NOSC) who, in most cases, is the Navy REC.

(3) Requests for Information

(a) Subject to the requirement to protect national security information, 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 COs providing initial information should indicate the information provided is preliminary and subject to verification or change during
subsequent investigation. Responses should be promptly provided to requests regarding the following preliminary information about Navy oil spills:

1. Whether an oil spill has occurred;
2. The specific source of the spill;
3. The type of substance spilled;
4. When and where the spill occurred;
5. The initial indication as to the general nature of the cause of the incident (e.g., whether due to equipment failure, operator error, undetermined origin); and
6. A preliminary estimate of how much oil was spilled.

(b) Ships receiving requests for investigation reports shall inform requestors 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 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. The CO will refer any media requests for information to the public affairs officer on the cognizant NOSC staff.

b. Access Procedures

(1) If a state or local inspector requests access to inspect a Navy ship, the parties involved shall follow these procedures:

(a) The CO shall confirm the inspector's credentials;

(b) The inspector shall identify specific spaces or work sites to which he or she requests access;

(c) The inspector shall make known the nature of the activity to be examined and its relationship to regulations. The CO should consult counsel and the Navy REC 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; and

(f) If off-ship alternatives are not practical, COs shall approve inspections that do not involve access by inspectors to classified or restricted information, equipment, technology, or operations.

(2) Shipboard air conditioning and refrigeration (AC&R) equipment designed or constructed to general or military specification requirements aboard Navy ships or vessels owned, operated, or bareboat chartered by Navy or COMSC is not subject to the requirements of CAA 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 section 35-3.4.d and notify the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) by routine message with information copies to the chain of command should this occur.

c. Environmental Inspector Security Clearances

(1) 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 CO concludes that a legitimate requirement exists for such access, he or she shall forward a message request for access. The message request shall be forwarded to OPNAV (N45) with information copies to the fleet commander and type commander (TYCOM) for spaces that would involve access to classified information or to the Director, Naval Nuclear Propulsion Program (CNO (N00N)) for NNPS or NNPI. The message shall identify the following:

(a) The space(s) to which the inspector wants access;

(b) The nature of the activity 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; and

(f) Security clearance information, including the name of inspecting official(s); date of visit; name of agency which the official(s) represents; and level, basis, and date of security clearance.

(2) The CO shall inform state or local inspector(s) the security implications of their request require consideration at Navy headquarters.

d. **Dispute Resolution.** If the CO determines the inspector does not have a requirement for access to the space(s) or information cited above, but the inspector does not agree with that determination, the CO shall promptly refer the matter up the chain of command for resolution by OPNAV (N45) or CNO (N00N) as described above.

35-3.5. **Environmental Inspection of Navy Ships Outside the United States.** Navy ships are not subject to inspection by foreign authorities or enforcement of environmental requirements, even when the ship is located within areas subject to the jurisdiction of foreign countries (i.e., internal waters, ports, and ocean waters within 12 nautical miles (NM) of land) or in foreign nation exclusive economic zones (EEZ). However, they must operate in due regard for foreign nations' 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 (SOFA).

a. **Access Procedures.** Environmental officials representing the foreign country or local authority do not have the authority to inspect U.S. Navy ships to determine compliance with the 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 CO shall refuse to permit the inspection and shall notify the U.S. Embassy, OPNAV (N45) or CNO (N00N), and the chain of command of the request, the alleged violation, and any amplifying
b. Violation or Perceived Violation Procedures. If the ship has violated or is perceived to be in violation of a foreign country's environmental laws or regulations, the country may request the ship to leave port or the ocean area under its jurisdiction. This does not include denial of the right of innocent passage through territorial seas per international law. In the case of a request for a Navy ship to depart from a port or internal waters, the CO shall comply with the request and notify the U.S. Embassy, OPNAV (N45), and the chain of command of this action.

35-3.6. Notices of Violations. A small number of MSC ships have been issued Environmental Protection Agency (EPA) permits related to hazardous waste (HW) management. Ships which have been issued permits shall comply with the provisions of chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations) regarding notices of violation (NOV) or other expressions of environmental regulatory concern. All other Navy ships have not been issued permits and will not be subject to NOVs from regulatory agencies for permit violations.

35-3.7. Afloat Environmental Compliance Inspections and Assessments by Navy Inspectors

   a. 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 the Afloat Environmental Checklist (appendix D) to the maximum extent practicable. 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, effectiveness, and issues requiring Chief of Naval Operations (CNO) attention as a part of the periodic briefings to CNO.

   b. INSURV will maintain data collected during final contract trials and underway material inspection in the INSURV database for use by TYCOMs, OPNAV (N45), Naval Safety Center, and other Navy environmental protection organizations.

   c. For USNS vessels operated by COMSC, the afloat environmental compliance inspection program consists of a combination of periodic regulatory body inspections (American
Bureau of Shipping (ABS) or USCG), internal assessments, and Ship Material Assessment and Readiness Testing (SMART) inspections (in lieu of INSURV). The results of SMART inspections are reported to INSURV.

d. COs are encouraged to annually evaluate environmental compliance practices using the Afloat Environmental Checklist (appendix D) and the INSURV checklist (refer to appendix E (Web Sites) for INSURV checklist Web site address).

35-3.8. Afloat Environmental Protection Coordinator. COs of ships shall designate a person as the AEPC. The person assigned to this position will be the CO'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 section 35-3.3.

35-3.9. Operation Within Foreign Nation Waters. Navy ships are not legally subject to enforcement of environmental requirements by foreign coastal or port states. When operating in foreign territorial seas, or when visiting foreign ports, Navy ships shall abide by environmental provisions contained in port visit clearances or in SOFAs (refer to tables 35-1a, b, and c). 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 or ports, as delineated in this chapter. In some cases, compliance with the corresponding U.S. requirements will not be feasible overseas due to lack of offload facilities, environmental services, or other reasons. 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.

35-3.10. Exclusion of Vessel Discharges from National Pollutant Discharge Elimination System Permitting

a. Incidental Discharges

(1) Discharges incidental to the normal operation of a vessel of the Armed Forces are subject to the Uniform National Discharge Standards (UNDS) Program, which is different from CWA requirements under the CWA National Pollutant Discharge
Elimination System (NPDES) Program Vessel General Permit applicable to commercial vessels. Navy vessels, MSC vessels, and vessels chartered by COMSC (except for time and voyage chartered vessels) are vessels of the Armed Forces which do not require a permit under the NPDES Program. For these vessels, EPA and the Department of Defense (DoD) have jointly determined the following incidental discharges will require control under the UNDS Program:

(a) Aqueous film-forming foam (AFFF),
(b) Catapult water brake tank and post-launch retraction exhaust,
(c) Chain locker effluent,
(d) Clean ballast,
(e) Compensated fuel ballast,
(f) Controllable pitch propeller hydraulic fluid,
(g) Deck runoff,
(h) Dirty ballast,
(i) Distillation and reverse osmosis brine,
(j) Elevator pit effluent,
(k) Firemain systems,
(l) Gas turbine water wash,
(m) Graywater,
(n) Hull coating leachate,
(o) Motor gasoline compensating discharge,
(p) Non-oily machinery wastewater,
(q) Photographic laboratory drains,
(r) Seawater cooling overboard discharge,
(s) Seawater piping biofouling prevention,
(t) Small boat engine wet exhaust,
(u) Sonar dome discharge,
(v) Submarine bilge water,
(w) Surface vessel bilge water and oil/water separator (OWS) discharge,
(x) Underwater ship husbandry, and
(y) Welldeck discharges.

(2) EPA and DoD also determined that the following discharges are incidental to the normal operation of a vessel of the Armed Forces, but do not require control under the UNDS Program:

(a) Boiler blowdown,
(b) Catapult wet accumulator discharge,
(c) Cathodic protection,
(d) Freshwater lay-up,
(e) Mine countermeasures equipment lubrication,
(f) Portable damage control drain pump discharge,
(g) Portable damage control drain pump wet exhaust,
(h) Refrigeration or air conditioning condensate,
(i) Rudder bearing lubrication,
(j) Steam condensate,
(k) Stern tube seals and underwater bearing lubrication, and
(l) Submarine acoustic countermeasures launcher discharge.

b. Additional Requirements. To promote uniformity in treatment of naval vessel discharges nationwide, OPNAV (N45) and
fleet commanders closely monitor local attempts to impose requirements on ships beyond those specifically provided for by U.S. Federal law or EPA regulation. COs or masters shall report any interest expressed by environmental regulators in discharges from U.S. Navy ships or COMSC public vessels, by message to OPNAV (N45) with information copies to the chain of command. Navy vessels shall not enter into agreements with environmental agencies regarding ship discharges without prior OPNAV (N45) approval.

35-3.11. 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 SW, sewage, bilge water, or ballast water discharges.

a. Cordell Bank National Marine Sanctuary Discharge Prohibitions. Stringent discharge requirements apply to all vessels, including military vessels engaged in routine exercises and vessel operations, in the Cordell Bank National Marine Sanctuary. The Cordell Bank National Marine Sanctuary is a 529 square mile marine protected area located 6 miles (at its closest point) off the coast of northern California, just north of the Gulf of the Farallones. For vessels (including military vessels engaged in transit of, or routine exercises within, Sanctuary waters) permissible discharges from vessel sanitation systems are limited to "clean effluent" generated incidental to vessel use by an operable Type I or II marine sanitation device (MSD). Untreated sewage (black water) from collection, holding, and transfer (CHT) systems may not be discharged within Sanctuary boundaries, including from military vessels engaged in routine exercises within, or transits of, the Sanctuary. These discharge prohibitions do not apply to vessels engaged in major exercises or when conducting military activities within the Sanctuary other than for routine training purposes (e.g., search and rescue).

b. California Coastal Waters No Discharge Zone

(1) All waters within 3 NM of the California coast have been designated by EPA as a no discharge zone (NDZ). In this NDZ, vessels equipped with Type II MSDs and that have available holding capacity may not discharge treated sewage. Navy vessels equipped with Type II MSDs that have available holding capacity shall refrain from discharging effluent from Type II MSDs unless one or more conditions of section 35-3.12.c are met. If one or
more conditions of section 35-3.12.c are met, discharge is permitted per section 35-3.12.c. Ships shall use Type II MSDs, if operable, to discharge treated sewage to minimize environmental impact and discharge volume to comply with the requirements of section 35-3.12.c.

(2) Tables 35-1a, b, and c provide a summary of pollution control discharge restrictions for ships. Detailed guidance and restrictions are provided in appropriate sections of this chapter.

Table 35-1a. Summary of Navy Pollution Control Discharge Restrictions

<table>
<thead>
<tr>
<th>Area</th>
<th>Hazardous Materials</th>
<th>Solid Regulated Medical Wastes &amp; Sharps¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 NM</td>
<td>No discharge.</td>
<td>Sterilize or disinfect, store, and transfer ashore. No discharges.</td>
</tr>
<tr>
<td>3-12 NM</td>
<td>No discharge.</td>
<td>Sterilize or disinfect, store, and transfer ashore. No discharges.</td>
</tr>
<tr>
<td>12-25 NM</td>
<td>No discharge except as permitted by table 35-4.</td>
<td>Sterilize or disinfect, store, and transfer ashore. No discharges.</td>
</tr>
<tr>
<td>&gt;25 NM</td>
<td>No discharge except as permitted by table 35-4.</td>
<td>Sterilize or disinfect, store, and transfer ashore. No discharges.</td>
</tr>
<tr>
<td>&gt;50 NM &amp; high seas</td>
<td>No discharge unless &gt;200 NM or as permitted by table 35-4.</td>
<td>If health and safety are threatened, sterilize or disinfect waste, package and weigh for negative buoyancy, log, and discharge. No discharge of sharps permitted.</td>
</tr>
<tr>
<td>MARPOL &quot;special areas&quot; in effect</td>
<td>No discharge except as permitted by table 35-4.</td>
<td>Sterilize or disinfect, store, and transfer ashore. No discharges. If &gt;50 NM and health and safety are threatened, sterilize waste, package and weight for negative buoyancy, log, and discharge. No discharge of sharps permitted.</td>
</tr>
<tr>
<td>Foreign countries</td>
<td>No discharge except as permitted by table 35-4.</td>
<td>The packaging, handling, storage, transport, treatment, and disposal of infectious waste shall be as prescribed by applicable visit clearance, SOFA, senior officer present afloat (SOPA) regulations, and port guides.</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td>Dispose of all sharps ashore. Other non-regulated medical waste may be disposed of as garbage and does not require steam sterilization or disinfection.</td>
</tr>
</tbody>
</table>

¹Liquid regulated medical wastes may be discharged to the sanitary system at sea and in port per local regulations.
Table 35-1b. Summary of Navy Pollution Control Discharge Restrictions

<table>
<thead>
<tr>
<th>Area</th>
<th>Sewage (&quot;Black Water&quot;)</th>
<th>Graywater</th>
<th>Oily Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 NM</td>
<td>No discharge from Type III MSD; direct discharge from Type II MSD while underway, outside NDZs. In port, discharge to pierside collection facilities.</td>
<td>If no pierside collection capability exists, direct discharge permitted.</td>
<td>No sheen. If equipped with oil content monitor (OCM), discharge &lt;=15 parts per million (ppm) oil.²</td>
</tr>
<tr>
<td>3-12 NM</td>
<td>Direct discharge permitted.</td>
<td>Direct discharge permitted.</td>
<td>No sheen. If equipped with OCM, discharge &lt;=15 ppm oil.²</td>
</tr>
<tr>
<td>12-25 NM</td>
<td>Direct discharge permitted.</td>
<td>Direct discharge permitted.</td>
<td>If equipped with OCM, discharge &lt;=15 ppm oil. Ships with OWSs or bilge water processing tanks (BWPTs) but inoperable OCM must process all machinery space bilge water through OWS or BWPT.³</td>
</tr>
<tr>
<td>&gt;25 NM</td>
<td>Direct discharge permitted.</td>
<td>Direct discharge permitted.</td>
<td>Same as 12-25 NM.³</td>
</tr>
<tr>
<td>&gt;50 NM &amp; high seas</td>
<td>Direct discharge permitted.</td>
<td>Direct discharge permitted.</td>
<td>Same as 12-25 NM.³</td>
</tr>
<tr>
<td>MARPOL &quot;special areas&quot; in effect</td>
<td>Direct discharge permitted.</td>
<td>Direct discharge permitted.</td>
<td>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.³</td>
</tr>
<tr>
<td>Foreign countries</td>
<td>Within foreign territorial seas (12 NM), refer to visit clearance or SOFA (as delineated in the port guide or LOGREQ reply). If sufficient guidance is not available, follow guidance above. If not feasible, follow standards observed by host nation warships.</td>
<td>Within foreign territorial seas (12 NM), refer to visit clearance or SOFA (as delineated in the port guide or LOGREQ reply). If sufficient guidance is not available, follow guidance above. If not feasible, follow standards observed by host nation warships.</td>
<td>Within foreign territorial seas (12 NM), refer to visit clearance or SOFA (as delineated in the port guide or LOGREQ reply). If sufficient guidance is not available, follow guidance above. If not feasible, follow standards observed by host nation warships.</td>
</tr>
<tr>
<td>Comments</td>
<td>Direct discharge allowed within 3 NM under emergency conditions.</td>
<td>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 pierside facilities or unrestricted waters.</td>
<td>State and 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.</td>
</tr>
</tbody>
</table>

²If operating properly, OWS or BWPT discharge will routinely be less than 15 ppm.
³Surface 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.

MARPOL Annex I (Oily Waste) Special Areas In Effect: Mediterranean Sea, Baltic Sea, Black Sea, North-West European Waters, Antarctic Area, Gulfs Area (Arabian Gulf and Gulf of Oman), and Southern South Africa Waters.
Table 35-1c. Summary of Navy Pollution Control Discharge Restrictions

<table>
<thead>
<tr>
<th>Area</th>
<th>Garbage (Non-Plastics)</th>
<th>Garbage (Plastics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 NM</td>
<td>No discharge.</td>
<td>No discharge.</td>
</tr>
<tr>
<td>3-12 NM</td>
<td>Pulped or comminuted food and pulped paper and cardboard waste may be discharged &gt;3 NM.</td>
<td>No discharge.</td>
</tr>
<tr>
<td>12-25 NM</td>
<td>Bagged shredded glass and metal waste may be discharged &gt;12 NM.4</td>
<td>No discharge.</td>
</tr>
<tr>
<td>&gt;25 NM</td>
<td>Direct discharge permitted.5</td>
<td>No discharge.</td>
</tr>
<tr>
<td>&gt;50 NM &amp; high seas</td>
<td>Direct discharge permitted.5</td>
<td>No discharge.</td>
</tr>
<tr>
<td>MARPOL &quot;special areas&quot; in effect</td>
<td>Discharge pulped or comminuted food and pulped paper and cardboard waste &gt;3 NM. Discharge bagged shredded glass and metal waste &gt;12 NM.5</td>
<td>No discharge.</td>
</tr>
<tr>
<td></td>
<td>Report all non-food, non-pulped, non-shredded garbage discharges to OPNAV (N45) upon completion of operations.</td>
<td></td>
</tr>
<tr>
<td>Foreign countries</td>
<td>Discharge pulped or comminuted food and pulped paper and cardboard waste &gt;3 NM from foreign coasts. Discharge bagged shredded glass and metal waste &gt;12 NM. Discharge all other garbage &gt;25 NM.</td>
<td>No discharge.</td>
</tr>
<tr>
<td>Comments</td>
<td>Garbage discharged should be processed to eliminate floating waste. Retain surplus material for shore disposal.</td>
<td>Recordkeeping and reporting requirements exist for at sea discharge. Minimal discharge authorized if plastic waste processor inoperable and necessary for safety of ship or health of ship’s personnel. Report discharge commencement to appropriate operational commander or OPNAV (N45).</td>
</tr>
</tbody>
</table>

4Submarines may discharge compacted, non-plastic, sinkable garbage between 12 NM and 25 NM provided the depth of water is greater than 1,000 fathoms.
5Surface ships equipped with pulpers and shredders shall use them 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, non-plastic, sinkable garbage.

MARPOL Annex V (Garbage) Special Areas In Effect: Baltic Sea, North Sea, Antarctic Area, Gulfs Area (Arabian Gulf and Gulf of Oman), Mediterranean Sea, and Wider Caribbean Region.
35-3.12. Sewage, Graywater, and Industrial Wastewater

a. Shipboard Equipment

(1) Marine Sanitation Devices. Navy ships shall be equipped 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 United States. Ships shall have the capability to collect and transfer graywater to shore while pierside. DoD regulations governing the design, construction, installation, and operation of MSDs aboard vessels owned and operated by DoD are contained in reference (a).

(2) MSD Types. Navy shall equip all new ships with Type II or Type III MSDs certified by the technical authority (Commander, Naval Sea Systems Command (COMNAVSEASYSCOM)). New public vessels operated under the direction of COMSC may be equipped with USCG-approved Type II MSDs. 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 operating under the direction of COMSC may replace inoperable MSDs with USCG-approved Type II MSDs.

(3) MSD Operation and Maintenance. 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.

(4) MSD Pumping Capability. MSD installations shall include pumps, piping risers, and weather deck connections to allow safe and convenient ship-to-shore transfer of collected sewage and graywater.

(a) Cam-Lock Sewage Discharge Connections. Surface ships, submarines, and service craft 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 and disconnect with shoreside offloading hoses.

(b) Flanges. Navy ships visiting foreign ports shall be equipped with adapters to accommodate hoses having international standard flanges specified by the International
Maritime Organization (IMO) in Annex IV, Regulation 10 of MARPOL. Table 35-2 provides specifications for such flanges.

Table 35-2. Standard Dimensions of Flanges for Discharge Connections

<table>
<thead>
<tr>
<th>Description</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside diameter</td>
<td>210 millimeter (mm)</td>
</tr>
<tr>
<td>Inner diameter (*)</td>
<td>According to pipe outside diameter</td>
</tr>
<tr>
<td>Bolt circle diameter</td>
<td>170 mm</td>
</tr>
<tr>
<td>Slots in flange</td>
<td>4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width will be 18 mm.</td>
</tr>
<tr>
<td>Flange thickness</td>
<td>16 mm</td>
</tr>
<tr>
<td>Bolts and nuts</td>
<td>4, each of 16 mm in diameter and of suitable length</td>
</tr>
</tbody>
</table>

*Note: 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 kilograms per square centimeter (kg/cm²). For ships having a molded depth of 5 meters (m) or less, the inner diameter of the discharge connection may be 38 mm.

b. Collection, Disposal, and Discharge Procedures

(1) Industrial Wastewater Disposal. 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, for disposal as waste.

(2) Solvent and Industrial Waste Disposal. 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.

(3) In Port

(a) Graywater. Ships shall collect graywater in installed MSDs or graywater collection systems while in port, if so equipped.

(b) Food Service Garbage. When in port, food service garbage grinders shall be diverted to the MSD system or a segregated food waste tank for discharge ashore.

(c) Navy Ports. While visiting Navy ports, ships equipped with Type III-A and Type III-B MSDs shall periodically
pump their collected sewage and graywater to shoreside reception facilities. Ships equipped with COMNAVSEASYSCOM or USCG-approved Type I or Type II MSDs shall follow local regulations regarding graywater and sewage discharge. The shore activity shall provide the transfer hoses and associated fittings to connect the ship discharge line with the shore equipment.

(d) Non-Navy Ports. While visiting non-Navy ports, ships shall request sewage reception facilities in LOGREQs or other pertinent documentation. Ships shall use pier sewers when available for sewage and graywater. If fixed sewers are not available, ships shall discharge sewage from a Type III MSD or effluent from Type I or II MSDs to other sewage collection facilities such as barges or tank trucks unless it is impractical to do so, or if the CO or master determines the safety of the crew or ship is at risk. If pier sewers are not available and barge or tank truck reception facilities are unavailable, impractical, or unsafe, ships may discharge graywater and sewage from a Type III MSD or effluent from Type I or Type II MSDs unless prohibited by law, regulation, or condition of port entry.

(4) Underway

(a) For MSDs not specifically designed to handle both sewage and graywater, holding or treatment of graywater in addition to sewage 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. Unless the MSDs aboard have been specifically designed and constructed to hold or treat both sewage and graywater, Navy ships shall ensure MSD piping is configured to collect and hold (Type III MSD) or treat (Type I or II MSD) only sewage while operating or transiting within 3 NM of shore and shall discharge graywater directly overboard. Navy vessels may discharge treated effluent from properly functioning USCG-approved Type II MSDs except if prohibited by law, regulation, or condition of port entry. While operating beyond 3 NM from shore, Navy ships may discharge all sewage and graywater directly overboard.

(b) 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.
c. Untreated Sewage Discharge Exceptions

(1) Navy ships may discharge minimal quantities of untreated sewage within 0 to 3 NM of shore under the following conditions 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 report discharge requirements through fleet and port environmental coordinators.

(a) The ship's holding capacity is insufficient because transit time through the zone 0 to 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;

(b) The ship is conducting or participating in military operations or exercises (including training or readiness evolutions) within the zone 0 to 3 NM from shore, and terminating operations to off-load sewage pierside or beyond 3 NM from shore would impair operational effectiveness or the mission;

(c) 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 on-board retention of sewage is not practicable;

(d) 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; and

(e) 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 report inoperable MSDs that either threaten or result in discharge through the casualty report (CASREP) system. The initial CASREP shall note the potential for discharge. All subsequent reports shall report the frequency and approximate amount of actual discharges.

(2) Ships shall discharge any sewage under these exceptions 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.
d. **Training Requirements.** 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 CHT course found on the Naval Education and Training Command (NETC) Shipboard Training Enhancement Program compact discs prior to assuming these duties. All personnel who operate or maintain sewage or graywater disposal equipment shall complete the Shipboard Sewage CHT and Treatment personal qualification standard (PQS) (Naval Education and Training (NAVEDTRA) 43199-C) prior to assignment to those duties. COMSC shall specify training requirements for personnel on ships owned or operated by MSC.

35-3.13. **Air Emissions.** Navy ships shall comply with applicable Federal, State, and local regulations governing air pollution emissions.

a. **Shipboard Procedures**

   (1) **Stack Emissions Pierside.** Navy ships at pierside shall implement operation and maintenance procedures, identified by the Navy REC or CNIC, 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.

   (2) **Stack Emissions in Port.** 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 chapter 221 of reference (b).

   (3) **Approved Material Usage.** 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 material (HM) approved for use aboard ship. For submarines, additional restrictions may apply to solvents, paints, fuels, lubricants, and other chemicals per reference (c).

   (4) **Asbestos Insulation Repairs and Disposal.** Only properly trained personnel equipped with appropriate personal
protective equipment shall perform shipboard emergency or operational readiness repairs on thermal insulation containing asbestos (chapter B1 of reference (d)). This reference also discusses other asbestos work, including the removal of asbestos-containing deck tiles, replacement of asbestos-containing gasket or 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 (chapter B1 of reference (d)). In preparation for disposal ashore, repair personnel must adequately wet asbestos residue before double bagging it in heavy duty (6 mm 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.

(5) **ODS Performance Goals.** Navy ships, including COMSC ships with AC&R systems with an installed refrigerant charge of 50 pounds or more that contain ODSs such as chlorofluorocarbon (CFC)-11, CFC-12, or CFC-114 or ODS substitute material such as hydrofluorocarbon (HFC)-134a, HFC-236fa, or R-404A (a blend of HFC-143a, HFC-125, and HFC-134a) 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, and

(b) Maintain maximum annual leakage rate of no more than 35 percent of total installed refrigerant charge of ship stores and cargo refrigeration.

(6) **ODS Recovery.** Ships shall recover ODSs and ODS substitute materials including refrigerants and firefighting agents prior to maintenance on AC&R systems and fire protection systems. Navy personnel shall not intentionally release CFCs or halons during the servicing, maintenance, repair, and disposal of any AC&R or firefighting equipment. Only maintenance personnel trained per section 35-3.13.f shall perform maintenance on equipment containing such substances. Maintenance personnel shall use only approved procedures for minimizing loss of ODSs, regardless of the ship's location.

(7) **AC&R Maintenance Records.** 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 section 35-3.13.a.5 and retain them for 3 years.

(8) Ozone-Depleting Solvents Use. Ships shall use only
those ODS-containing solvents as authorized by the SHML or SMCL
and shall restrict their use to those maintenance procedures
specifically required.

b. ODS Reserve. Navy established the ODS reserve to support
mission-critical ODS requirements. Shipboard CFC for use in AC&R
systems and halon for use in firefighting systems are mission-
critical designated. The ODS reserve material is set aside for
these shipboard systems. Reference (e), produced by Defense
Logistics Agency Aviation, provides procedures for deposits to
and requisitions from the reserve. OPNAV (N45); COMNAVSEASYSCOM;
Commander, Naval Air Systems Command; COMSC; and fleet commanders
monitor requisitions from the ODS reserve.

c. Shipboard Galley and Other Ancillary Refrigeration
Equipment. Class I ODS refrigerants used in shipboard galley and
other ancillary refrigeration equipment such as air dehydrators,
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 2020. 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 Program) and must use only those
refrigerants approved by COMNAVSEASYSCOM with an ozone depletion
potential of zero. Reference (f) lists replacement equipment.

d. Recordkeeping and Reporting Requirements

(1) EPA headquarters has recommended regional EPA offices
grant waivers to relieve Navy activities classified as affected
source sites of the requirement to record and report ship's force
marine coating use on operational ships. Operational ships are
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;
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.

(2) When requested by the Navy activity or Supervisor of Shipbuilding (SUPSHIP), ships must record and report marine coating use each day. Hazardous Inventory Control System for Windows (HICSWIN) or Submarine Hazardous Material Inventory and Management System (SHIMS), as appropriate, may be used to track this information. Records shall be provided by the 7th day of the month for the previous month, or prior to departure, and shall include the following information:

(a) Coating type (e.g., general use, non-skid, special marking);

(b) Color;

(c) National stock number;

(d) Manufacturer name or commercial and government entity code;

(e) Manufacturer product name and part number;

(f) Volume of coating used;

(g) Volatile organic compound (VOC) content of coating;

(h) Non-naval stock number coating certification (when available); and

(i) Date used.

(3) Ship's force shall record and report coating use when located at commercial affected source sites (e.g., private shipyards or maintenance facilities) regardless of availability type or operational status.

(4) **Ships in an Operational Status**

(a) EPA has made the determination that routine, incidental preservation and maintenance painting conducted by ship's force aboard vessels in an operational status may be exempted from recordkeeping and reporting requirements of the shipbuilding and ship repair (surface coating or painting operations) NESHAP. However, Navy shore activities designated
"EPA affected sources" must apply to the local EPA region for this waiver. At some locations, state, regional, or local regulations may be applicable to ship's force pierside use of marine coatings in addition to any NESHAP requirements.

(b) Fleet commanders shall direct Navy activities, at affected sources, to work with Navy RECs to request NESHAP recordkeeping waivers from EPA regional offices for ships in operational status. In addition, waivers to any state, regional, or local regulations should also be sought for ships in an operational status. If regional EPA offices grant appropriate waivers, operational ships located at Navy affected source sites will not be required to maintain records of ship's force marine coating use.

(c) Affected activities unable to secure waivers for ship's force painting recordkeeping and reporting during operational availabilities are required to comply with subpart II of reference (g) or local permit requirements. Navy activities and SUPSHIPs shall notify ships of their permit or reporting responsibilities prior to entering the activity.

(5) Ships in a Non-Operational Status. Ships in an overhaul availability at Navy NESHAP affected source sites shall maintain records of ship's force marine coating use for coatings distributed from ships' stores. Surface ships may use the installed COMNAVSEASYSCOM-approved management software (HICSWIN) to maintain these records. Submarines may use the SHIMS to maintain these records.

e. Shipboard Marine Coating Use

(1) Restrictions. Ships are required to use materials which do not exceed permissible VOC limits for applications as listed in table 35-3 (the 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 Navy's supply system, they should contact COMNAVSEASYSCOM (NAVSEA 05P) for a compliant substitute.

(2) Restrictions on Thinners Use. 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 or paints is prohibited." Supervisors of the paint locker and those personnel designated to
apply paint shall ensure no thinning of paints with any material, other than water, occurs.

Table 35-3. Permissible VOC Limits for Applications

<table>
<thead>
<tr>
<th>Application</th>
<th>EPA VOC Limit (Metric)</th>
<th>Conversion (U.S.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air flask</td>
<td>(340 grams/liter (g/l))</td>
<td>(2.83 pounds/gallon (lbs/gal))</td>
</tr>
<tr>
<td>Antenna</td>
<td>(530 g/l)</td>
<td>(4.42 lbs/gal)</td>
</tr>
<tr>
<td>Antifoulant</td>
<td>(400 g/l)</td>
<td>(3.33 lbs/gal)</td>
</tr>
<tr>
<td>Heat resistant</td>
<td>(420 g/l)</td>
<td>(3.50 lbs/gal)</td>
</tr>
<tr>
<td>High gloss</td>
<td>(420 g/l)</td>
<td>(3.50 lbs/gal)</td>
</tr>
<tr>
<td>High-temperature</td>
<td>(500 g/l)</td>
<td>(4.17 lbs/gal)</td>
</tr>
<tr>
<td>Inorganic zinc high-build primer</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Military exterior</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Mist</td>
<td>(610 g/l)</td>
<td>(5.08 lbs/gal)</td>
</tr>
<tr>
<td>Navigational aids</td>
<td>(550 g/l)</td>
<td>(4.58 lbs/gal)</td>
</tr>
<tr>
<td>Nonskid</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Nuclear</td>
<td>(420 g/l)</td>
<td>(3.50 lbs/gal)</td>
</tr>
<tr>
<td>Organic zinc</td>
<td>(360 g/l)</td>
<td>(3.00 lbs/gal)</td>
</tr>
<tr>
<td>Pre-treatment wash primer</td>
<td>(780 g/l)</td>
<td>(6.50 lbs/gal)</td>
</tr>
<tr>
<td>Repair and maintenance of thermoplastic coating</td>
<td>(550 g/l)</td>
<td>(4.58 lbs/gal)</td>
</tr>
<tr>
<td>Rubber camouflage</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Sealant coat for thermal spray aluminum</td>
<td>(610 g/l)</td>
<td>(5.08 lbs/gal)</td>
</tr>
<tr>
<td>Special marking</td>
<td>(490 g/l)</td>
<td>(4.08 lbs/gal)</td>
</tr>
<tr>
<td>Specialty interior</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Tack coat</td>
<td>(610 g/l)</td>
<td>(5.08 lbs/gal)</td>
</tr>
<tr>
<td>Undersea weapons systems</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
<tr>
<td>Weld-through shop primer</td>
<td>(650 g/l)</td>
<td>(5.42 lbs/gal)</td>
</tr>
<tr>
<td>*General use</td>
<td>(340 g/l)</td>
<td>(2.83 lbs/gal)</td>
</tr>
</tbody>
</table>

*General use coating is defined as "any coating not defined as a specialty coating."

(3) Certification. Navy supply activities including fleet industrial supply centers have implemented procedures ensuring all marine coatings have batch VOC certificates complying with the requirements of subpart II of reference (g) prior to issue of marine coatings to affected sources. VOC certificates may be obtained by any of the following means:

(a) Directly from the vendor or manufacturer;

(b) From Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) Ship-NESHAP batch certification database; or

(c) Locally prepared by an activity qualified to perform VOC content analysis per EPA Method 24.

(4) Work Practices. Ships shall implement the following
marine coating work practices:

(a) Minimize spills of marine coatings,

(b) Ensure marine coating containers are intact and leak-free, and

(c) Ensure marine coating containers are closed when not in use.

f. Training Requirements

(1) Ships shall train personnel whose watch duties may result in air emissions (e.g., diesel engine operators, boiler operators, gas turbine operators) in the minimization of air pollution as a part of their watch qualification. Ships shall train personnel whose task assignments may result in air emissions (e.g., 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.

(2) All Navy AC&R technicians who perform maintenance on AC&R equipment shall be certified under an EPA-approved technician certification program appropriate for the type of equipment they maintain. Ships shall provide these personnel with training on ODS regulations as well as spent or recyclable ODS labeling prior to assigning them to perform these duties. Ships shall train personnel who work with other ODSs (e.g., halons, solvents) or perform maintenance on equipment containing such substances on methods to prevent release prior to assigning them to such work.

(3) Personnel assigned to operate incinerators or other thermal destruction equipment shall complete all PQS appropriate for the type of equipment, prior to assignment.

(4) For MSC ships, COMSC shall prescribe environmental protection training requirements.

35-3.14. Oil and Oily Waste. Ship COs will comply with applicable oil discharge regulations and the operational requirements contained in this chapter.

a. Minimizing Oil Spill Risks

(1) COs 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.

(2) Preventing oil spills is one of Navy's top priorities; however, in the event of a discharge of oil or oily waste, COs and MSC ship masters shall ensure minimal amounts of oil or oily waste are discharged and duly note the details in the ship's engineering log. Recordkeeping 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. If such a discharge occurs within 12 NM of the coastline of the United States and its territories and a sheen is created, the discharge shall be treated as an OHS spill and immediately reported to the USCG National Response Center and military authorities per requirements set forth in section 35-3.15.d.

b. Surface Ships with OWSs and OCMs. Navy ships equipped with OWSs and OCMs shall process all machinery space bilge water through OWSs and OCMs in a manner designed 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, or particulates that could clog the OWS.

c. Surface Ships with OWSs but with inoperable OCMs and Submarines with BWPT. Navy ships equipped with an OWS or submarines equipped with BWPTs shall process all machinery space bilge water through an OWS or BWPT before discharge.

d. Surface Ships Without an Operating OWS but with an Oily Waste Holding Tank. Navy 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. The discharge may be conducted only after a concerted effort has been expended to repair the equipment malfunction. Ships shall report equipment casualties that either threaten or result in a discharge of oily water through the CASREP system. The initial report shall note the potential for discharge. COs or ship masters shall minimize discharge volume and environmental impact by discharging only the water portion of the holding tank.
Details of the discharge shall be noted in the ship's engineering log. Recordkeeping 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. If such a discharge is conducted within 12 NM of the coastline of the United States and its territories and a sheen is created, the discharge shall be treated as an OHS spill and immediately reported to the USCG National Response Center and military authorities per requirements set forth in section 35-3.15.d.

e. Surface Ships Without an Operating OWS and Without an OWHT. Navy ships without an operating OWS and without an 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.

f. Submarines Without BWPT. 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 and the oily phase shall be held aboard and pumped to a shore collection facility. Submarines shall ensure this policy is met by written procedure.

g. Foreign Countries. Within foreign territorial seas (12 NM), refer to the visit clearance or SOFA as delineated in the LOGREQ reply. If sufficient guidance is not available, follow the procedures in section 35-3.14.b through f above. If the above procedures are not feasible, U.S. Navy ships shall operate in a manner consistent with the host nation's warships.

h. Shipboard Equipment

(1) Navy shall equip ships with oil pollution abatement equipment certified by the technical authority (COMNAVSEASYSCOM). Navy shall install the following equipment or systems on ships to allow proper segregation, collection, and processing of shipboard oily waste and collection of waste oil:
(a) OWSs, OCMs, OWHTs, and waste oil tanks (WOT) to allow adequate processing of shipboard oily waste prior to its discharge overboard and to allow proper segregation and collection of shipboard waste oil;

(b) Bilge pumps (oily waste transfer pumps), piping risers, and weather deck connections to allow safe and convenient ship-to-shore transfer of oily waste and waste oil (OW and WO);

(c) Cam-lock discharge connections, 2 1/2 inch (MS 27023 14), for OW and WO discharge to allow quick connect or disconnect with shoreside offloading hoses;

(d) OW and WO adapters to accommodate hoses with standard IMO flanges for use by Navy ships visiting foreign or non-Navy ports;

(e) Mechanical seals on appropriate shipboard pumps to minimize the quantity of oily wastewater collected in ship bilges;

(f) Tank level indicators to reduce the potential for overboard spills during fueling and oil and oily waste handling and transfer operations;

(g) Contaminated fuel settling tanks (CFST) to receive and assist reclamation of fuel tank strippings that might otherwise be discharged overboard; and

(h) Oil and water interface detectors, cargo tank cleaning systems, and where appropriate, segregated ballast tanks on oilers and oil tankers.

(2) All oil pollution abatement equipment or systems shall be inspected prior to the issuance of a user's certificate to verify proper installation and operation per COMNAVSEASYSCOM's inspection and certification process. Inspections are required before ships are placed into service, after major oily waste equipment modification, and every 5 years per reference (a). Uncertified equipment may be used so long as no safety issues or risk of inadvertent discharge are present.

(3) The installation and operation of oil pollution abatement equipment or systems on MSC vessels shall be inspected and certified to commercial standards by USCG or ABS.

i. 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 sections. Chapter 593, section 3 of reference (b) provides detailed procedural instructions implementing these requirements.

(1) 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 shall be required and will greatly reduce the generation of oily waste.

(2) Contaminated Bilge Water and Oily Waste

(a) 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. Navy ships shall not procure bilge cleaners or chemical agents that have not been approved for use by COMNAVSEASYSCOM. Use of unapproved bilge cleaners will prevent oil and 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 (b).

(b) In port, ships shall off-load 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 (e.g., AFFF, solvents, anti-freeze, other HM), ships shall advise the receiving shore facility prior to off-load. 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) At sea, ships shall not attempt to process oily bilge water containing chemical emulsion agents or contaminants that are not compatible with the OWS. If bilges have become contaminated from other than routine sources (e.g., AFFF, solvents, anti-freeze, other HM), ships shall educt the contaminated bilge water and follow the requirements of 35-3.14.i.4. Ships shall not pump any of the contaminated oily waste to the OWHT or WOT. If planning for drills or exercises involving the use of AFFF, all bilges containing oily waste shall be pumped to the OWHT prior to the use of AFFF. If the OWHT has
already been contaminated with emulsion agents or contaminants, the OWS may be unable to adequately separate the bilge water. In this situation, the ship shall keep processing oily waste and retain all oily waste water to the maximum extent practical.

(3) 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 waste per supporting activity guidance using one or more of the following approaches:

(a) Permanent Shore Reception Facilities. In Navy ports that provide shore oily waste collection, shoreside collection of bilge water and oily waste followed by recovery of recyclable products is the preferred method of dealing with these shipboard wastes.

(b) OWS OCM Systems. Ships equipped with OWS and OCM systems may use them, provided the overboard discharge does not exceed 15 ppm, cause a sheen, or violate any other applicable water quality standard, local law, or regulation. 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.

(c) Ship Waste Offload Barges. Supporting shore activities shall operate ship waste offload barges (SWOB) per reference (h). Ships not equipped with an operable OWS shall use OW and WO collection lines ashore, if available, or shall discharge to a SWOB.

(4) Emergency Dewatering. Ships shall not use eductors to dewater bilges containing oily waste (e.g., all machinery space bilges), except in emergency situations when OWS systems (including OWHT) 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 (e.g., nature, quantity, geographic location) concerning eductor use to discharge bilge waste overboard. If a discharge occurs within 12 NM of the U.S. coast, it shall be treated as a spill and appropriate notification made.

(5) Waste or Used Oil. Shipboard personnel shall make maximum use of available port facilities for disposal of all
waste or used oil products prior to departing from and upon
returning to port. Port facilities include SWOBs, pierside
collection tanks, tank trucks, bowsers, and contaminated fuel
barges. Required actions include the following:

(a) Shipboard personnel shall collect, store
separately, and label used lubricating oils for eventual shore
reclamation;

(b) Shipboard personnel 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 or waste oils;

(d) Ships that do not have a system dedicated to
collect used synthetic oils shall use 5- or 55-gallon steel
containers, properly labeled for eventual shore recycling;

(e) All personnel handling synthetic oil shall wear
protective clothing, as specified in material safety data sheets
(MSDS); and

(f) Ships shall retain containers (e.g., drums, cans)
in which oil products were originally packaged and properly label
them for storing and transferring oil ashore.

(6) Fuel Transfer. Ships shall fuel, defuel, transfer
fuel internally, and off-load oil in restricted waters during
normal daylight working hours, when operating schedules permit.
They shall conduct these evolutions with well-trained personnel
(refer to section 35-3.14.k). 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;

(c) Double-check alignment of all transfer system
valves;

(d) Use only qualified personnel to perform the
detailed transfer procedures;
(e) Continuously monitor each tank level while fueling;

(f) Use remote tank-level indicators as the primary method of obtaining tank levels; and

(g) Prior to actual fuel transfer, transfer personnel shall inform the responsible ship's officer (i.e., CO, command duty officer, or officer of the deck) and the fuel supplier the ship is ready to commence fueling operations.

(7) **Fuel Tank Stripping.** Ships shall not use eductors to strip fuel or cargo tanks. 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. CFSTs are for strippings from fuel storage and service tanks only. Ships shall not discharge bilge water and waste or other wastewater into CFSTs.

(8) **Compensated Fuel Ballast Water Systems and OW and 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 an adequate margin is preserved in tanks to prevent inadvertent discharges of oil with the compensating water. Because some state regulations require supporting shore activities to collect and process compensated fuel ballast water prior to discharge to the environment, ships shall consult with the shore facility for local requirements.

(9) **Oil-Contaminated SW.** Surface ships shall containerize oil and fuel filters and other items coated or soaked with oil for shore disposal. They may weigh these items for negative buoyancy and jettison them beyond 50 NM of shore if necessary for safety of ship or health of crew. Surface ships equipped with COMNAVSEASYSCOM-approved thermal destruction equipment shall not burn heavily soaked oily rags or rags contaminated with HM. Ships may only dispose of rags that are lightly soaked (i.e., less than 50 percent of the rag surface area wetted and not dripping without wringing) with petroleum products or other non-hazardous liquids ashore or via thermal destruction equipment beyond 12 NM from shore. Ships, other than MSC vessels, shall utilize the COMNAVSUPSYSCOM Afloat Shop Towel Program to the maximum extent practicable. 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 (d). Submarines may weight oil-contaminated SW (including oily rags or sorbents) for negative buoyancy and jettison beyond 50 NM from shore, or as necessary for the safety of the submarine and crew.

(10) Vegetable and Other Cooking Oils. Ships may dispose of small quantities of cooking oils and cleaning solutions (i.e., wash or rinse water) containing these oils outside of 12 NM from land without restriction. Inside of 12 NM, ships shall not dispose of such material. Ships shall containerize larger quantities (e.g., the content of a deep fat fryer) for disposal or recycling ashore. Ships and submarines shall not dispose of quantities of cooking 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 cooking oil should be disposed of per SW processing requirements for the material.

j. 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:

(1) A Navy ship may discharge oily waste to the sea in any other situation in which a CO 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. COs shall minimize such discharges and ensure the recording of details of the discharge (e.g., nature, quantity, geographic location) in the engineering log. If such a discharge is conducted within 12 NM from the United States or its territories' shore and it creates a sheen, ships shall treat the discharge as an OHS spill and immediately report to the USCG National Response Center and military authorities per requirements set forth in section 35-3.15.d.

(2) 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.
k. Training Requirements. Ships shall train personnel who operate or maintain oil, 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 and perform oily waste processing and disposal operations shall complete the Oil Pollution Abatement 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-C) prior to assignment to those duties. For MSC ships, COMSC shall specify applicable training requirements.

35-3.15. OHS Spills. CWA prohibits OHS discharges in harmful quantities into or upon the navigable waters of the United States, including the contiguous zone, EEZ, and adjoining shorelines.

a. Shore-Based Facility Response Teams. Facility response teams (FRT) 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.

b. Supervisor of Salvage and Diving Spill Response Capability

(1) The Supervisor of Salvage and Diving (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 off-loading petroleum, oil, and lubricants; portable storage; and related equipment. These inventories are located in response centers in Williamsburg, Virginia; Port Hueneme, California; Pearl Harbor, Hawaii; Anchorage, Alaska; and Bahrain, and are designed for rapid mobilization to spill sites worldwide. Salvage equipment is also maintained in Livorno, Italy; Sasebo, Japan; and Singapore.
(2) Trained operators, mechanics, and supervisory personnel deploy from U.S. response centers with the equipment. SUPSALV, headquartered in Washington, D.C., 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.

c. Ship Spill Response Capability

(1) For spills over the side, ship's personnel under the CO or master shall initiate immediate actions to mitigate the effects of the spill. Each surface ship shall maintain a minimum of one oil spill response kit - Allowance Equipage List serial number 2-550024006 (for surface ships), 2-550024005 (for small craft), or 2-550024004 (for mine countermeasures vessels) for on-board and overboard oil spill response. Submarines shall maintain at least one OHS spill containment and cleanup kit to be used for on-board response operations per enclosure (2) of reference (i). Submarines shall also maintain an Otto fuel spill cleanup kit (AEL 0006350027) for torpedo Otto fuel spill response. If the response to Navy ship spills is considered beyond the ship's limited capability, the cognizant shore activity CO, shore NOSC, or fleet NOSC will provide appropriate assistance and direct response efforts.

(2) While mitigating the spill, in all cases of spills, the ship's CO or master shall immediately report the incident to the cognizant shore activity CO, NOSC, and other officials as required by the ship's spill contingency plan (SCP). The Hazardous Material Control and Management (HMC&M) CD-ROM program lists spill response points of contact.

d. Response Within 12 NM of the United States. In Navy or non-Navy ports and when the ship is within 12 NM of the U.S. coastline, the ship's CO shall:

(1) 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 cleanup minor spills before requesting assistance from shore-based personnel;

(2) Notify the shoreside NOSC or cognizant facility CO by the most expeditious means possible. For environmentally significant spills, refer to section 35-3.15.g;

(3) Ensure the USCG National Response Center is notified
by telephone at 1-800-424-8802; and

(4) Follow-up by submitting a naval message. Appendix C (Message Formats) provides formats for OHS spill reports.

e. Response Outside 12 NM from the United States. For OHS spills in these areas, ships shall:

(1) Initiate immediate action to mitigate the effects of the spill;

(2) Notify the pre-designated fleet NOSC by naval message using the format in appendix C (Message Formats) for OHS. For information on environmentally significant spills, refer to section 35-3.15.g; and

(3) The fleet or shore NOSC shall implement the applicable NOSC OHS regional response plan (NOSC plan).

f. Response in Foreign Ports. Ships shall take the following action for an OHS spill in these waters:

(1) The ship's CO shall initiate immediate action to mitigate the effects of the spill;

(2) The ship's CO shall immediately notify the pre-designated shoreside NOSC (as defined in governing contingency plans) by naval message. Appendix C (Message Formats) contains formats for OHS spill and release messages; and

(3) The shoreside NOSC shall be responsible for implementing the applicable NOSC plan.

g. Environmentally Significant Spills. For spills anywhere resulting from catastrophic events, causing significant adverse public reaction, having geopolitical implications, or for other causes warranting operations event and incident report (OPREP 3) special incident reports per reference (h), 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 C (Message Formats).

h. Shipboard 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. 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. Submarines shall use enclosure (1) of reference (i) to develop their OHS SCPs. The plan(s) shall contain procedures for reporting, containment, control, recovery, and disposal of spilled material, protective clothing, and spill cleanup materials; information sources for oil and HM; and names and telephone numbers of fleet as well as shoreside NOSCs. The plan(s) shall be reviewed and updated annually to ensure they are consistent with current ship conditions and policies and shall contain up-to-date NOSC contact information to ensure appropriate notification of spills. Although neither USCG nor state officials have authority to require preparation of public vessel OHS SCPs, Navy will provide Navy ship SCPs to USCG and state officials upon request to promote strong, cooperative relationships with the local community.

i. Training Requirements

(1) Ships shall conduct and document at least one overboard OHS spill response drill for each duty section annually. These drills shall include deployment of the oil spill response kit or HM 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 or USCG-sponsored triennial "area exercises" designed to test worst case spill response capabilities. 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.

(2) One petty officer in each in port fire party and each repair party shall qualify as oil spill cleanup supervisor within 6 months of assignment (Watchstation 324 in NAVEDTRA 43704, PQS for engineering collaterals and qualifications). For submarines, TYCOMs shall specify requirements so appropriately qualified individuals are present at the scene of any HM or oil spill.

It requires HM be selected, used, and managed over its life-cycle so 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.

a. Shipboard Procedures. Ships shall follow these procedures in the management of used or excess HM:

(1) Surface ships and submarines shall implement the Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP) by following policies and requirements in the subsequent sections of this chapter, chapters 593 and 670 of reference (b), and reference (d). The following elements are essential for effective CHRIMP implementation. The requirements associated with these elements are described in reference (d).

(a) Centralized inventory management and tracking;
(b) Requisitioning and receiving authorized HM;
(c) HM container labeling;
(d) Storage of HM;
(e) Controlling HM issue, re-issue, and return;
(f) HM container compatibility;
(g) Consolidation of used HM and empty HM containers;
(h) Offload or disposal of used or excess HM and empty HM containers;
(i) HM use and handling requirements; and
(j) Training requirements.

(2) Navy ships and submarines shall not commingle different HM for the purpose of disposal. Consolidation of HM with identical stock numbers is permitted. Consolidation of HM 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, HMs shall be sorted by compatibility and a list of HM commingled in each container shall be maintained and provided to the shore receiving
activity.

(3) Except for MSC vessels, submarines, and small surface ship types such as mine countermeasure (MCM), patrol craft (PC), and littoral combat ship (LCS), all HM containers shall be managed by the ship's hazardous material minimization centers (HAZMINCEN). HAZMINCEN personnel shall determine if HM containers meet the definition of an empty HM container and can be declared "empty." Empty HM containers meeting these requirements are no longer considered to be hazardous and shall be consolidated separately for review by the shore-based Enhanced CHRIMP Afloat Program (ECAP) technician prior to being disposed of as shipboard SW per the procedures in section 35-3.17. HM containers aboard MSC vessels shall be managed by the supply officer. HM aboard submarines shall be centrally managed by the supply department using SHIMS. HM on small surface ship types such as MCM, PC, and LCS shall be managed by the supply department.

(4) Ships shall retain used or excess HM aboard for shore disposal. Navy ships shall not discharge overboard used or excess HM generated aboard or HW unless specifically allowed by table 35-4 or if necessary for crew or ship safety. Table 35-4 provides detailed guidance for authorized HM discharges. If HM discharge is necessary for crew or ship safety, every effort will be made to discharge greater than 200 NM from land. In the event of HM discharge for crew or ship safety, the CO shall note the details of such a discharge (i.e., date, time, and location of discharge; nature of the material discharged, and reason for discharge) in the ship's deck log.

(5) Under no circumstance may a ship collect used or excess HM from other ships or HW from shore facilities and transport it to sea for the purpose of disposal.

(6) References (b) and (k) govern shipboard labeling, handling, and storing of HM.

(7) References (b), (d), and (k) govern shipboard labeling, handling, and storing of polychlorinated biphenyls (PCB) and items containing PCBs. Ships shall implement the PCB requirements of reference (k).

(8) Ships shall turn over used HM received from another ship within 12 NM of the United States to a supporting shore activity for processing within 90 days of receipt.
(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.

b. 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 or 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 circumstance will a Navy vessel be listed as a "generating site" by a shore facility or contractor when applying for EPA HW generator identification numbers.

(1) Prior to transfer ashore, ships shall segregate, containerize, and label used HM per chapter B3 of reference (d). 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)). When this requirement cannot be met, a list of HM comingle in each container shall be maintained and provided to the shore receiving activity. 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.

(2) Afloat hazardous material coordinators (AHC) aboard Navy and MSC ships shall contact the local COMNAVSUPSYSCOM Fleet Logistics Center (FLC) CHRIMP center or if at a non-Navy port the local COMNAVSUPSYSCOM contracted husbanding agent for ship-to-shore HM offload support. The FLC CHRIMP technician will assist the AHC with excess HM offload planning and facilitate document preparation, staging, and transportation to the CHRIMP center. The AHC will coordinate with local COMNAVFACENGCOM environmental department for used HM and SW offload support in accordance with Chapter 27 paragraph 3-8 of this manual. The AHC shall ensure original containers with manufacturer's original label affixed, if available, are used to turn in used and excess HM otherwise a container specified in chapter B3 of reference (d) shall be used. In the absence of manufacturer's original label, either DD Form 2521 Hazardous Chemical Warning Label (8-1/2 X 11) or DD Form 2522 Hazardous Chemical Warning Label (4 X 6) and a "Used HAZMAT" label must be attached to the container
prior to turn-in ashore. Additionally, a copy of the manufacturer's MSDS or SDS and DD Form 1348-1A Issue Release/Receipt Document, prepared in accordance with reference (1), paragraph 5105 citing TYCOM expenditure number and fund code, shall accompany the used and excess HM container(s) being transferred to the receiving activity ashore.

(3) When visiting non-Navy ports and foreign ports, Navy ships shall off-load used HM only when necessary and feasible. The ship shall identify in the LOGREQ the types and amount of used HM to be off-loaded. If unable to find adequate facilities at non-Navy ports, the ship shall hold HM for off-loading at a Navy port. All HM shall be properly labeled and containerized. If offload is necessary in foreign ports, COs must consult with their TYCOM staffs to ensure they are in a port authorized for HM offload and to ensure compliance with applicable customs laws and SOFA.

(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 regional maintenance center (RMC) 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 RMC or port engineer during pre-availability planning conferences the types and amounts of HW anticipated by ship's force during the availability; and

(d) Comply with all established HW and HM management practices and those site-specific procedures delineated by the SUPSHIP RMC or port engineer.

(5) TYCOMs responsible for ships in private shipyards for availabilities shall monitor ship compliance with established procedures.

c. Ship-to-Ship Transfer
(1) Except where used or 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 off-load all used HM within 5 working days of arrival at a U.S. Navy port.

(2) Prior to transfer to the receiving ship, ships shall properly segregate, containerize, and label used HM per chapters B3 and D15 of reference (d). Responsibility for packaging, documentation, and labeling shall rest with the originating ship. After receiving used HM from another ship for eventual shore processing, the receiving ship shall off-load the material to a shore facility within 90 days of receipt. This includes transfer from another ship while in port.

d. Transporting Shore-Generated HW Aboard Ship. Navy ships shall not accept HW from shore facilities in the United States for transportation to another location. Navy ships may accept HW from a shore activity outside the United States for transportation to the United States 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. For information on shore activity requirements, refer to section 27-3.9.

e. Electronic Waste. All electronic waste (e-waste) shall be handled through the HAZMINCEN or supply department. E-waste includes personal devices such as cell phones, laptops, computers, and electronic tablets. E-waste shall not be disposed of as SW.

f. Training Requirements. Chapter B3 of reference (d) provides training requirements for personnel handling, storing, and disposing of HM.

35-3.17. Solid Waste. Requirements applicable to garbage discharge at sea include both legal requirements and Navy requirements adopted as a matter of policy to enhance protection of the marine environment. Although the at sea disposal of ship-generated garbage by Navy ships is permissible as indicated below, international guidelines encourage the use of port reception facilities as the primary means of shipboard garbage disposal whenever practical. For all Navy ships, surplus
materials that can reasonably and safely be stored on board, including items such as damaged equipment or office furniture, shall be retained on board for shore disposal.

a. **Plastic Materials.** 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, plastic wrapping and shipping materials will be removed from supply items before bringing them aboard.

b. **Surface Ship Plastic Discharge**

(1) Discharge of plastic waste to the marine environment from Navy surface ships is prohibited unless necessary to ensure ship safety, protect the health of ship’s personnel, or save a life at sea. In the event of such a discharge, the ship shall report the date of discharge, location of discharge, and estimated amount of plastic discharged, via message, to OPNAV (N45) and provide information copies to the chain of command. Plastic waste processors will normally be used to manage plastic waste. Ships without plastic waste processor equipment installed shall use specifically designed odor barrier bags (OBB). Heat sealers are to be used on OBBs that do not have adhesive sealing. Ships with inoperable plastic waste processor(s) shall utilize remaining processor(s) to their maximum extent. If the generation rate exceeds processing capacity, plastic shall be sorted and stored until processor(s) are repaired or waste can be off-loaded. 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.

(2) If plastic waste interferes with normal operation of the ship or poses a potential health problem to ship’s personnel, surface ships should use combat logistics force 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:

(a) 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;

(b) The sending ship shall transfer only processed or
non-food contaminated plastic. Ships shall develop procedures to ensure packages for transfer do not contain articles such as food contaminated plastic, other trash, garbage, and HM;

(c) 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; and

(d) Ships shall clearly mark the content of processed or non-food contaminated plastic waste packages on the outside.

(3) If the plastic waste storage capacity of the ship is exhausted and operational considerations require the discharge of plastic, then as a last resort, plastic overboard discharge is authorized. Such discharges may only be made beyond 50 NM from the nearest land. COs shall minimize the amount of plastics discharged under these circumstances. The ship shall make such discharges in weighted bags to ensure negative buoyancy. The CO shall note the details of such a discharge (i.e., 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, who will report the discharge to OPNAV (N45).

c. Submarine Plastic Discharge

(1) 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. In the event of such a discharge, the submarine shall report the date of discharge, location of discharge, and estimated amount of plastic discharged via message to OPNAV (N45) and provide information copies to the chain of command. The submarine plastic waste management process and related equipment will normally be used to manage plastic waste. 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.

(2) If the plastic waste storage capacity of the submarine is exhausted and operational considerations require the
discharge of plastic, then as a last resort, plastic overboard discharge is authorized. Such discharges may only be made beyond 50 NM from the nearest land. COs shall minimize the amount of plastics discharged under these circumstances. The submarine shall ensure such discharges are negatively buoyant. The CO shall note the details of such a discharge (i.e., 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, who will report the discharge to OPNAV (N45).

d. 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 (e.g., targets, weather balloons, sonobuoys) 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.

e. Accidental Release of Expended Munitions. Empty shell casings and duds that go overboard during gun firing exercises are not considered "waste." However, ships should take all reasonable precautions to prevent overboard discharge and collect empty shell casings and duds for appropriate shore disposal or recycling.

f. Non-Plastic Garbage Discharge. All references to "garbage" within this section refer to non-plastic garbage discharge. No garbage discharge shall occur within 3 NM of land. Alternative methods or equipment for processing garbage shall not be used.

(1) Pulpers, Grinders, and Shredders

(a) 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. 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 to maximize necessary sewage holding
capacity and thus reduce the risk of inadvertent overboard discharges of sewage. Ships equipped with an operable metal and glass 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.

(b) The above restrictions do not apply when discharge of non-plastic garbage is necessary to ensure ship and submarine safety, protect the health of ship’s personnel, or save a life at sea. In the event of such a discharge, the ship or boat shall report the date of the discharge, location of the discharge, and estimated amount and types of non-plastic garbage discharged to OPNAV (N45), with information copies to the chain of command.

(2) Fluorescent Light Bulbs. Fluorescent light bulbs contain a small amount of mercury and shall not be processed, but shall be retained, intact, for shore disposal (refer to table 35-4).

(3) Operating Outside MARPOL Annex V Special Areas in Effect. When operating outside special areas in effect, if a ship does not have pulper or 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.

(4) Operating Within MARPOL Annex V Special Areas in Effect. Current MARPOL Annex V special areas in effect are: Baltic Sea, North Sea, Gulfs Area (Arabian Gulf and Gulf of Oman), Mediterranean Sea, Wider Caribbean Region and Antarctic Area (south of 60 degrees south latitude). When operating within special areas in effect, surface ships that do not have Navy SW 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 MARPOL Annex V special area in effect, these ships will identify essential logistics requirements needed to facilitate 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 aboard, the health of ship’s personnel, or for saving life at sea, or

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 CO shall note the details of such a discharge (e.g., date of discharge, special area involved, 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 be made to OPNAV (N45) per section 35-3.17.f.4.d.

(d) Upon completion of operations in a special area in which a garbage discharge was necessary, Navy surface ships shall report the following information to OPNAV (N45) and provide information copies to the chain of command, regarding all discharges of other than food waste, pulped garbage, and shredded and bagged metal and glass:

1. Date of discharge;

2. Special area involved; and

3. Nature and amount of discharge (e.g., estimated pounds of plastic; unshredded metal and glass; unpulped wood, paper and cardboard; ceramic; or other non-food material).

(5) Submarines. 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. Submarines may discharge compacted, sinkable, non-plastic garbage between 12 NM and 25 NM from land, provided the depth of water is greater than 1,000 fathoms. When greater than 25 NM from land,
direct discharge is permitted.

(6) Transporting Material for Sea Disposal. Transporting any material to sea for the purpose of dumping requires a permit from EPA. In most cases, obtaining a permit is a complex undertaking and beyond the capability of afloat units. To ensure compliance with the Ocean Dumping Act, 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 OPNAV (N45).

(7) Aerosol Cans. Only aerosol cans reasonably believed to be empty may be punctured, drained, or crushed and only with a COMNAVSEASYSCOM-approved aerosol can puncturing or draining, or puncturing, draining, or crushing device. However, ships shall verify local Navy region policy governing requirements of facility permits that allow aerosol can crushing to take place. For purposes of this manual, a can is "empty" if its contents have been emptied to the extent possible using the can's propellant and very little of the original amount remains inside. Punctured or drained and punctured, drained, or crushed aerosol cans shall be retained for shore disposal or recycling due to plastic content. If the device operator has reason to believe a can is not empty under this definition (e.g., spray nozzle is broken off or clogged, can feels or sounds as though more than "very little" of the original amount remains) or if the ship is not equipped with the COMNAVSEASYSCOM-approved device(s), the aerosol can shall not be punctured, drained, or crushed but shall be retained for disposal ashore.

g. Foreign Food and Garbage. Navy ships shall comply with USDA regulations pertaining to ship introduction of foreign source garbage into the United States, its territories, and possessions. 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. Garbage that is not disposed of beyond 25 NM from U.S. shores will be retained on board, treated as foreign source garbage, and will be disposed of ashore by USDA-approved methods provided in references (m) and (n). Plastic disks from plastic waste processors or plastic waste from ships or submarines, contaminated with foreign source food and garbage will be retained on board, treated as foreign source garbage, and also disposed of ashore by the USDA-approved methods provided in references (m) and (n). The instructions given above do not preclude discharge of any SW in an emergency when failure to do so would clearly endanger the health or safety of shipboard personnel.
h. Miscellaneous Wastes. Pilot urine bags and feminine hygiene products are not considered medical waste. These products should be placed into OBB and adhesive sealed or heat-sealed closed for shore disposal.

i. Thermal Destruction. Ships equipped with COMNAVSEASYSCOM-approved thermal destruction equipment may incinerate non-plastic, non-hazardous garbage outside of 12 NM from the nearest land. Ships equipped with thermal destruction equipment for high thermal content wastes may burn specific items outside of 12 NM from the nearest land as approved by COMNAVSEASYSCOM and only per specified procedures. Such items can include one or more of the following: plastics, pilot urine bags, feminine hygiene products, oily rags, and other non-HW. 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 the nearest land. Ash containing unburned plastics or heavy metals must be retained and transferred to appropriate shore reception facilities for disposal. Incinerators installed on MSC vessels shall be USCG certified.

j. Training Requirements. 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. Ships shall train personnel responsible for the supervision and approval of overboard disposal of SW on the legal requirements applicable to this waste category. All personnel assigned to operate and maintain SW processing equipment (e.g., plastics waste processors, shredders, pulpers, incinerators), shall complete the applicable computer-based training interactive courseware or appropriate SW processing equipment sections of PQS (NAVEDTRA 43704) within 7 working days of assignment. For MSC ships, COMSC shall specify applicable training requirements.


a. Liquid Medical Wastes. Ships may dispose of all liquid medical wastes (regulated and non-regulated) by discharging them into the sanitary (black water) system, at sea, and in port per local wastewater regulations.

b. Solid Non-Regulated Medical Waste. Ships may dispose of
solid non-regulated medical waste as garbage. Ships shall process and dispose of this material in the same method as prescribed for similar material in section 35-3.17 (e.g., plastic will be sent to the plastic waste processor; paper and cardboard will be pulped; glass and metal (excluding sharps) will be shredded).

c. Solid Regulated Medical Waste

(1) Surface ships shall steam or chemically sterilize or disinfect solid regulated medical waste, which is also referred to as "infectious waste." The resultant sterilized or disinfected solid regulated medical waste shall be suitably packaged and stored for ultimate disposal ashore or incinerated in COMNAVSEASYSCOM-approved thermal destruction equipment (refer to section 35-3.17.i). The requirement for steam sterilization does not apply to ships with installed autoclaves smaller than 16" x 26" x 16." Wastes that have been processed through a properly functioning medical waste processor are not medical wastes, and may be disposed of as SW (refer to section 35-3.17).

(2) If retention of solid regulated medical wastes would threaten the health or safety of personnel aboard, overboard discharge (excluding sharps) is authorized (using the methods prescribed for similar material in section 35-3.17) beyond 50 NM, provided such waste has been sterilized or disinfected and packaged for negative buoyancy. Ships shall record in the deck log the overboard discharge of solid regulated medical wastes including time and location of the discharge, approximate weight and volume, and nature of the discharged material. The requirement to steam sterilize before disposal at sea does not apply to submarines.

(3) Ships shall establish a system of tracking storage and disposal of solid regulated medical waste as required by reference (o).

d. Sharps. Ships shall collect sharps in approved 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 aboard for proper disposal ashore. They shall dispose of unused sharps ashore in the same manner as solid regulated medical waste. Ships equipped with medical waste processors that use shredding and chemical disinfection shall process sharps per equipment instructions.
e. **Training Requirements.** Ships shall train personnel responsible for processing and disposing of shipboard medical waste to ensure actions comply with the requirements governing this waste. Submarine independent duty corpsmen (IDC) receive their training as part of the Submarine IDC School. For MSC ships, COMSC shall specify applicable training requirements.

35-3.19. **Ship and Ballast Water**

a. **Ballast Water Guidelines.** The Marine Environmental Protection Committee of the IMO has developed guidelines for the control of ship ballast water to prevent the introduction of unwanted aquatic organisms and pathogens. USCG initially published these guidelines for adoption as voluntary standards to decrease the possibility of further introduction of cholera and other pathogens into U.S. waters, and converted them to mandatory regulations in 2004. While the standards do not apply directly to Navy ships, Navy has chosen to adopt the intent of the USCG standards.

b. **Ballast Water Pollution.** 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 3 NM from the shore or within the polluted areas described above.

c. **Ship Ballast Water and Anchor System Sediment Control**

(1) If it is necessary for a surface ship to load ballast water in an area that is either potentially polluted (as defined in section 35-3.19.b) or within 3 NM from land (e.g., amphibious ships operating in such waters and ballasting to operate landing craft or tankers ballasting to replace offloaded cargo), the ship shall, prior to discharging ballast water in U.S. waters within 3 NM of shore, perform one of the following ballast water exchange procedures:

(a) Single exchange - a complete empty and refill of each tank that took on ballast water that is either potentially polluted or within 3 NM of shore. This exchange shall be conducted in ocean waters that are greater than 200 NM from the nearest land.
(b) If the single exchange in ocean waters greater than 200 NM from the nearest land is not practicable, then conduct a single exchange — a complete empty and refill of each tank that took on ballast water that is either potentially polluted or within 3 NM of shore. The single exchange shall be conducted in ocean waters that are greater than 50 NM from the nearest land and in water depths greater than 200 meters.

(c) If the single exchange in water 50 NM or greater from the nearest land is not practicable, then conduct a double exchange — two complete empties and refills of each tank that took on ballast water that is either potentially polluted or within 3 NM of shore. The double exchange shall be conducted in ocean waters that are greater than 12 NM from the nearest land.

(2) Surface ships shall conduct one of the above ballast exchanges, 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.

(3) Recordkeeping. 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. Surface ships with seawater compensated fuel stowage systems shall also record seawater 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).

(4) Wash Downs. 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 shore to flush out sediment, mud, or silt. 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.

d. Ballast Water Exchange Exception. Ballast water exchange is not required during local operations or when re-entering within 12 NM in the same locale as the ballast water was
initially loaded. "Local operations," for this section only, are defined as an underway period of short duration (less than 5 days), during which the ship operates exclusively within a 50 mile radius of the port of departure or within Navy operating areas associated with the port (e.g., Southern California Range Complex for Naval Station (NAVSTA) San Diego, Hawaii Range Complex for NAVSTA Pearl Harbor), does not make any intermediate stops or port calls, and returns to the port of departure. "Same locale" is defined as water taken from within 12 NM of the mouth of the same harbor, port, river, estuary, or bay, or from the same landlocked water body.

35-3.20. Environmental Compliance During Routine Training, Testing, and Minor Exercises at Sea

a. Routine training, testing, and minor exercises at sea are generally limited to routine unit-level or small group training exercises conducted with available sensors and assets as training opportunities arise. In conducting routine training, testing, and minor exercises at sea, Navy commands shall comply with applicable statutes, regulations, and executive orders (E.O.) 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 consistent and efficient manner which minimizes administrative burdens on commanders of operating units. For purposes of this policy, routine training, testing, and minor exercises do not include combat operations, operations in direct support of combat, or other activities conducted primarily for purposes other than training.

b. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) identifies environmental planning and compliance requirements under E.O. 12114 for major Navy actions, including U.S. joint and combined exercises and training at sea. Routine training, testing, or minor exercises at sea do not comprise a major Navy action. In addition, this section does NOT provide guidance for exercises conducted under a dedicated training operation order.

c. This guidance applies to routine training, testing, and minor exercises conducted worldwide, except when such routine training, testing, and minor exercises are conducted in established ranges or operating areas where more restrictive protective measures developed through environmental impact statements, regulatory processes, or imposed by court order, are applicable.
(1) Within the U.S. EEZ and High Seas. Commanders shall ensure compliance with environmental requirements contained in references (p) and (q) and this section. Unit or squadron COs conducting unit level routine training or minor exercises shall ensure the use of the Protective Measures Assessment Protocol (PMAP).

(2) Within Foreign Nation EEZs and Foreign Nation Territorial Seas, as Defined by Reference (r). The protective measures contained in the PMAP shall form the minimum requirements absent definitive guidance from the applicable SOFA (or other bilateral agreement(s)), U.S. fleet commander, or U.S. operational commander. However, routine training and minor exercises within a foreign nation territorial sea are only conducted with the concurrence of the host nation. In the event of conflict between the protective measures contained in the PMAP and those provided by the applicable SOFA (or other bilateral agreement(s)), U.S. fleet commander, or U.S. operational commander, the more stringent protective measures shall apply.

35-3.21. Protection of Marine Mammals and Endangered Marine Species and Reporting of Mid-Frequency Active Sonar Use

   a. Marine Mammal Protection. Marine mammals are protected under MMPA. Therefore, no Navy vessel or personnel shall deliberately harass a marine mammal. COs shall plan and act to protect marine mammals during operations and planning.

   b. Threatened and Endangered Marine Species Protection. Threatened and endangered marine species enjoy protection under ESA. Therefore, no Navy vessel shall deliberately harass any threatened or endangered marine species. COs shall plan and act to protect threatened or endangered marine species, including sea turtles and their eggs, during operations and planning.

   c. Marine Mammal Reports. Whale strikes and strandings shall be reported as OPREP 3 NAVY BLUE per reference (s). Reports are intended to assist 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. Other direct interactions with whales, such as instances where naval units assist responsible agency personnel (National Marine Fisheries Service or U.S. Fish and Wildlife Service) in freeing whales entangled in nets shall be reported as Unit SITREPS in the format prescribed.
d. **Mid-Frequency Active Sonar Reporting.** Prudent environmental stewardship requires enhancing Navy's ability to quickly and accurately determine if mid-frequency active sonar (MFAS) training, testing, or maintenance had been conducted in 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 environment. Use of MFAS for training, testing, or maintenance shall be reported per the PMAP and SPORTS Web sites (refer to appendix E (Web Sites) for Web site addresses). This requirement applies to all units (e.g., surface, submarine, aviation) that employ MFAS or other sonar devices that operate in the mid-frequency range (1-10 kilohertz (KHz)).

(1) All units employing MFAS shall report as of 2000Z on days when MFAS has been used for training, testing, 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.

(2) The message format and software to generate the message body are available at the SPORTS Web site (refer to appendix E (Web Sites) for Web site address). The data message will be sent for action to NAVWARCENDIV NEWPORT RI, and information to CNO WASHINGTON DC//N45/N3IPS//, COMUSFLTFORCOM NORFOLK VA// N46//, COMUSPACFLT PEARL HARBOR HI//CDO/N01CE1// with the subject line "DAILY MID-FREQUENCY SONAR REPORT." The data collected will include:

(a) Unit name,

(b) Purpose of sonar use,

(c) Positional information (updated every 4 hours or 40 NM during the time that active sonar is used), and

(d) Sensor used.

35-3.22. **Floating Dry Docks**

a. **Industrial Wastes**

(1) Using vacuum methods, dry docks shall periodically remove and send to shore facilities for disposal spent sand,
metals, wood, liquid wastes, SW, and all other industrial waste from the floor of the dry dock. Dry docks shall prevent those wastes from entering the air or surrounding waters. Prior to flooding the dock, all loose materials and floors shall be removed, and chainways vacuumed cleaned.

(2) Floating dry docks 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. Dry dock 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.

b. Sewage and Graywater. Where possible, dry docks, and hosted vessels shall transfer all sewage and graywater ashore for proper disposal.

35-3.23. Noise. 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.

35-3.24. CNO Afloat Environmental Awards. The CNO Afloat Environmental Awards enhance the Navy Afloat Environmental Program. These awards recognize outstanding contributions to fleet readiness, increased morale, and efficient, economical use of resources to promote environmental protection at sea. Consideration for CNO Afloat Environmental Awards requires achieving the highest standards of environmental compliance and stewardship.

a. Competitive Categories

(1) The following competitive categories are established:

(a) Littoral or Amphibious Warfare (LCS, LPD, LSD, MCM, PC),

(b) Surface Combatant (DDG, CG, FFG),

(c) Large Deck Combatant (CVN, LCC, LHA, LHD),

(d) Submarine (SSBN, SSGN, SSN), and

(e) MSC (All MSC vessels including JHSV).
(2) Fleet Commanders. Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM) and Commander, U.S. Pacific Fleet (COMUSPACFLT) may nominate one ship each, for the Littoral or Amphibious, Surface Combatant, Large Deck Combatant, and Submarine categories for each fiscal year competitive cycle.

(3) Commander, Military Sealift Command. COMSC may nominate two ships for the MSC category for each fiscal year competitive cycle.

(4) Award packages are due to OPNAV (N45) no later than 10 January.

b. CNO Afloat Environmental Awards Winners

(1) OPNAV (N45) will judge the packages forwarded from each fleet (COMUSFLTFORCOM and COMUSPACFLT) and MSC to determine the CNO Afloat Environmental Award winners.

(2) Each CNO Afloat Environmental Award winner will receive a CNO citation.

(3) CNO Afloat Environmental Award winners will be eligible to compete for the Secretary of the Navy (SECNAV) Afloat Environmental Award.

(4) CNO Afloat Environmental Award winners will be required to submit pictures with visual information record identification numbers, ships logos, and other information suitable for publishing to OPNAV (N45) by no later than 1 April for use in the CNO and SECNAV Environmental Awards ceremony.

c. Award Submissions. Use OPNAV Form 1650/18 CNO Afloat Environmental Award for CNO Afloat Environmental Awards. Award packages shall be a maximum of six pages. Award packages are due to OPNAV (N45) no later than 10 January.

Figure 35-1. CNO Afloat Environmental Award Format

1 Introduction. List the ship's mission (unless classified), approximate crew size, and homeport.

2 Background

2.1 Summarize the ship's environmental challenges in the past fiscal year.
2.2 Describe the ship's environmental management organization and staffing.

2.3 List all the ship's environmental guidance, directives, and plans (i.e., SCPs) and dates of preparation or last review.

3 Program Summary

3.1 Describe the ship's environmental program and degree of compliance with chapter 35 (Environmental Compliance Afloat) and appendix D (Afloat Environmental Checklist) of Chief of Naval Operations Manual (OPNAV M) 5090.1, during the past fiscal year.

3.2 Describe the most outstanding program features and accomplishments (3 or less) of the past fiscal year.

4 Accomplishments. Describe activities and achievements during the past fiscal year in the following areas, if applicable:

4.1 Air Pollution Control. Describe air pollution control practices and improvements. Include management efforts to control engine emissions, to reduce refrigerant use, and to minimize volatile organic compound releases.

4.2 Water Pollution Control

4.2.1 Delineate CHT system management practices.

4.2.2 Describe OHS spill prevention and response efforts.

4.2.3 Describe shipboard practices for waste oil or oily waste management. Include identification of bilge water management practices. Identify the operating capabilities of the OWS and oil content monitor during the past fiscal year and efforts, if any, to improve these capabilities.

4.3 SW Management and Resource Recovery

4.3.1 Summarize SW management practices.

4.3.2 List source reduction techniques used by the command.
4.3.3 Enumerate resource recovery recycling techniques used by the command.

4.4 HM and HW Management. Describe HMC&M efforts. Describe the ship's efforts for reutilization and inventory management; to reduce the amount of used HM transferred ashore; and to use material from shoreside HAZMINCEN.

4.5 Protective Measures Assessment Protocol. Describe the ship's use and integration of the PMAP CD tool for routine training. Describe how PMAP supports and enhances the ship's planning for routine training.

4.6 Sonar Positional Report System. Describe the ship's implementation and execution of CNO and fleet policy to report the use of MFAS (1-10 KHz) for training and maintenance, via SPORTS.

4.7 Environmental Awareness. List command-initiated programs to enhance environmental protection and awareness.

d. Submission Criteria. Surface ships, submarines, and civil service-manned ships eligible for the CNO Afloat Environmental Award must meet any amplifying fleet, MSC, or TYCOM requirements.

35-4 Responsibilities

35-4.1. OPNAV (N45) shall oversee the review of Navywide sonar use trends.

35-4.2. COMNAVSEASYSCOM shall:

a. 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;

b. Develop, test, evaluate, procure, and install the necessary shipboard sewage systems, SW processing equipment, oil pollution abatement equipment, and associated support designed to minimize health and safety hazards and to comply with applicable standards;

c. Develop, test, evaluate, procure, and install the necessary pollution abatement equipment and associated logistic support to allow Navy floating dry docks to operate in full
compliance with guidelines and standards;

d. Continue the inspection and certification program to ensure 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;

e. 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;

f. Establish procedures for the safe and effective management of ballast water, including ballast water exchange for each class of ship. Ensure that future ship designs or alteration plans include processes for automating ballast water exchange procedures;

g. Provide support and hardware for shipboard environmental training programs established by NETC;

h. Acquire, distribute, and install appropriate disposal systems, containers, labels, handling equipment, cleanup materials, and protective clothing to allow safe and effective control of HM aboard Navy ships. Ships shall use reference (d) as guidance for proper management of HM aboard;

i. Initiate procurement procedures to ensure the major noise-producing products and equipment, not designed for combat use, meet applicable federal noise emission standards;

j. Ensure all ships have proper material support, including adequate spare parts for installed sewage systems;

k. Ensure associated funding requirements are properly identified, budgeted, and programmed;

l. Promote research to define and study noise pollution problems unique to Navy and coordinate such research with other DoD components and EPA;

m. Identify, evaluate, and correct Navy ships' systems and equipment that are major sources of environmental noise;

n. Develop improvements to shipboard processes to reduce the
use of HM and the generation of shipboard used HM;

   o. 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 COs, fleet commanders, and other appropriate command
      levels;

   p. Provide assistance and guidance to fleet and shoreside
      NOSCs in the preparation of oil spill and hazardous substances
      (HS) release response plans;

   q. Provide general shipboard OHS SCPs to Navy ships for use
      in preparation of ship-specific OHS SCPs;

   r. Develop shipboard OHS spill kits containing appropriate
      equipment and protective clothing for personnel use in responding
      to OHS spills;

   s. Provide specialized equipment and trained personnel to
      assist NOSCs or COs in responding to offshore, salvage-related,
      and major inland oil spill and HS release response operations;

   t. Provide proper reception capabilities at COMNAVSEASYSCOM
      facilities for receipt of ship-generated oily waste and waste
      oil, sewage and graywater, SW, 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;

   u. Ensure operating forces obtain adequate system
      documentation with particular emphasis on ensuring the
      documentation contains health, sanitation, and safety guidance.
      Documentation shall include:

      (1) Equipment technical manuals for all installed
          equipment and systems;

      (2) Maintenance requirements cards covering a
          comprehensive sewage system preventive maintenance program and
          certification criteria;

      (3) Sewage Disposal Operation Sequencing System which
          consists of systematic and detailed written procedures using
          charts, instructions, and diagrams developed for the operations
          of a specific ship's sewage system;
(4) Chapter 593 of reference (b); and

(5) PCB Advisories.

v. Develop contract requirements for ship availabilities in private shipyards to process ship-generated waste in compliance with the law;

w. Apply for required HW generator numbers required to manage Navy-generated and co-generated HW at private shipyards;

x. Manage the HW manifest program and provide annual management reports to CNO and the fleets on program cost and effectiveness;

y. Develop and issue to the fleet site-specific HW management procedures for private shipyards;

z. Provide on-site coordination from the SUPSHIP office with the identified ship HM coordinator;

aa. Identify to the TYCOM or TYCOM representative any unresolved issues of ship noncompliance with SUPSHIP-generated procedures;

bb. Monitor requisitions from the ODS reserve;

c. Provide program management for SPORTS; and

dd. Ensure all data generated or obtained in support of SPORTS is provided in electronic format meeting the standards set by Federal, DoD, and Navy policies.

35-4.3. NETC shall:

a. Establish formal training programs on the operation, maintenance, sanitation, and safety of all shipboard sewage systems. Monitor and update training programs as required;

b. Develop shipboard indoctrination programs on sanitation, safety, and basic operation of all sewage systems. Review and revise indoctrination programs as necessary;

c. 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;
d. 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;

e. Establish formal training programs on the handling, storage, treatment, disposal, and cleanup of shipboard OHS. Monitor and update training programs as required; and

f. Incorporate environmental protection training including protection of marine mammals and endangered species and use of the PMAP into relevant curricula.

35-4.4. 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.

35-4.5. Chief, Bureau of Medicine and Surgery shall:

a. Issue guidance for shipboard medical department personnel concerning health and sanitation aspects of shipboard sewage systems;

b. Ensure training programs for shipboard medical personnel include all aspects of health and sanitation associated with shipboard sewage systems;

c. Determine, validate, and establish health criteria and standards relating to chemical and physical environmental health standards;

d. Collect, evaluate, and disseminate data related to health problems associated with lead and zinc chromate paint removal aboard ship;

e. Perform research and evaluation in environmental medicine to determine the health impacts of Navy sources of environmental noise; and

f. Provide, at Navy ports, the required services for disposal of medical waste generated by ships and ensure disposal ashore complies with applicable Federal, State, and local laws or regulations and SOFAs or international agreements.

35-4.6. Fleet commanders shall:
a. Ensure ships under their command are equipped with appropriate sewage systems, air emission and oil pollution abatement equipment, SW treatment and disposal systems, and low-noise emission equipment;

b. Ensure ships under their command possess appropriate disposal or treatment systems, containers, labels, handling equipment, cleanup materials, spill kits, and protective clothing to allow safe and effective control of shipboard HM;

c. Ensure ships operate their sewage systems; air, oil, and SW control systems; and other pollution abatement systems per the requirements of this manual;

d. Provide for repair and maintenance of air, oil, sewage, and SW pollution abatement systems that are beyond the capability of ship's force to accomplish;

e. Issue operational guidelines and reporting procedures for compliance with the policies set forth in this manual for ship-generated plastic waste;

f. Perform duties as the fleet NOSC when assigned and provide the names and addresses of NOSC representatives to fleet units;

g. Fund the cleanup of OHS spills from Navy vessels under their command;

h. Ensure assigned Navy floating dry docks possess appropriate pollution abatement systems and equipment;

i. Ensure assigned dry docks operate their pollution abatement systems per section 35-3.22;

j. Provide for repair and maintenance of pollution abatement systems beyond the capability of assigned dry dock's force;

k. Establish procedures to ensure, to the maximum extent feasible, used and excess HM is off-loaded at a Navy or other public facility prior to a ship 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;

l. Ensure ships identify a shipboard HM coordinator to the
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RMC for each ship availability at a private shipyard. Ensure 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;

m. Ensure ships identify, in preavailability planning conferences, the types and amounts of used HM anticipated by ship's force during the availabilities;

n. Direct ships to comply with all established HM and HW management practices and those site-specific procedures delineated by the RMC;

o. Ensure TYCOMs monitor ship compliance with established HM and HW procedures while in private shipyards;

p. Develop, manage, support, and implement PMAP;

q. Incorporate the protection of marine mammals and endangered marine species into operational planning for major fleet exercises by directing subordinate commands to use the PMAP for routine training and exercises at sea and ensuring compliance with the PMAP requirement through a comprehensive assessment mechanism;

r. In conjunction with COMNAVSEASYSCOM, monitor requisitions from the ODS reserve;

s. Establish, resource, and maintain a SPORTS to collect data on when and where MFAS (1-10 KHz) is used for training, testing, or maintenance;

t. Ensure all units under their command implement and execute MFAS reporting via SPORTS per this manual; and

u. Review subordinate command award packages and forward nominees to OPNAV (N45) by 10 January.

35-4.7. COMNAVSUPSYSCOM shall:

a. Implement programs for source reduction of plastic aboard ship by identifying non-plastic packaging products and non-plastic consumables for shipboard use; and

b. Ensure ECAP services are provided to all Navy ships and submarines in Navy ports to maximize reutilization of HM and
ensure proper training and system updates occur on Navy ships and submarines.

35-4.8. COMSC shall:

a. Properly equip assigned ships with appropriate sewage systems, air emission and oil pollution abatement equipment, SW treatment or disposal systems, and low-noise emission equipment;

b. Equip assigned ships with appropriate disposal or treatment systems, containers, labels, handling equipment, cleanup materials, spill kits, and protective clothing to allow safe and effective control of shipboard HM;

c. Ensure assigned ships operate installed sewage systems; air, oil, and SW control systems; and other pollution abatement systems per the requirements of this manual;

d. Provide for repair and maintenance of air, oil, sewage, and SW pollution abatement systems that are beyond the capability of ship's force to accomplish;

e. Issue operational guidelines and reporting procedures for compliance with the policies set forth in this manual for ship-generated plastic waste;

f. Fund the cleanup of OHS spills from assigned Navy and contract ships;

g. Establish procedures to ensure, to the maximum extent feasible, used HM is off-loaded 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;

h. Ensure ships identify, in preavailability planning conferences, the types and amounts of HW anticipated by ship's force during the availabilities;

i. Direct ships to comply with all established HM and HW management practices and those site-specific procedures delineated for the private shipyard;

j. Monitor ship compliance with established HM and HW procedures while in private shipyards;

k. In conjunction with COMNAVSEASYSCOM, monitor requisitions
from the ODS reserve;

1. Incorporate the protection of marine mammals and endangered marine species into operational planning for major fleet exercises by directing subordinate commands to use the PMAP for routine training and exercises at sea and ensuring compliance with the PMAP requirement through a comprehensive assessment mechanism; and

   m. Review subordinate command award packages and forward nominees to OPNAV (N45) by 10 January.

35-4.9. PRESINSURV shall:

   a. Conduct environmental compliance oversight inspections as a part of the regular ship inspection process including review of equipment operation, program compliance, and training;

   b. Train assigned inspectors on the requirements of this chapter; and

   c. Report to CNO the status of afloat environmental compliance and issues requiring CNO attention as a part of the periodic brief.

35-4.10. CNIC shall provide, at Navy ports under their command, proper facilities for receipt of ship-generated SW, 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.

35-4.11. RECs shall:

   a. Coordinate with the cognizant port clearance authority to ensure LOGREQ replies fully apprise arriving ships of local environmental requirements and port practices;

   b. Notify the cognizant area environmental coordinator (AEC) and OPNAV (N45) in advance when anticipating regulatory concern over arriving ship environmental compliance and recommend a course of action to resolve the issue;

   c. Maintain close liaison with SUPSHIP and RMC offices and naval shipyards to ensure proper resolution of environmental issues regarding ships in overhaul;

   d. 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;

e. 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;

f. Provide information on Federal, State, and local environmental regulations that apply to ships in port. Such information shall describe necessary actions by ship COs to comply with the requirements of this manual and all other Federal, State, and local regulations applicable to the port;

g. Inform ship COs of reference (g) subpart II compliance requirements for marine coatings at Navy and commercial affected source sites activities; and

h. Direct Navy activities, at affected sources, to work with RECs to request recordkeeping waivers from regional offices for ships in "operational status."

35-4.12. COs of Navy ships and masters of MSC vessels shall:

a. Obtain certification and recertification, and properly operate, periodically inspect, and properly maintain the ship’s sewage and oil pollution abatement systems;

b. Carry out ship-to-shore transfers of sewage and graywater in a safe and effective manner;

c. Operate and maintain his or her ship to conform with applicable state and local air pollution emission regulations and HM regulations;

d. Ensure ships comply with the guidelines, standards, and procedures of this manual;

e. 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;

f. Complete and document training of shipboard personnel as prescribed in section 35-3.3;

g. (Specific to COs of Navy ships) Schedule periodic
inspections (at least quarterly) per reference (t) 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 SW processing equipment (when installed and operating). (Specific to masters of MSC vessels) COMSC shall specify inspection requirements for MSD systems and SW processing equipment;

h. Post appropriate health and sanitation precautions as required by chapter 593 of reference (b), reference (d), and reference (t);

i. Report, as required and established by the chain of command, sewage discharge within 3 NM from U.S. shores;

j. Report to the chain of command any conditions or equipment malfunctions that:

   (1) Could result in unlawful air pollutant emissions;

   (2) Would necessitate oily waste, HM, or SW discharge into waters in which discharge is restricted;

k. Ensure 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. Recordkeeping 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;

l. Designate an officer as HM coordinator to ensure all shipboard personnel comply with reference (d) requirements for HM handling, packaging, storage, labeling, treatment, and disposal. Prior to the ship leaving port, the HM coordinator or HAZMINCEN supervisor shall request used or excess HM pickup by the cognizant shore activity representative;

m. Pre-designate one or more shipboard action officers to be responsible for shipboard spill contingencies planning and response;

n. Prepare shipboard OHS SCPs and coordinate with the cognizant NOSC plan and provide these plans, via the chain of command, to USCG and state officials for information, upon request;

o. Properly train shipboard personnel and make them fully
aware of the oil or OHS SCPs. Conduct required OHS spill drills;

   p. Report all OHS spills as prescribed in section 35-3.15.d through g;

   q. Take immediate actions to contain, control, and mitigate all spills caused by the ship;

   r. Consider the factors outlined in section 35-3.4.a when responding to Navy oil spill planning and response;

   s. Appoint an officer or petty officer to oversee dry dock operations to ensure industrial waste and sewage collection and treatment systems are properly operated and maintained and ship-to-shore transfers of the waste are handled in a safe and effective manner;

   t. Off-load 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 off-load HM not anticipated for use by ship's force during the availability before entering the private shipyard;

   u. Identify to the SUPSHIP RMC or port engineer 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;

   v. Identify to the SUPSHIP or port engineer, in preavailability planning conferences, the types and amounts of used HW anticipated by ship's force during the availability;

   w. Comply with all established HM and HW management practices and those site-specific procedures delineated by the RMC;

   x. 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;

   y. Report to the chain of command, cognizant REC, AEC, and OPNAV (N45) any request by a regulatory agency that Navy apply for permits involving ship discharges or implement measures regarding ship discharges beyond the requirements contained in
this chapter. Do not enter into agreements with environmental agencies regarding ship discharges without OPNAV (N45) approval;

z. 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), off-load 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;

aa. 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;

bb. Personally approve any plastic discharges and properly enter reports of all plastic discharges by surface ships in the deck log;

cc. Prior to getting underway from port, ensure all trash and garbage is collected and off-loaded, ensure no hazardous material is left on the pier, and include this requirement in the ship's sea detail checklist;

dd. Employ the PMAP for all routine training and minor exercises at sea. Ensure the PMAP requirement is included in appropriate ships' instructions, bills, and checklists and maintain documentation per fleet commander and TYCOM requirements. While participating in major fleet exercises, employ PMAP for all applicable exercises or training events absent definitive environmental protection guidance;

ee. Avoid deliberately harassing marine mammals and sea turtles or other endangered species. Consider measures needed to protect marine mammals, sea turtles, and other endangered species during ship operations and planning;

ff. Ensure the requirements of references (d) and (k) 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);

gg. Assign and train a crewmember as the AEPC per section
35-3.8;

hh. Maintain records of ship's force marine coating use for coatings distributed from ship's stores for domestic Navy and commercial affected source sites, as appropriate. Deliver a monthly report of daily coating use by the 7th 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 RMC office;

ii. Use only marine coatings that meet VOC content standards of chapter 631, table 3-7 of reference (b). These coatings are compliant with subpart II of reference (g). When approved marine coatings are not available or there is uncertainty whether a material is regulated under subpart II of reference (g), contact COMNAVSEASYSCOM (NAVSEA 05) 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;

jj. Prohibit the thinning of marine coatings and label paint lockers per section 35-3.13.e.2;

kk. Implement the marine coating work practices identified in section 35-3.13.e.4;

ll. Follow the requirements of section 35-3.16.c when transferring or receiving used HM from another ship while at sea; and

mm. All units employing MFAS shall report via SPORTS as of 2000Z on days when MFAS has been used for training, testing, 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.

35-4.13. COs of floating dry docks shall:

a. Appoint an officer or petty officer to ensure dry dock personnel properly operate and maintain oil and oily waste collection and treatment systems and they safely and effectively handle ship-to-shore transfers of the waste;

b. Properly train dry dock personnel working with oil
pollution systems, send them to appropriate schools, and fully document this training;

c. Coordinate with the shore activity CO to ensure compliance with state or local regulatory requirements;

d. Report to the fleet commander any conditions or equipment malfunctions that would necessitate SW discharge upon or into restricted waters;

e. Properly operate dry dock systems for the collection and transfer of sewage and wastewater from the ship in dry dock to shoreside receiving facilities. Periodically inspect and properly maintain the systems. Handle transfers of sewage and wastewater in a safe and effective manner. Chapters 593 and 670 of reference (b) and reference (t) provide guidance concerning CHT systems; and

f. Ensure discharges from floating dry docks are permitted as required.

35-5 Definitions

35-5.1. Affected Source. An affected source is a major source of hazardous air pollutants (HAP) that emits more than 25 tons per year of HAPs aggregate or more than 10 tons per year of any single HAP and uses at least 264 gallons of marine coating per year.

35-5.2. At Sea. For the purposes of this chapter, "at sea" is the area from the U.S. high water mark seaward to the recognized EEZs or fishing zones as set out in reference (r). 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.

35-5.3. Bilge Water. Bilge water is a mix consisting primarily of water, 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 an HW.

35-5.4. Coating. A coating is 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, and lacquers. Marine coatings meeting this definition
are regulated under subpart II of reference (g).

35-5.5. Consolidated Hazardous Material Reutilization Inventory Management Program. CHRIMP is an HMC&M program that requires all HM (including used and excess HM and all empty HM containers) to be centrally controlled aboard ships and submarines. CHRIMP requires the establishment or installation of HAZMINCENs. CHRIMP includes centralized inventory management; procurement; storage; issue, receipt, and reissue; and collection, consolidation, and offload of HM.

35-5.6. Domestic. The term domestic refers to areas within the United States, its possessions, and territories.

35-5.7. Empty Hazardous Material Container. An HM container shall be considered to be empty if there is no liquid in the container and there is less than 1 inch of solid residue (hardened product) in the container.

35-5.8. Endangered Marine Species. Endangered marine species include any listed endangered marine species, including all six species of sea turtles in the United States. It is illegal to harm, harass, or in any way interfere with a sea turtle or its eggs.

35-5.9. Facility Response Team. The facility response team is comprised of the 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.

35-5.10. Floating Dry Dock. A floating dry dock is a mobile dock, floating in water, capable of lifting a host ship for repairs to its underwater hull.

35-5.11. Food Waste. Food waste is spoiled or unspoiled victual substances, such as fruits, vegetables, dairy products, meat products, food scraps, and food particles.

35-5.12. Foreign Source Garbage. Foreign source garbage includes 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 Territory of the Pacific Islands.

35-5.13. Garbage. For consistency with international law, this chapter adopts the MARPOL Annex V definition of garbage which
defines garbage as "All kinds of victuals and domestic and operational waste generated during the normal operation of the ship." The MARPOL term "garbage" therefore encompasses shipboard SW, including plastics; food waste; and dry waste such as paper, cardboard, and wood, traditionally referred to as "trash."

35-5.14. General Use Coating. A general use coating is any coating that is not a specialty coating. Marine coatings meeting this definition are regulated under subpart II of reference (g).

35-5.15. Graywater. Graywater is discarded water from deck drains, lavatories, showers, dishwashers, and laundries, as well as discarded water from shipboard medical facilities. It does not include industrial wastes, infectious wastes, and human body wastes.

35-5.16. Graywater Collection and Transfer System. A graywater collection and transfer system is 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 MSDs that may lack the capability to collect and transfer graywater.

35.5.17. Hazardous Material

a. An 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 when incorrectly used, purposefully released, or accidentally spilled. This definition includes the following:

(1) Flammable or combustible materials,
(2) Toxic materials,
(3) Corrosive materials (including acids and bases),
(4) Oxidizing materials,
(5) Aerosol containers, and
(6) Compressed gases.

b. For this manual, 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.

c. Asbestos and lead require special guidance for handling and control, which are addressed in reference (d).

35-5.18. Hazardous Material Contaminated Rags. HM contaminated rags are cleaning rags or other sorbents contaminated with solvents, adhesives, paint, or other HM as identified in the HM definition.

35-5.19. Hazardous Material Minimization Center. HAZMINCEN is the facilities, equipment, and procedures used to execute the CHRIMP. HAZMINCEN designs can vary greatly, depending on the size of the ship, mission, and requirements for HM.

35-5.20. Hazardous Substance. A HS is an HM or HW.

35-5.21. Hazardous Waste

a. An HW is an SW or combination of SW which, because of its quantity, concentration or physical, chemical or infectious characteristics, may:

(1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

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

b. The term SW includes liquid, semi-solid, or contained gaseous material.

35-5.22. Industrial Wastewater. Industrial wastewater is wastewater or semi-solid material generated in shipboard processes such as manufacturing, production, and maintenance (e.g., metal plating, acid cleaning, photo processing, solvent cleaning, painting materials).

35-5.23. Marine Mammal. A marine mammal is any ocean dwelling mammal (e.g., sea otters, manatees, dugongs, sea cows, sea lions, seals, walruses, whales, dolphins, porpoises) or mammal that primarily inhabits the marine environment (e.g., polar bears).

35-5.24. Marine Sanitation Device. An MSD is any equipment
aboard a ship or craft designed to receive and treat sewage to a level acceptable for overboard discharge or which receives or retains sewage aboard for later discharge ashore or in waters where discharge is permissible. Within the generic term MSD, Navy uses the following terms to identify general types:

a. **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;

b. **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;

c. **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; and

d. **Type III B.** Collection, holding, and transfer system designed to collect both sewage and graywater while in port; to off-load sewage and graywater to suitable shore receiving facilities; to hold sewage while transiting within 0 to 3 NM from shore; and to discharge both sewage and graywater overboard while operating beyond 3 NM from shore.

35-5.25. Medical Waste. Medical waste is any waste generated during patient diagnosis, treatment, or immunization and consists of two categories - regulated medical waste and non-regulated medical waste. The waste matter remaining after medical wastes have been processed through a properly functioning medical waste processor is not medical waste.

35-5.26. Medical Waste Processor. A medical waste processor is a device that uses shredding and chemical disinfection to disinfect infectious medical wastes, including sharps, and render them unrecognizable.

35-5.27. Navy On-Scene Coordinator. The NOSC is the Navy official pre-designated to coordinate Navy OHS spill contingency planning and direct Navy OHS spill response efforts in a pre-assigned area. NOSCs are pre-designated by the cognizant AEC. The NOSC is the FOSC 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 area of responsibility. The NOSC may designate a "qualified individual" who meets the qualifications identified in the definition to implement a NOSC OHS regional response plan and manage an oil spill incident.

35-5.28. Non-Regulated Medical Waste. Non-regulated medical waste includes disposable medical supplies and materials generated in the health care setting but which are not potentially infectious and thus require no additional treatment before disposal. Specific examples of non-regulated medical wastes are provided in reference (o).

35-5.29. Oil. For the purposes of compliance with MARPOL Annex I and 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 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.

35-5.30. Oily Rags. Oily rags are cleaning rags or other sorbents contaminated with oil as defined in the definition of oil. The term does not include sorbents contaminated with vegetable oils, liquid or solid shortening, or animal fat or lard used in food preparation.

35-5.31. Oily Waste. Oily waste is oil mixed with water or other fluids such that the mixture is no longer useful.

35-5.32. Plastic Waste Processor. A plastic waste processor is a device that melts and compresses plastic waste so that it can be efficiently and safely stored aboard ship for shore disposal.

35-5.33. Protective Measures Assessment Protocol. The PMAP is a geographic information system-based software program specifically designed to provide COs with situational awareness and protective measures for routine unit level training and exercises to implement SECNAV's at sea policy. The PMAP provides graphical representations of protected and environmentally sensitive areas such as coral reefs and marine sanctuaries. The PMAP currently provides protective measures
for the following 21 exercises and training events. Guidance is also provided for MFAS maintenance.

a. GUNEX (surface-to-surface),
b. GUNEX (surface-to-air),
c. GUNEX (air-to-surface),
d. TORPEX (excluding service weapon or 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 and minesweeping),
l. Mine countermeasures (acoustic mine avoidance and mine sweeping),
m. Underwater detonation (mine countermeasures),
n. Anchor operations,
o. Ship and submarine active sonar use,
p. IEER and AEER operations,
q. Helicopter active sonar training operations,
r. FIREX using IMPASS,
s. Mine shape deployment,
t. Anti-swimmer grenade training, and
u. SINKEX.
35-5.34. **Pulped Garbage.** Pulped garbage is pulped, ground, or comminuted garbage capable of passing through a screen with openings no greater than 12 mm (0.47 inch).

35-5.35. **Reclamation.** Reclamation is the processing of used oil to recover useful oil products.

35-5.36. **Regulated Medical Waste.** Regulated medical waste, also referred to as "infectious medical waste," has the potential to contain pathogens in sufficient numbers and with sufficient virulence to cause infectious disease in susceptible hosts exposed to the waste. Specific examples of regulated medical wastes are provided in reference (o).

35-5.37. **Routine Training and Minor Exercises at Sea.** For the purposes of this manual, routine training and minor exercises at sea are generally conducted at the unit or small group level and:

   a. Are associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and shipboard or airborne gunnery, missile, anti-submarine warfare, or torpedo firings;

   b. Are conducted as unit operating schedules permit;

   c. Are not repeated in the same vicinity;

   d. Utilize available sensors and assets within normal operating parameters;

   e. Are conducted per all applicable standard operating procedures protective of the environment; and

   f. Ordinarily have minor, localized, and transient effects on the environment.

35-5.38. **Sewage.** Sewage is human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes.

35-5.39. **Sheen.** Sheen is an iridescent appearance on the surface of the water.

35-5.40. **Short-Lived Detergent.** 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
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35-5.41. Special Area. A special area is 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 special areas under MARPOL Annexes I and V. The MARPOL Annex I special areas in effect as of publication date of this manual are Mediterranean Sea, Baltic Sea, Black Sea, North-West European Waters, Gulfs Area (Arabian Gulf and Gulf of Oman), Southern South Africa Waters, and Antarctic Area. The Annex V special areas in effect as of publication date of this manual are Baltic Sea, North Sea, Gulfs Area (Arabian Gulf and Gulf of Oman), Mediterranean Sea, Wider Caribbean Region, and Antarctic Area (south of 60 degrees south latitude). Other MARPOL Annex V special areas designated but not yet in effect are the Black Sea and the Red Sea special areas.

35-5.42. Spill. A spill is an accidental or not permitted discharge of oil and HS into or upon the water. In this chapter, this definition does not apply to spills aboard ships that do not go over the side.

35-5.43. Stranding. For the purposes of this chapter, a marine mammal stranding includes animals found alive or dead on beaches or floating dead in open water.

35-5.44. Submarine Plastic Waste Management Process. Submarine plastic waste management process is a process that consists of using high-strength 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.

35-5.45. Supervisor of Salvage and Diving Spill Response Team. The SUPSALV spill response team is a specially trained and equipped mobile spill response team maintained by COMNAVSEASYSCOM Supervisor of Salvage (NAVSEA 00C). COMNAVSEASYSCOM maintains the team and an extensive inventory of offshore and large-scale spill response equipment to support NOSCs and COs for offshore, salvage-related, or major inland oil spills and HS releases.

35-5.46. Take. The National Defense Authorization Act (NDAA) of 2004 amended MMPA for military and scientific research activities. Under NDAA 2004, to "take" a marine mammal means to engage in any act that injures or has the significant potential
to injure a marine mammal or marine mammal stock in the wild; or any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered. Under ESA, to "take" an endangered species means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.

35-5.47. Technical Authority. An acquisition official in a technical oversight office responsible for approving systems and equipment for installation on vessels and administering certification requirements has technical authority.

35-5.48. United States. For the purposes of this chapter, the United States includes the Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Commonwealth of the Northern Mariana Islands.

35-5.49. Used Oil. Used oil is 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.

35-5.50. Used or Excess HM. Used or excess HM includes HM for which there is no further, immediate use aboard 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.

35-5.51. Volatile Organic Compounds. VOCs are 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.
35-5.52. **Waste Oil.** Waste oil is oil whose characteristics have changed markedly since being originally refined, has become unsuitable for further use, and is not considered economically recyclable.
The HM listed in the table below are representative of materials used during conduct of normal shipboard operations and in performance of planned maintenance and general housekeeping procedures. If disposal guidance is sought for a material not listed in the table, contact your ship's HM coordinator.

<table>
<thead>
<tr>
<th>Shipboard HM Type</th>
<th>Examples of Generation Sources</th>
<th>Examples of Associated HMs</th>
<th>Authorized Disposal Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid, spent</td>
<td>Cleaning.</td>
<td>Acetic, citric, hydrochloric, sulfuric, and sulfamic acids.</td>
<td>Carefully neutralize with a weak base, and dilute and flush overboard beyond 12 NM of shore using large amounts of water; within 12 NM, containerize for shore disposal. Chapter 593 of reference (b) includes spent acid disposal procedures.</td>
</tr>
<tr>
<td>Aerosol cans</td>
<td>Empty paint, lubricant, deodorant, and shaving cream cans.</td>
<td>Flammable products, flammable propellants (propane, butane), oxidizer (nitrous oxide).</td>
<td>If the ship is equipped with a NAVSEASYSCOM-approved aerosol puncturing or draining device, puncture and drain the exhausted aerosol container. The container shall be marked &quot;empty&quot; and treated as an empty HM container. If the ship is not equipped with a NAVSEASYSCOM-approved aerosol puncturing or draining device, containerize for shore disposal. Aerosol cans, whether punctured, drained or crushed or not, shall be containerized for shore disposal. Aerosol cans contain plastic, which is prohibited for overboard discharge.</td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
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<td>Authorized Disposal Methods</td>
</tr>
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</tr>
<tr>
<td><strong>Alkali, spent</strong></td>
<td>Cleaning, deoxidizing.</td>
<td>Sodium hydroxide, potassium hydroxide.</td>
<td>Carefully neutralize with a weak acid, and dilute and flush overboard beyond 12 NM of shore using large amounts of water; within 12 NM containerize for shore disposal. Chapter 593 of reference (b) includes spent alkali disposal procedures.</td>
</tr>
<tr>
<td><strong>Asbestos containing materials</strong> (to be removed by properly trained personnel equipped with appropriate personal protective equipment only)</td>
<td>Thermal insulation, pipe lagging, flooring tile, safety curtains, gasket and packing materials.</td>
<td>Asbestos.</td>
<td>Dispose per requirements set forth in chapter B1 of reference (d).</td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Lead-acid batteries</strong></td>
<td>Propulsion systems auxiliary lighting, communication, and power systems.</td>
<td>Lead, lead sulfate, lead dioxide, antimony, sulfuric acid electrolyte.</td>
<td>Containerize for shore disposal. Do not empty electrolyte from battery.</td>
</tr>
<tr>
<td><strong>Rechargeable batteries:</strong> Nickel-cadmium Silver-zinc Nickel-iron Silver-cadmium Nickel-zinc Nickel metal hydride</td>
<td>Auxiliary power systems, power supply for portable equipment.</td>
<td>Nickel, silver, zinc, cadmium, potassium hydroxide electrolyte.</td>
<td>Containerize for shore disposal. Do not empty electrolyte from battery.</td>
</tr>
<tr>
<td><strong>Dry cell batteries:</strong> Lelanche cells Mercury cells Low-temperature cells</td>
<td>Power supply for portable equipment.</td>
<td>Manganese dioxide, mercuric oxide, zinc.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td><strong>Lithium batteries</strong></td>
<td>Power supply for portable equipment.</td>
<td>Lithium, acetonitrile.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td><strong>Biocides</strong></td>
<td>Water from MK41 vertical launch deluge system.</td>
<td>Polyhexamethylene biguanide hydrochloride, sodium hypochlorite.</td>
<td>Overboard discharge permitted beyond 25 NM of shore. In port, containerize for shore disposal.</td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
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<td>Authorized Disposal Methods</td>
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</tr>
<tr>
<td>Boiler wastewater</td>
<td>Boiler blowdown, boiler water, continuous boiler water treatment tank.</td>
<td>Trisodium and disodium phosphate, carbohydrazide, ethylenediaminetetraacetic acid (EDTA), sodium sulfite.</td>
<td>Overboard discharge of blowdown effluents and boiler water permitted** inside 12 NM. Continuous boiler feedwater treatment tank contents or diluted carbohydrazide solution may be discharged outside 50 NM of shore. Carbohydrazide stock solution must be disposed of ashore.</td>
</tr>
<tr>
<td></td>
<td>Boiler water or feedwater test chemicals.</td>
<td>Nitric acid, EDTA, mercuric nitrate, potassium chloride, phenolphthalein, methyl purple, chloride indicator, carbohydrazide test reagents, caustic soda, oxygen ampoules, molybdate reagents, hardness indicator, hardness buffer, dimethylglyoxime.</td>
<td>Containerize excess reagents (including oxygen ampoules) and samples containing mercuric contaminated wastewater for shore disposal. If available, process mercuric samples through ion exchange cartridge. Overboard discharge of cartridge effluent permitted. Containerized exhausted cartridges for shore disposal. Boiler water or feedwater samples, except samples containing mercuric compounds, discharge overboard permitted outside 12 NM of shore.</td>
</tr>
<tr>
<td></td>
<td>Boiler waterside cleaning solutions.</td>
<td>EDTA, citric acid, sulfamic acid.</td>
<td>Overboard discharge permitted beyond 50 NM of shore. In port, off-load to tank, barge, or truck.* Off-loading to bilge and shore bilge water collection system is not permitted.</td>
</tr>
</tbody>
</table>

**NOTE:** The disposal methods for Boiler wastewaters and Boiler treatment chemicals are subject to specific environmental regulations and may vary depending on the location and local guidelines. Always consult current and applicable regulations before disposing of any hazardous materials.
<table>
<thead>
<tr>
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<th>Examples of Generation Sources</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Boiler wastewater (continued)</td>
<td>Boiler layup solutions.</td>
<td>Carbohydrazide, morpholine, sodium nitrate.</td>
<td>Overboard discharge permitted beyond 50 NM of shore. In port, offload to tank, barge, or truck. Offloading to bilge and shore bilge water collection system is not permitted.* For carbohydrazide layup, boiler light-off with subsequent steaming direct from layup permitted (chapter 220, volume 2 of reference (b)).</td>
</tr>
<tr>
<td>Acid cleaning solutions.</td>
<td>Hydrochloric, sulfamic acid, citric acid.</td>
<td>Overboard discharge not permitted. In port, off-load to tank, barge, or truck. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
<td></td>
</tr>
<tr>
<td>Passivator solutions.</td>
<td>Sodium nitrite.</td>
<td>Overboard discharge not permitted. In port, off-load to tank, barge or truck. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
<td></td>
</tr>
<tr>
<td>Boilout and degreasing solutions.</td>
<td>Trisodium phosphate, sodium metasilicate, nonionic wetting agent, degreaser.</td>
<td>In port, off-load to tank, barge, or truck. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
<td></td>
</tr>
<tr>
<td>Waterjet wastewater.</td>
<td>Sodium nitrite.</td>
<td>Overboard discharge permitted outside 50 NM of shore. In port, off-load to tank, barge or truck. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
<td></td>
</tr>
<tr>
<td>Feedwater and mercuric sample demineralizer resins.</td>
<td>Ion exchange resin with absorbed metal ions (including mercury).</td>
<td>Containerize for shore disposal as used HM.*</td>
<td></td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
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<td>Authorized Disposal Methods</td>
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</tr>
<tr>
<td>Canisters</td>
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</tr>
<tr>
<td>Battery water purification canister</td>
<td>Cation exchanger, mixed bed exchanger.</td>
<td>Ion exchange resin with adsorbed metal ions.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Used or expired oxygen breathing apparatus canisters</td>
<td>Damage control operations.</td>
<td>Potassium superoxide, sodium chlorate.</td>
<td>Label and containerize for shore disposal. Contact with oil, grease, or water during storage is prohibited. Follow guidelines within chapter 077 of reference (b).</td>
</tr>
<tr>
<td>Distilling plant cleaning wastes</td>
<td>Off-line distilling plant chemical cleaning.</td>
<td>Citric acid, sulfamic acid, disodium EDTA, tetrasodium EDTA, trisodium phosphate.</td>
<td>In port, off-load to tank, truck, or barge. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
</tr>
<tr>
<td></td>
<td>On-line distilling plant chemical cleaning.</td>
<td>Citric acid, sulfamic acid, disodium EDTA, tetrasodium EDTA, trisodium phosphate.</td>
<td>Overboard discharge permitted beyond 50 NM of shore. In port, off-load to tank, truck, or barge. Off-loading to bilge and shore bilge water collection system is not permitted.*</td>
</tr>
<tr>
<td>Film processing wastes</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Color film</td>
<td>Continuous processor effluent, small quantities of processing liquids.</td>
<td>Hydroquinone, sodium thiosulfate.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td></td>
<td>Excess film; batch quantities of developer, fixer, and intensifier solutions.</td>
<td>Hydroquinone, sodium thiosulfate, cellulose acetate.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Black and white film</td>
<td>Continuous processor effluent, stop bath, photo-flo, detergents, and hardener solutions.</td>
<td>Acetic and sulfuric acids, potassium chrome alum.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Shipboard HM Type</td>
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<td>Authorized Disposal Methods</td>
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</tr>
<tr>
<td>Film processing wastes (continued)</td>
<td>Excess film; batch quantities of developer and intensifier solution.</td>
<td>Hydroquinone, ethanolamine, diethylene glycol, cellulose acetate.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Black and white film (continued)</td>
<td>Fixer solutions.</td>
<td>Sodium thiosulfate, silver, halides.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>For submarines:</strong> Containerize fixer solutions for shore disposal at all times.</td>
</tr>
<tr>
<td>Emergency escape breathing devices (EEBDs)</td>
<td>Emergency escape operations.</td>
<td>Sodium chlorate, barium peroxide, iron, lithium hydroxide, potassium perchlorate.</td>
<td>Label and containerize for shore disposal. Contact with oil, grease, or water during storage is prohibited. Follow guidelines within chapter 077 of reference (b).</td>
</tr>
<tr>
<td>Firefighting materials</td>
<td>Firefighting, testing of firefighting equipment.</td>
<td>AFFF (perfluorocarbon compounds mixed with polyoxyethylene compound).</td>
<td>Overboard discharge permitted beyond 12 NM of shore, preferably while ship is underway. In port and within 3 NM of shore, discharge to tank, barge or truck.* Between 3 to 12 NM, overboard discharge permitted with minimum 12-knot speed.</td>
</tr>
<tr>
<td>Fluorescent light bulbs, other light bulbs containing mercury</td>
<td>Normal shipboard operation.</td>
<td>Mercury.</td>
<td>Retain for shore disposal. <strong>DO NOT CRUSH.</strong></td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
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</tr>
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</tr>
<tr>
<td><strong>HM contaminated items</strong></td>
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<td></td>
</tr>
<tr>
<td>Contaminated sorbents, rags, unrecoverable personal protective clothing</td>
<td>Normal ship maintenance operations, spill response operations.</td>
<td>Items contaminated with HMs that must be containerized for shore disposal (find specific contaminants in this table to learn if containerization is required).</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td></td>
<td>Normal ship maintenance operations, spill response operations.</td>
<td>Items contaminated with HMs that may be discharged overboard (find specific contaminants in this table to learn if overboard discharge is permitted).</td>
<td>Jettison beyond 25 NM or specified disposal distance in this table, whichever is greater. Discharged material must be negatively buoyant. Containerize for shore disposal if within 25 NM or disposal restriction distance of land.</td>
</tr>
<tr>
<td><strong>Empty HM containers</strong></td>
<td>Cleaning operations.</td>
<td>Containers with residual HM.</td>
<td>Empty HM containers that are metal or glass may be disposed of as SW per section 35-3.17. Empty HM containers that are plastic or contain plastic shall be handled as plastic SW.</td>
</tr>
<tr>
<td><strong>Petroleum-based hydraulic fluids</strong></td>
<td>Aircraft elevators, weapons handling systems, some ballast valve operating systems and replenishment-at sea systems.</td>
<td>Fluids per MIL-H-19457 contain tertiary butylated triphenyl phosphate.</td>
<td>Hold for shore disposal. Keep separate from petroleum hydraulic fluids.</td>
</tr>
<tr>
<td><strong>Synthetic hydraulic fluids</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
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<td>Authorized Disposal Methods</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>Hydraulic fluids</strong> (continued)</td>
<td>Catapult retracting engines, jet blast deflectors, weapons elevators.</td>
<td>Fluids per MIL-H-22072 contain 30-60 percent ethylene glycol, 10-30 percent polyoxypropylene glycol, and 30-60 percent water.</td>
<td>Hold for shore disposal. Keep separate from petroleum hydraulic fluids.</td>
</tr>
<tr>
<td>Synthetic hydraulic fluids (continued)</td>
<td></td>
<td>Synthetic fluids such as MIL-S-81087 and MIL-H-83282.</td>
<td></td>
</tr>
<tr>
<td><strong>Insecticides, pesticides</strong></td>
<td>Pest control operations.</td>
<td>Diazinon, Baygon, Dyrethrin, Resmethrin, Dursban, Malathion.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td><strong>Lubricants, dry-film</strong></td>
<td>Machine maintenance, motors, roller bearings.</td>
<td>Dry lube, molybdenum disulfide, graphite, talc.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td><strong>Medical or dental lab chemicals and materials</strong></td>
<td>Dental amalgam used as filling material, thermometers, mercury from broken thermometers. Antiseptics, disinfectants.</td>
<td>Silver, silver nitrate, mercuric nitrate, mercury. Isopropyl alcohol.</td>
<td>Containerize for shore disposal. Overboard discharge permitted beyond 12 NM of shore. In port, containerize for shore disposal.</td>
</tr>
<tr>
<td><strong>Medical or dental lab chemicals and materials</strong></td>
<td>X-ray film processing wastes.</td>
<td>X-ray film processing chemicals.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
<td>Examples of Associated HMs</td>
<td>Authorized Disposal Methods</td>
</tr>
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<td>------------------</td>
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</tr>
<tr>
<td>Oils (continued)</td>
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<tr>
<td></td>
<td>Lubricating oils from machinery, turbines, engines, and motors.</td>
<td>Lubricating oils such as MIL-L-9000, MIL-L-15019, MIL-L-17331, and MIL-L-23699.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Oily sludge</td>
<td>Residue from OWSs, fuel tanks, degreasing operations.</td>
<td>Oil mixed with lead, zinc, chromium, copper, or tin residues.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Oily SW</td>
<td>Contaminated sorbents or rags, oil and fuel filters.</td>
<td>Items contaminated with residual oil.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Paint wastes from painting, resurfacing operations</td>
<td>Paints, enamels, varnishes, lacquers, paint chips and debris.</td>
<td>Unusable paint; paint contaminated solvents, strippers, application and clean-up materials.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Personal items</td>
<td>Disposable butane lighters</td>
<td>Lighters no longer usable.</td>
<td>Butane, plastics.</td>
</tr>
<tr>
<td>PCB contaminated components</td>
<td>Capacitors, coils (usually with radar systems) (a listing of components containing PCBs has been provided to each ship), electrical cables, felt gaskets.</td>
<td>PCBs.</td>
<td>Containerize for shore disposal.</td>
</tr>
<tr>
<td>Solvents</td>
<td>Chlorinated solvents</td>
<td>Cleaning operations.</td>
<td>Perchloroethylene, trichloroethylene, trichloromethane, trichloroethane, freon™.</td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
<td>Examples of Associated HMs</td>
<td>Authorized Disposal Methods</td>
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<tr>
<td>Solvents (continued)</td>
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</tr>
<tr>
<td>Non-chlorinated solvents</td>
<td>Cleaning operations.</td>
<td>Ethyl acetate, acetone, morpholine, methyl ethyl ketone, toluene, xylene, kerosene, petroleum naptha, petroleum ether, petroleum distillates.</td>
<td>Containerize for shore disposal. Keep separate from chlorinated solvents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ethylene and propylene glycols; methyl, ethyl, isopropyl, and butyl alcohols.</td>
<td>Overboard discharge permitted beyond 12 NM of shore. In port, containerize for offload.</td>
</tr>
<tr>
<td>Water, waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipboard HM Type</td>
<td>Examples of Generation Sources</td>
<td>Examples of Associated HMs</td>
<td>Authorized Disposal Methods</td>
</tr>
<tr>
<td>------------------</td>
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</tr>
<tr>
<td></td>
<td>Detergent flush of engine cooling systems.</td>
<td>Sodium chromate solution mixed with residual fuel or soluble oil.</td>
<td>Containerize for shore disposal. Containerize excess stock chemicals for shore disposal.</td>
</tr>
</tbody>
</table>

Beyond 12 NM of shore, overboard discharge permitted after neutralizing with sodium bicarbonate. In port and within 12 NM, containerize for shore disposal. Containerize excess stock chemicals for shore disposal.
<table>
<thead>
<tr>
<th>Shipboard HM Type</th>
<th>Examples of Generation Sources</th>
<th>Examples of Associated HMs</th>
<th>Authorized Disposal Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water, waste (continued)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water with corrosion inhibitors (continued)</td>
<td>Acid cleaning of IF diesel engine cooler cores.</td>
<td>Sulfamic acid, MIL-D-16791 detergent.</td>
<td>Beyond 12 NM of shore, overboard discharge permitted after neutralizing with sodium bicarbonate. In port and within 12 NM, containerize for shore disposal. Containerize excess stock chemicals for shore disposal.</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Cleaning of shipboard gas turbine propulsion power systems.</td>
<td>Napthalene, naval distillate fuel, gas turbine fuel, synthetic lube oil, copper, cadmium, nickel.</td>
<td>Collect and hold in gas turbine water wash collection tank. Pump ashore or containerize for shore disposal. If collection tank capacity is exceeded, overboard discharge permitted beyond 12 NM of shore. Effluent that flows up the stack need not be collected.</td>
</tr>
<tr>
<td>Marine gas turbine water wash wastewater</td>
<td>Normal submarine CO₂ scrubber CO₂ scrubber maintenance.</td>
<td>MEA, citric acid.</td>
<td>Overboard discharge permitted beyond 12 NM of shore. Inside 12 NM and in port, collect and containerize for shore disposal.*</td>
</tr>
<tr>
<td></td>
<td>Submarine missile tubes.</td>
<td>Heavy metals, cyanide.</td>
<td>Overboard discharge permitted beyond 12 NM of shore. Inside 12 NM and in port, collect and containerize for shore disposal.*</td>
</tr>
</tbody>
</table>

* Contact local public works center or public works department for authorized procedures.
** Except when a state has a no-discharge zone applicable to this discharge.
CHAPTER 36

PERMITTED OCEAN DISPOSITION

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36-1  Scope. This chapter identifies requirements and responsibilities for ocean disposal of material, other than dredged or fill material (refer to chapter 20 (Clean Water Ashore)), and those discharges covered in chapter 35 (Environmental Compliance Afloat).

36-1.1.  Related Chapters. Chapter 20 (Clean Water Ashore) provides information on clean water ashore and chapter 35 (Environmental Compliance Afloat) provides information on environmental compliance afloat.

36-1.2.  References

(a) 40 CFR 220-225 and 227-229


(c) OPNAVINST 1541.5, General Policy for Sinking Exercise Approval

(d) NAVMEDCOMINST 5360.1, Decedent Affairs Manual

36-2  Legislation
a. The following legislation contains provisions that pertain to permitted ocean disposition:

(1) Marine Protection, Research, and Sanctuaries Act; and

(2) Ocean Dumping Act.

b. A summary of this legislation is included in appendix A (Laws and Regulations).

36-3 Requirements

36-3.1. Ocean Dumping. Ocean dumping may only be authorized on a case-by-case basis by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)). Except in emergency conditions, requests for such authorization shall be accompanied by documentation per the criteria established in reference (a). Following OPNAV (N45) approval, full compliance with Environmental Protection Agency (EPA) permitting procedures is required. Any material may be jettisoned from ships and aircraft in an emergency to safeguard life at sea.

36-3.2. Transport of Target Vessels

a. The transportation of naval ships and craft from the United States or from any other location for the purpose of conducting a sinking exercise (SINKEX) concerning training or tests and evaluations of conventional ammunition and weapons systems is subject to EPA permit requirements established in section 229.2 of reference (a). Sinking vessels for other purposes, such as creation of an artificial reef, are covered by different regulations and are not addressed in this section.

b. Necessary measures shall be taken to ensure the vessel sinks to the bottom rapidly and permanently and marine navigation is not impaired by the sunken vessel. All such vessel sinkings shall be conducted in water of at least 1,000 fathoms (6,000 feet) and at least 50 nautical miles (NM) from land, as measured from that portion of the baseline from which any territorial sea is measured (reference (b)) that is in the closest proximity to the proposed SINKEX site.

c. Under permit conditions and before sinking, appropriate measures shall be taken by qualified personnel at a Navy command or other appropriate facility to remove, to the maximum extent
practicable, all materials that may degrade the marine environment, including, but not limited to:

(1) 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 tanks and lines are essentially free of petroleum; and

(2) Removing other pollutants and all readily detachable material capable of creating debris or contributing to chemical pollution from the hulls.

d. Each SINKEX operation shall be conducted only after approval by the Office of the Chief of Naval Operations and preparation of the target per the EPA permit and specific OPNAV directives. Requests for conducting SINKEX exercises shall be prepared per reference (c).

e. Prior to conducting a SINKEX, Navy commands shall also comply with the mitigation measures provided in the Protective Measures Assessment Protocol (PMAP) (refer to appendix E (Web Sites) for the Web site address). The PMAP identifies mitigation measures that are required for a SINKEX.

f. After the sinking, the fleet commander or other major claimant that requested the SINKEX assets shall submit an after action report to Commander, Naval Sea Systems Command, Navy Inactive Ships Program (COMNAVSEASYSCOM PMS-333) (copies to OPNAV, Fleet Readiness Division (OPNAV (N43)); OPNAV (N45); the Office of the Chief of Naval Operations, Warfare Integration and Assessment Division; and appropriate fleet and force commanders) that includes the name of each vessel sunk, approximate tonnage, location, and date of sinking.

36-3.3 Burial at Sea. The transportation of human remains from any location for the purpose of burial at sea and to bury such remains at sea is subject to EPA permit requirements established in section 229.1 of reference (a). Human remains shall be prepared for burial at sea and be buried per chapter 11 of reference (d). 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 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 reference
(b)) that is in closest proximity to the proposed disposal site. Cremated remains shall be buried in or on ocean waters without regard to the depth limitations specified above, provided that such burial takes place no closer than 3 NM from U.S. land and 12 NM from foreign land.

36-4 Responsibilities

36-4.1. OPNAV (N45) shall submit an annual report to the EPA Administrator prepared by COMNAVSASYSCOM on or about 1 February of each year.

36-4.2. COMNAVSASYSCOM shall:

   a. Prepare an annual report for submission by OPNAV (N45) to the EPA Administrator, setting forth the name of each vessel utilized in a fleet training exercise or during a weapons effect test during the calendar year;

   b. For each vessel, include in the report the vessel's tonnage, the location and date of vessel sinking, water depth, estimated weight of regulated polychlorinated biphenyl-containing solid materials remaining on board at the time of sinking, and all efforts taken to clean each vessel prior to the exercise; and

   c. Forward this report to OPNAV (N45) for review no later than 15 January of each year.

36-4.3. Fleet commanders shall:

   a. Ensure ship sea detail checklists include a requirement to collect and off-load all trash and garbage before getting underway; and

   b. Ensure planning for exercises includes provisions for appropriate disposal of wastes generated ashore during the exercise.

36-4.4. Commanding officers (CO) of a vessel or aircraft conducting burials at sea shall, within 20 days of conducting the burial, report 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 (REC).
36-4.5. RECs shall submit a report to the appropriate EPA regional office detailing the burial at sea within 30 days of conducting the burial.

36-5  Definitions

36-5.1. Dumping. Dumping refers to the intentional disposition of wastes generated ashore or materials on-loaded in port for the express purpose of disposal at sea. Dumping does not include routine discharge of materials or wastes generated aboard ship or effluent incidental to the propulsion or operation of motor driver equipment on vessels (i.e., those discharges covered in chapter 35 (Environmental Compliance Afloat)). It does, however, include the discharge of contaminated material, including bilgewater received from another ship or shore source.

36-5.2. Material. In this context, material is matter of any kind or description, including, but not limited to, solid waste, incinerator residue, garbage, sewage, sewage sludge, munitions, discarded equipment, and radiological, chemical, and biological warfare agents.

36-5.3. Ocean Waters. Ocean waters are those seaward of the baseline from which the boundary of the territorial sea is measured.
CHAPTER 39

OIL AND HAZARDOUS SUBSTANCE SPILL PREPAREDNESS AND RESPONSE

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39-1 Scope. This chapter identifies requirements to prepare for and respond to oil and hazardous substance (OHS) spills from Navy vessels and shore facilities worldwide and summarizes Navy planning and response requirements for both Navy and non-Navy OHS spills.

39-1.1. Related Chapters. Chapter 20 (Clean Water Ashore) identifies the requirements and responsibilities for the control and prevention of water pollution. Chapter 23 (Hazardous Materials Management Ashore) describes the comprehensive management of hazardous material (HM). Chapter 27 (Hazardous Waste Management Ashore) describes the comprehensive management of hazardous waste (HW). Chapter 30 (Oil Management Ashore) discusses oil management at shore facilities. Chapters 31 (Storage Tanks) and 35 (Environmental Compliance Afloat) discuss the prevention and minimization of OHS pollution from storage tanks at shore facilities and OHS management aboard ships, respectively. Chapter 34 (Overseas Environmental Compliance

39-1
Ashore) covers Navy policy for overseas activities and chapter 41 (Natural Resource Damage) identifies Navy responsibility with respect to natural resource damages after an OHS spill incident.

39-1.2. References.

(a) 33 U.S.C. §2701

(b) 40 CFR 300

(c) 40 CFR 260-282

(d) 40 CFR 112

(e) 33 CFR 154

(f) 30 CFR 254

(g) 49 CFR 194

(h) 49 CFR 195

(i) 29 CFR 1910.120

(j) 61 FR 28642


(l) NAVSEA S9593-FF-MMA-010, U.S. Navy Shipboard Oil and Hazardous Substance Spill Contingency Plan Guide


(n) OPNAVINST 3440.17, Navy Installation Emergency Management Program

(o) Memorandum of Agreement (MOA) Between Department of Defense and Department of Transportation on the Administration of the Ready Reserve Force, 28 Jan 2009 (NOTAL)

(p) 40 CFR 117, 302, and 355

(q) OPNAVINST F3100.6J, Special Incident Reporting (OPREP 3, Navy Blue and Unit SITREP) Procedures (NOTAL)
39-1.3. **Applicability.** Navy shore facilities, both in the continental United States and overseas, are subject to a wide array of OHS planning, training, exercise, reporting, and response requirements. The specific Federal, State, and local laws and regulations that apply are dependent on factors such as facility's location, nature of operations, and whether certain criteria and threshold requirements are met. Federal laws applicable to OHS preparedness and response include the Clean Water Act (CWA) and Oil Pollution Act of 1990 (OPA 90). This chapter explains Navy-specific shipboard preparedness and response requirements applicable to Navy vessels, which are exempt from corresponding provisions of OPA 90 because the definition of "vessel" at paragraph 29 of reference (a) specifically excludes public vessels.

39-2 **Legislation**

a. The following legislation contains provisions that pertain to OHS spill preparedness and response:

(1) Clean Air Act (CAA);

(2) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);

(3) CWA;
(4) Emergency Planning and Community Right-to-Know Act (EPCRA);
(5) Occupational Safety and Health Act;
(6) OPA 90; and

b. A summary of this legislation is included in appendix A (Laws and Regulations).

39-3 Requirements

a. Environmental Protection Agency (EPA); Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA); U.S. Coast Guard (USCG); Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM, R&E); and Occupational Safety and Health Administration (OSHA) all regulate portions of OHS preparedness and response. Navy facilities fall under EPA and or USCG jurisdictions, but all facilities should carefully evaluate their responsibility to meet other regulatory requirements.

b. In addition, 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. Department of Defense (DoD) facilities, including Navy facilities, are subject to state and local facility prevention and response planning requirements. Public vessels, including military vessels, are exempt from most state requirements. Some facilities are required to develop and submit to EPA a risk management plan (RMP) for EPA's regulated substances under CAA. Refer to section 22-3.3.b(3) for RMP requirements under CAA regulations.

39-3.1 Response Personnel

a. The federal on-scene coordinator (FOSC) is the Federal official predesignated by EPA or USCG to coordinate and direct Federal responses under reference (b). In the case of Navy hazardous substance (HS) releases on or solely from Navy facilities, the Navy on-scene coordinator (NOSC) is the Navy official predesignated as the FOSC. The NOSC coordinates Navy
OHS spill contingency planning and directs Navy OHS spill response efforts in a pre-assigned area. NOSCs are predesignated by the cognizant naval forces commanders or Commander, Navy Installations Command (CNIC). The naval forces commanders are U.S. Fleet Forces Command, U.S. Pacific Fleet, U.S. Naval Forces Europe, U.S. Naval Forces Africa, U.S. Naval Forces Southern Command, and U.S. Naval Forces Central Command. The NOSC also acts as the incident commander for spills which exceed the response capability or extend beyond the fenceline of a facility located within the NOSC area of responsibility (AOR). The NOSC may designate a qualified individual (QI) who meets the qualifications of section 39-5.15 to implement a NOSC OHS regional response plan and manage an oil spill incident.

b. 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 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 during a response. The title of FIC is retained by the commanding officer (CO) and may not be delegated.

39-3.2. Planning. All Navy facilities shall maintain contingency plans to combat releases of HS or discharges of oil and minimize hazards to human health and the environment. These plans shall provide information on facility emergency equipment, evacuation, and coordination (reference (c)). 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 appropriate regulations to determine if they meet the criteria to prepare and submit plans. 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. At a minimum, each plan shall be reviewed and updated annually. Depending on personnel turnover rate, the responsibility and notification sections shall be updated at least quarterly. Each plan shall be updated and resubmitted as required by regulations or, at a minimum, every 5 years or after any major spill event.

a. Facility Plans. All Navy facilities shall develop either an FRP or spill contingency plan (SCP), depending upon regulatory
requirements, size, and location of the facility. Facilities shall report, via the NOSC, the status of their plans through use of a Web-based database maintained by Commander, Naval Sea Systems Command (COMNAVSEASYSCOM) to CNIC annually.

(1) Facility Response Plans. Facilities that store, transport, or handle oil and meet the specific threshold requirements of any of the OPA 90 regulations (references (d) through (g)) must submit an FRP to the appropriate regulatory agency (i.e., EPA; USCG; BOEM,R&E; Bureau of Ocean Energy Management, Regulation and Enforcement; or PHMSA). Each agency has established criteria that define which facilities fit this description. Table 39-1 shows a brief description of these criteria. The actual regulations shall be reviewed to determine applicability.

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>FRP Threshold Requirement</th>
<th>Regulatory Agency</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-transportation-related onshore facilities</td>
<td>(1) The facility, because of its location, could be reasonably expected to cause &quot;substantial harm&quot; to the environment;</td>
<td>EPA</td>
<td>Reference (d)</td>
</tr>
<tr>
<td></td>
<td>(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</td>
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<tr>
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<td>(3) The facility's total oil storage capacity is greater than or equal to 1 million gallons, and one of the following is true:</td>
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<tr>
<td></td>
<td>(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 to allow for precipitation;</td>
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<tr>
<td></td>
<td>(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;</td>
<td></td>
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<tr>
<td></td>
<td>(c) The facility is located at a distance such that a discharge from the facility would shut down</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Type</td>
<td>FRP Threshold Requirement</td>
<td>Regulatory Agency</td>
<td>Citation</td>
</tr>
<tr>
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</tr>
<tr>
<td>Marine transportation-related (MTR) facilities</td>
<td>(1) The facility, because of its location, could be reasonably expected to cause &quot;substantial harm&quot; 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 captain of the port.</td>
<td>BOEM</td>
<td>Reference (e)</td>
</tr>
<tr>
<td>Non-transportation-related facilities; Offshore platforms and pipelines</td>
<td>Each owner or operator of an oil handling, storage, or transportation facility, located seaward of the coastline, must submit a spill response plan to BOEM,R&amp;E for approval.</td>
<td>BOEM</td>
<td>Reference (f)</td>
</tr>
<tr>
<td>Onshore pipelines</td>
<td>Each operator of an onshore pipeline facility shall prepare a response plan and submit it 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 (g) for specific criteria.</td>
<td>*PHMSA</td>
<td>Reference (g)</td>
</tr>
</tbody>
</table>

*Navy facilities with pipelines that leave the facility or with mobile sources may fall under PHMSA's jurisdiction. Pipelines that transport fuel off facility grounds must comply with the safety standards and reporting requirements of reference (h).

(a) Facilities meeting the criteria for more than one type of facility are considered "complex facilities" and must submit an FRP to each Federal agency with jurisdiction, with a maximum of one per facility. While the requirements for the FRP
vary widely depending on the type of facility, certain essential elements are common to all plans, including:

1. Designation of an individual who can be reached on a 24-hour basis and has the authority to take necessary response action;

2. An emergency section of the plan that provides concise response direction;

3. Extensive drills and exercises with specified documentation and recordkeeping;

4. A provision for regular update and review of FRPs; and

5. Provisions for responding to spills up to and including worst case discharge (WCD).

(b) "Substantial harm" facilities shall submit FRPs to the relevant regulatory agency for information; "significant and substantial harm" facilities shall submit FRPs to the appropriate regulatory agency for review and approval.

(c) Navy barges are considered "public vessels" and, although not required to have vessel response plans, should be addressed in response plans. Facilities owning barges that are used only at that facility to store, transfer, or handle oil for that facility should include these barges in their response plans.

(d) Facilities may rely on their NOSC for WCD response, and FRPs submitted to regulators may reflect this fact. A facility's FRP must include the NOSC as part of the spill management team (SMT) for WCDs in order for the facility to receive Preparedness for Response Exercise Program (PREP) credit when the NOSC responds to a facility incident or conducts WCD exercises.

(2) Spill Contingency Plans. Navy facilities storing petroleum or HS and not meeting federal requirements for preparing an FRP shall maintain a SCP. SCPs should be tailored to the specific size and operations of 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 using their own personnel for emergency
spill responders, the SCP must address all of the emergency response plan elements of OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations in part (q) of reference (i). 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.

b. Integrated Contingency Plan

(1) A facility may choose to develop an integrated contingency plan (ICP) per reference (j). This is not an additional plan. The guidance was intended for facilities that wanted to combine different FRP requirements found in various EPA, Department of Transportation, USCG, and OSHA regulations into a single response document. ICP development may be beneficial for those facilities that need to meet multiple spill contingency regulatory requirements from various Federal agencies. ICPs may also be used in locations where facilities share response resources or that are in close proximity. Areas with a high concentration of Navy facilities may benefit from having a single plan with appendices that cover each facility.

(2) An ICP is not a suitable solution for all cases. The added complexity and potential cost of maintenance should be considered when evaluating the appropriateness of this option. Consultation with regulators regarding acceptance of such an arrangement shall be conducted prior to combining plans into a single plan.

c. NOSC Plans. NOSC plans, in combination with facility FRPs, must provide sufficient detail to ensure Navy can respond to oil spills up to the WCD and to spills beyond facility boundaries. For spills beyond their capability, facilities may rely on the NOSC for additional resources. 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, and reviewed and maintained for currency annually, with notification sections validated quarterly. They shall receive a thorough review and update, including a new signature, every 5 years. Status of shoreside NOSC plans shall be forwarded by assigned NOSCs annually to CNIC and status of fleetside NOSC plans shall be forwarded by assigned NOSCs annually to COMNAVSEASYSCOM through use of a Web-based database maintained by COMNAVSEASYSCOM.

(1) Shoreside NOSC Plans
(a) The shoreside NOSC plan 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, or natural resource damages, and address WCD scenarios and the WCD support required by the facility within the NOSC's AOR, as well as scenarios that occur beyond facility boundaries.

(b) These plans shall be consistent and aligned with area contingency plans (ACP) and NOSC plans for adjacent AORs (shoreside and fleet). Delineation of responsibility between shoreside and fleet NOSCs shall be clear. Overseas shoreside NOSC plans shall also include information regarding host nation assistance and requirements.

(2) Fleet NOSC Plans. Fleet NOSCs are required to develop contingency plans to combat Navy ship OHS 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 an assigned AOR that may be affected by Navy spills shall be included. Plan coverage shall provide for all Navy vessels (including Commander, Military Sealift Command (COMSC) and U.S. Maritime Administration (MARAD)) regardless of fleet operational control within their AOR. Supervisor of Salvage and Diving (SUPSALV) shall provide assistance to fleet commanders or their designees in preparing the plans. These plans shall be consistent and aligned with shoreside NOSC plans within the AOR.

d. Spill Prevention, Control, and Reporting Plans. Overseas facilities are governed by both DoD guidance and applicable local laws and regulations and shall develop and maintain a spill prevention, control, and reporting (SPCR) plan per the final governing standard (FGS) for the country where the facility is located. If an FGS does not exist for a particular country, the plan shall be developed per reference (k). The plan shall contain similar information to spill prevention, control, and countermeasure (SPCC) plans; SCPs; or FRPs such as necessary notifications, emergency procedures, response assets, and sensitive areas.

e. Shipboard SCP. Each Navy and COMSC ship shall develop a contingency plan to respond to oil spills. COMNAVSEASYSCOM will provide a sample of a shipboard oil spill contingency plan (SOSCP) format (reference (l)). 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 cleanup materials; information sources for oil and HM; and names and telephone numbers of fleet as well as shoreside NOSCs. The plan(s) shall be reviewed and updated annually to ensure consistency with current ship conditions and policies and shall contain up-to-date NOSC contact information to ensure appropriate notification of spills. Although neither USCG nor state officials have authority to require preparation of public vessel OHS SCPs, Navy will provide Navy ship SCPs to USCG and state officials upon request to promote strong, cooperative relationships with the local community. Shipboard OHS spill response policy guidance is found in chapter 35 (Environmental Compliance Afloat).

f. Non-Navy Ports Planning. Navy vessels (including COMSC vessels regardless of operating condition (OPCON) and MARAD vessels as assigned) calling on non-Navy ports shall arrange through logistics requirements, 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 assistance as needed to determine necessary preparedness measures for situations which could potentially arise during vessel operations in a non-Navy port called upon by the U.S. Navy, U.S. Naval Ship (USNS), or MARAD vessels in their respective AORs. Preparedness measures shall address all accepted operations (e.g., fueling) and shall include meeting all criteria set forth in the Overseas Environmental Baseline Guidance Document (OEBGD), FGS, and respective NOSC plans.

g. Emergency Management Plans. Facility commanders and NOSCs shall coordinate planning activities with emergency management (EM) functions as appropriate. OHS plan information should either be incorporated or referenced in EM plans as part of the national policy outlined in references (b) and (m) and the Navy's overall EM approach (reference (n)) to ensure efficient use of resources, minimal duplication of effort, and maximum readiness.

h. Other Planning Considerations. Facilities may be subject to additional HS contingency planning laws and regulations including RCRA, EPCRA, and CAA. 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.

(1) SUPSALV is designated as the Navy's corporate oil spill response organization and shall maintain and operate 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. SUPSALV oil spill response equipment is procured, maintained, and exercised to comply with USCG oil spill response organization guidelines and meets WCD requirements for most facility and ship scenarios, especially in the United States. Planners should contact SUPSALV directly for specifics on capabilities and response timelines.

(2) In addition to response assets available from local Navy activities, commercial oil pollution response assets, available through basic ordering agreements (BOA) pre-negotiated by USCG, may be a CO's best means of meeting the response requirements of more significant spill scenarios by augmenting a facility's equipment and personnel resources. Planning efforts should consider these assets and, where appropriate, include them in response plans. NOSCs should validate that USCG BOAs can be implemented within their respective regions under existing USCG BOA contracts prior to an emergency. Access to BOAs is managed by Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM).

(3) Membership in oil spill cooperatives potentially exposes Navy to the risk of significant liability. Accordingly, Navy activities considering membership in an oil spill cooperative shall forward a request to participate to the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) via their chain of command.

(4) Protective booming strategies shall be developed where feasible and implemented for petroleum, oils, and lubricant transfer operations when any of the following conditions exist:

(a) Protective booming is required by law or regulation;

(b) The nature or volumes of fuels to be transferred is of sufficient magnitude that prudent operational risk management indicates protective booming is required;
(c) Environmentally sensitive areas are likely to be negatively impacted in the event of a spill; or

(d) Potential spills 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.

39-3.3. Training Requirements. All Navy facilities that store oil or HS in regulated quantities shall ensure personnel are trained to combat discharges of HS or oil and perform response duties as defined in the facility's plans, while maintaining safety as the number one priority. Facility COs and NOSC shall coordinate training activities with EM and other training 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. Naval Safety and Environmental Training Center (NAVSAFENVTRACEN) manages a number of courses applicable to spill response techniques, spill management, and response worker health and safety.

a. FRP Training

(1) EPA; USCG; BOEM,R&E; and PHMSA (references (d) through (g)) 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.

(2) Navy facilities owning and maintaining spill response equipment will act as the first responder to a Navy oil spill. As such, Navy personnel must be trained on the safe use of this equipment and in effective response techniques. Typically, this training should be received annually, but depending on the level of expertise of the facility response team (FRT), the amount of personnel turnover, the number of actual deployments, and other factors, training may be received at an interval not to exceed once every 2 years. NAVSAFENVTRACEN offers courses in FRT operations.

b. OSHA Training. OSHA requires HAZWOPER training including identification of hazards, use of personal protective equipment, and other safety-related measures for all emergency response personnel before they are permitted to engage in emergency response operations. Navy personnel assigned response duties
shall receive this training commensurate with responsibilities. It must be completed prior to a spill event to avoid any delays in response. Sections (e)(3) and (4) of reference (i) list required training, but are written for uncontrolled HW sites. Additional guidance is available from OSHA that addresses the applicability of these regulations to oil spill response training in more detail. OSHA requires this training be updated annually. NAVSAFENVTRACEN offers HAZWOPER courses. Depending on the nature of the position or expected responsibilities of the individual, incident management training may also be required.

c. National Incident Management System Training

(1) It is Navy policy to comply with reference (m) regarding National Incident Management System (NIMS) training and incident command system (ICS) training. NIMS sets forth the requirement for hazard incident preparedness activities, including implementing an ICS for managing incident response. ICS is an effective crisis management system and has been proven for OHS spill response. Training defines NIMS operations and ICS roles and responsibilities. Various levels of training are required, depending on assigned responsibilities (references (b), (k), and (m)).

(2) 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. NAVSAFENVTRACEN offers courses in ICS.

d. General Training. It is imperative NOSC management have an understanding of environmental issues beyond OHS response and OSHA concerns. Awareness training, such as general environmental and spill management, may be necessary to ensure NOSCs are fully capable of understanding the issues and problems that may arise surrounding OHS spill, response, mitigation, and management.

39-3.4. Exercises. CWA, as amended by OPA 90, requires facilities to train and exercise to be prepared to respond to oil spills.

a. National PREP. National PREP describes various types of exercises and the frequency of performance for each type. Exercises are conducted so all plan components are tested at least once every 3 years. OPA 90 and its implementing regulations require that employees responsible for conducting spill response receive proper training to accomplish these tasks.
The four Federal agencies that have issued implementing regulations under OPA 90 (i.e., USCG; EPA; BOEM, R&E; and PHSMA) developed exercise guidelines to establish a workable exercise program that meets the intent of 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:

(1) QI notification exercises are conducted 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;

(2) Emergency procedure exercises are performed 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, these exercises should be conducted as necessary to ensure personnel are capable of performing these tasks. Additionally, this exercise can be performed to satisfy the requirements for an unannounced exercise (see below);

(3) SMT tabletop exercises are conducted to ensure SMTs are familiar with the contingency plan and individual responsibilities assigned by the plan and able to use it effectively to conduct a spill response. Facilities shall conduct one tabletop exercise annually;

(4) Equipment deployment exercises ensure personnel who would normally deploy and operate or supervise the operation of response equipment are capable of doing so. They also ensure equipment is in good working order. Facilities that maintain response equipment shall conduct this type of exercise semi-annually;

(5) Unannounced exercises require 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 emergency procedure, tabletop exercise, or equipment deployment exercise unannounced each calendar year;

(6) WCD exercises should be conducted annually in each 3-year cycle in the facility’s SMT tabletop exercise schedule. This is not an additional exercise, but serves as the SMT tabletop for that year; and
(7) Area exercises are designed to test the entire response community and may be led by regulators or planholders. Navy facilities that participate in area exercises shall document their participation in their spill response plans to receive proper credit.

b. Facility Requirements. Facility commanders and SPCC and FRP planholders of both OPA 90 and non-OPA 90 SPCC-regulated facilities shall forward an annual report to the NOSC indicating intended 3-year exercise schedule and previous year accomplishments through use of the Web-based database maintained by COMNAVSEASYSCOM on a near real-time basis. As much as possible, facility SMT personnel shall participate in NOSC or area exercises. Navy facilities that participate in these exercises shall document their participation to receive proper credit. NOSCs shall review the annual reports and forward to CNIC.

(1) OPA 90 Facilities. OPA 90 regulated facilities shall follow the PREP guidelines to accomplish exercise requirements. Facilities shall document exercise accomplishments per PREP guidelines and the appropriate regulating agency(ies) to ensure 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 an 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 to 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. Prior to any EM exercise involving an OHS incident, EM personnel must receive proper training on S-191 (Command Post or EOC) to understand their role under NIMS ICS and understand the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

(2) Non-OPA 90 Facilities. Non-OPA 90 regulated facilities shall develop an exercise program commensurate with facility complexity and risk that ensures 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.
Exercise scope shall be appropriate for the level of 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. To minimize cost, facilities should coordinate with neighboring installations, NOSCs, and the community when possible.

c. NOSC Exercise Requirements

(1) 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. Therefore, 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 familiarity with the spill scenarios of Navy vessels, all FRPs, SCPs, and SPCRs within their AOR. Where possible, NOSE SMT personnel should be included in facility SMTs to assist the NOSC in providing WCD SMT support for the regulatory requirements of the FRP. NOSCs shall ensure 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 3-year exercise schedule and previous year accomplishments for all facilities in the assigned AOR, as well as for NOSC exercises.

(2) Fleet NOSCs. Fleet NOSCs shall conduct annual SMT exercises to ensure 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 3-year exercise schedule and previous year accomplishments through the use of the Web-based database maintained by COMNAVSEASYSCOM on a near real-time basis.

d. Equipment. Navy spill response equipment shall be drilled and exercised per the designated exercise program (PREP or otherwise) to allow activities listing Navy spill response equipment in their plans to take credit accordingly.

39-3.5. Spill Response. Navy shall respond to Navy OHS spill incidents in such a manner as to retain control of the response 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. OHS Spill Response. Reference (b) describes the roles and responsibilities of DoD in responding to DoD OHS spills. In response to spills:

(1) In the event of an OHS spill from a Navy facility or vessel, Navy will always assume initial responsibility for cleanup;

(2) In the case of an HS release that is on, or the sole source of the release is from, any facility or vessel under the Navy's control, the NOSC assumes the role of the FOSC. As the FOSC, the NOSC will direct the federal response effort, including coordination with the area coordinators and other Federal, State, and local authorities; and

(3) Depending upon the location of the oil spill, EPA or USCG assumes the role of the FOSC. Typically, the EPA or the USCG FOSC will monitor Navy's response effort and advise appropriate action if necessary. The FIC or NOSC shall take all appropriate measures to ensure they maintain control of the OHS incident. If the EPA or the USCG FOSC determines Navy's response is inadequate or inappropriate, then the FOSC has the authority to assume command of response efforts. In the case EPA or USCG assumes command of response efforts, COs and masters of public vessels remain in command of their vessels and personnel.

b. Salvage Related Spills. 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.

c. Collision Spills. Navy will provide immediate spill response assistance, regardless of fault, where a collision between a Navy vessel and non-Navy vessel or structure results in an OHS spill from the non-Navy vessel. In such situations, the numbered fleet commander shall report the spill, monitor the situation, and offer appropriate support to the stricken vessel.

d. Sunken Navy Vessels Oil Spills. Navy retains title to a number of vessels sunk while in Navy service due to armed conflicts, acts of God, or other reasons. Navy response to oil spills from such vessels or oil spills that are reported to be
from such vessels shall be conducted per the procedures in chapter 40 (Sunken Navy Vessels).

e. COMSC Spills. Navy will manage response to OHS spills from vessels owned, operated, or chartered by COMSC as follows:

(1) 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;

(2) Vessels of the Department of Transportation's MARAD Ready Reserve Force (RRF) may be activated to meet sealift requirements identified by U.S. Transportation Command. Operation of MARAD RRF vessels is governed by reference (o). RRF vessels are managed by various commercial ship managers. Administrative control of RRF vessels remains a MARAD responsibility at all times, including activation, crewing, training, logistical support, maintenance, and repair. OCPON of activated vessels tendered to DoD will be exercised by COMSC. MARAD will provide oil spill liability insurance coverage for RRF vessels under COMSC OCPON and will manage oil spill response for those vessels while under COMSC OCPON. MARAD will pay any deductibles for their insurance policy. COMSC, or the NOSC for oil spill response, reserves the right to manage the spill response as incident (or unified) commanders, provided they expressly relieve the MARAD of management and liability responsibility during a spill incident. In such cases, MARAD will continue its insurance coverage as a potential financial and management resource;

(3) Vessels under bareboat charter (or long-term build-to-charter lease) to COMSC and operated by COMSC exclusively for the benefit of the United States are public vessels of the United States for the purposes of this manual. 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; and

(4) Commercial vessels under time or voyage charter to MSC are not considered public vessels under applicable U.S. law, and are subject to federal pollution prevention and control regulations which derive their authority from reference (a) and CWA OHS provisions. Such time and voyage chartered vessels will manage their own spill response per their OHS SCPs. Under international law, such vessels are entitled to sovereign immunity and are not subject to regulation by foreign nations.
f. Non-Navy Spills (other DoD). The FOSC may request Navy response assistance for non-Navy spills. Navy will respond to such requests under the terms and conditions of references (b) and (m) and Navy's SUPSALV and USCG Interagency Agreement for Pollution Response. In the case of large marine oil discharges, requests for Navy assistance from the Defense Logistics Agency, Marine Corps, or other DoD components are particularly likely. Navy response to such requests shall be consistent with procedures established by DoD and any applicable inter-Service agreement.

g. Non-DoD Spills. As one of 16 Federal agencies comprising the national response team (NRT), the federal response organization tasked with coordinating OHS spill response and contingency planning efforts, DoD and its component services must, upon request of the FOSC, provide any response assistance they can for non-DoD spills, insofar as such assistance would not impair DoD mission readiness. 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.

h. SUPSALV Assistance. In the case of a large or salvage-related pollution incident or an OHS spill that exceeds local capabilities, the NOSC shall consider activating SUPSALV personnel, equipment, and expertise. SUPSALV is one of several national special teams named in the NCP as available to provide assistance to the FOSC (reference (b)).

i. Basic Ordering Agreements. If a spill exceeds a facility's response capabilities and BOA resources are needed, the CO 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.

39-3.6. Reporting. Navy vessels and shore activities in the United States shall report OHS spills immediately upon discovery per section 39-3.6.a to the National Response Center (NRC) at 1-800-424-8802 or (202) 267-2675. NRC is the 24-hour OHS spill notification center, located at USCG Headquarters in Washington, D.C. It is the single Federal notification point (outside the Navy chain of command) for emergency spill response and is responsible for notifying the predesignated FOSC of reported OHS pollution incidents. Activities shall not delay NRC notification 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 NRC.

a. Reporting Requirements

(1) National Response Center

(a) Navy commands shall report any spills or discharges to NRC which meet or exceed the amounts described below:

1. Any discharge of oil in quantities that may be harmful to the environment; defined by CWA regulations as a discharge 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;

2. No report is needed for discharges from properly functioning vessel engines, or discharges verified by monitoring equipment to contain less than 15 parts per million (ppm) oil, regardless of the presence of sheen. These discharges have been determined not to be harmful and therefore are exempted from the reporting requirements;

3. Any discharge of oil that threatens to reach the navigable waters of the United States; and

4. Any release of an HS in the United States, its territories, possessions, or navigable waters in excess of quantities proscribed by reference (p).

(b) When in doubt, Navy personnel shall be mindful of environmental stewardship responsibilities and report.

(2) Vessels. While public vessels are generally exempt from State and Federal reporting requirements, COs and masters of Navy vessels shall immediately report the fact and nature of an OHS spill from their vessels per chapter 35 (Environmental Compliance Afloat) and ensure naval messages are sent per appendix C (Message Formats). COs and masters of Navy vessels shall:
(a) For spills between 0 and 12 nautical miles (NM) from the U.S. coast, report the spills to NRC and the chain of command, and notify the shoreside NOSC or cognizant facility CO by the most expeditious means possible. Facility COs or shoreside NOSCs shall implement the applicable NOSC plan;

(b) For spills outside 12 NM from the U.S. coast, report the spills to the chain of command and the fleet NOSC. The fleet NOSC shall report spills occurring within 200 NM of the U.S. coast to the NRC within 24 hours of receiving the initial report from the spilling vessel and implement the applicable fleet NOSC plan; and

(c) For spills in foreign ports, immediately notify the chain of command and the appropriate NOSC.

(3) Hazardous and Extremely Hazardous Substances. In addition to the reporting requirements set forth above, EPCRA and chapter 26 (Procedures for Implementing the Emergency Planning and Community Right-to-Know Act) require all activities to report to the state emergency response commission and local emergency planning committee any release of a reportable quantity of an HS or an extremely hazardous substance (EHS) that crosses the facility boundary or escapes into the atmosphere.

(4) Internal Navy. 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:

(a) Any OHS spill reported to the NRC, state, or local authorities;

(b) Any discharge of oil in quantities that may be harmful to the environment; defined by CWA regulations as a discharge which 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 navigable water or upon adjoining shorelines;

(c) No report is needed for discharges from properly functioning vessel engines, or discharges verified by monitoring equipment to contain less than 15 ppm oil, regardless of the presence of sheen. These discharges have been determined not to be harmful and therefore are exempted from the reporting requirements; and
(d) 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 operations event and incident report (OPREP 3) as prescribed by reference (q).

b. Reporting Procedures

(1) Reports shall be made through the chain of command and NOSC as follows:

(a) By voice immediately upon discovering the spill;

(b) By official Navy message in the format provided in appendix C (Message Formats) as soon as practicable; and

(c) 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.

(2) Note: If NRC or state or local authorities are called, or if in doubt, send a Navy message. Sending an OPREP 3, situation report, or other message does not substitute for the requirement to submit the OHS message detailed in appendix C (Message Formats).

c. Message Formats for Oil Spill and HS Release Reports. Appendix C (Message Formats) outlines a format for reporting oil discharges and HS releases to the Navy chain of command.

d. Excess Navy Property. Caretakers shall continue to report OHS spills from excess Navy property until management and control is passed to local reuse authorities.

e. Sheen Sightings. Responsible environmental stewardship and longstanding maritime tradition require COs report to proper authorities any oil on the water's surface discovered in the course of daily operation whether at sea or in port and whether attributable to Navy sources or not. Accordingly, COs 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 a responsible party cannot be identified from currently available information. No report is needed for discharges from properly functioning vessel engines, or discharges verified by monitoring equipment to contain less than 15 ppm oil, regardless of the presence of sheen. These discharges have been determined not to be harmful and therefore are exempted from the reporting requirements.

f. Penalties. Federal law provides criminal penalties for failure to report OHS spills. In addition, State and local jurisdictions may impose reporting requirements that differ from Federal requirements. Facilities must be aware 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.

g. Reporting OHS Spills Outside the United States. When reporting OHS spills outside the United States, facility commanders should refer to the appropriate NOSC plan, FGSs and subsequent SPCR plans for host nation reporting requirements. COs and masters of Navy vessels shall follow policy as described in chapter 35 (Environmental Compliance Afloat).

39-3.7. Natural Resources Trusteeship. NCP regulations assign roles and responsibilities to certain Federal and State agencies to provide for efficient, coordinated, and effective action to minimize damage from oil discharges and HS releases and protect natural resources held in trust for the public (reference (b)). These trustees 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. After an OHS spill incident, the Secretary of Defense is responsible for protecting natural resources within Navy management and control. For additional discussions of trustee responsibilities and natural resource damage assessment procedures, refer to chapter 41 (Natural Resource Damage).

39-3.8. 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 (i), (r), (s), and (t), including establishment of a process safety management program to prevent or mitigate catastrophic chemical workplace emergencies and the requirement for employers to have an emergency action plan. In addition, 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.

39-3.9. Navy Web Site Reporting. COMNAVSEASYSCOM maintains a Web site to coordinate the NOSC review of OHS spill messages for spills within their AOR. NOSCs should validate the reported data on the OHS spill database Web site (refer to appendix E (Web Sites) for Web site address).

39-4 Responsibilities

39-4.1. Naval forces commanders shall:

a. Develop and periodically update an area-wide OHS spill contingency planning instruction specifying NOSC responsibilities for OHS spill contingency planning and response in the AOR and request technical assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM, as needed;

b. Establish contingency planning and response policies in their areas consistent with this manual;

c. Establish a spill response training program consistent with this chapter and regulatory requirements and request assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM, as needed; and

d. Pre-designate NOSCs to plan for and direct response efforts to OHS spills throughout their AORs.

39-4.2. Budget submitting offices (BSO) shall:

a. Fund OHS spill response expenditures beyond the capability of the Navy subordinate activity ultimately responsible for the cost of spill cleanup from existing funds;

b. Ensure 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) receive the general overview spill response training per section 39-3.3 and introductory or executive overview training in emergency response management and become familiar with the provisions of this chapter; and
c. Ensure facilities fully comply with Federal, State, international, and foreign laws and regulations for spill prevention, preparedness, and response.

39-4.3. Commander, Navy Installations Command (CNIC) shall:

a. Identify and fund shoreside oil spill preparedness and response preparedness requirements;

b. Provide oversight of shoreside NOSCs ensuring all required training, drill, and exercise requirements are met and appropriately documented;

c. Provide oversight of shore installation and facility OHS contingency planning and response requirements ensuring 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 and provide information to OPNAV (N45) and 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; and

f. Develop and establish a spill response training program policy guidance ensuring 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) receive general overview spill response training per section 39-3.3 and introductory or executive overview training in emergency response management and become familiar with the provisions of this chapter and request technical assistance from COMNAVSEASYSCOM and COMNAVFACENGCOM, as needed.

39-4.4. COMNAVSEASYSCOM shall:

a. As requested by naval forces commanders, 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 with guidance about current worldwide regulatory compliance and in worst case spill scenario planning;

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;

e. Maintain a list of current NOSC contact information and provide to ships upon request;

f. Collect status of fleet and shore NOSC plans, exercise accomplishments and requirements, and equipment readiness;

g. Collect status of shoreside NOSC plans, exercise accomplishments and requirements, and equipment readiness via CNIC;

h. Provide OPNAV (N45) with an annual readiness assessment of Navy's spill response program based upon fleet NOSC contingency plan status, CNIC NOSC input, results of training exercises, and OHS spill reports;

i. Determine requirements for, as well as budget for and obtain investment category equipment for, major and salvage-related spill response;

j. Ensure sufficient expertise exists to operate Navy's equipment inventory for major and offshore spill events and that equipment is available for immediate response;

k. As requested, support COMNAVFACENGCOM by providing technical advice to OPNAV (N45) in review of requests by Navy shore commands to participate in spill cooperatives;

l. Provide a Web-based mechanism for the reporting of lessons learned from major drills, exercises, and spill events;

m. As requested, assist NAVSAFENVTRACEN with development of technical content of associated training courses;

n. Upon request and as resources allow, assist NOSCs in meeting WCD exercise requirements for testing and exercising Navy capabilities to respond up to worst case spill scenarios;
o. Upon request and as resources allow, assist fleet NOSCs in meeting exercise requirements;

p. Upon request and as resources allow, support fleet commanders in execution of various OHS exercises and drills under the overall requirements of the fleet NOSC plans;

q. Ensure Navy's equipment inventory for major and offshore spill events is drilled and exercised per this manual;

r. Notify all Navy regions within the United States indicating the status of these drills and exercises so the regions may take credit for readiness, when appropriate;

s. Maintain a Navywide OHS spill report database and provide Navy periodic and annual reports of OHS release to OPNAV (N45);

t. Assist NOSCs in major OHS pollution response issues as they arise and in decision-making for major or offshore and salvage-related response operations;

u. Provide expertise and equipment at the request of the NOSC for spills exceeding local capability including WCD, offshore, or salvage-related OHS pollution incidents;

v. Provide advice, personnel, and equipment, as appropriate, for joint salvage and pollution operations; and

w. Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

39-4.5. COMNAVFACENGCOM shall:

a. Provide primary support to CNIC to prepare response planning guidance covering the determination and evaluation of response resources for FRPs, spill response equipment planning levels and criteria, and a standardized methodology for calculating equipment requirements and converting plan recovery requirements into spill response equipment types and quantities;

b. Maintain technical, legal, and logistic expertise in the OHS Spill Response Regulatory Program arena and stay abreast of planning developments and changing guidance to provide facilities with accurate up-to-date OHS spill response planning compliance guidance;
c. Assist shoreside COs with the development of OHS spill contingency and response plans by preparing and maintaining guidance that includes minimum content requirements and essential elements for compliance with current regulations;

d. 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;

e. Determine requirements for, as well as budget for and obtain, investment category equipment for inland water and harbor oil discharge control;

f. As requested, provide technical advice to OPNAV (N45) in review of requests by Navy shore commands to participate in spill cooperatives;

g. Provide technical assistance and advise CNIC and other BSOs, as requested;

h. As requested, assist NOSCs in the determination of emergency response training needs;

i. As requested by NAVSAFENVTRACEN, provide assistance in the development of technical content for training curricula and courses;

j. Assist shoreside NOSCs and facilities in meeting exercise requirements;

k. Coordinate Navy access to USCG BOAs for response to spills beyond the capability of the facility; and

l. Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

39-4.6. NAVSAFENVTRACEN shall:

a. Develop curricula and delivery mechanisms for comprehensive courses of instruction that meet training requirements as referenced in chapter 3 (Environmental Readiness Training) and request assistance from COMNAVFACENGCOM and COMNAVSEASYSCOM in development of technical content of associated training and courses, as applicable; and
b. Deliver training necessary to meet the requirements of this chapter or as negotiated with sponsors of environmental training.

39-4.7. Fleet NOSCs shall:

a. Develop area-wide fleet NOSC plans per naval forces commander's instructions, coordinate these plans with adjacent shoreside NOSCs, and request assistance from COMNAVSEASYSCOM as needed;

b. Coordinate fleet planning and operations and ensure Navy senior officer present afloat (SOPA) instructions contain guidance for fleet OHS spill response 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, and conduct a complete review and submit for signature at least every 5 years;

e. Ensure all staff with OHS response responsibilities are 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. For a vessel spill that produces a visible sheen between 12 NM and 200 NM from the United States, the NOSC shall report the spill to NRC at 1-800-424-8802 or (202) 267-2675 within 24 hours of receiving the initial report from the spilling vessel;

h. Coordinate review of OHS spill messages for spills within the AOR, and validate reported data on the COMNAVSEASYSCOM—maintained OHS spill database Web site;

i. At least annually, provide COMNAVSEASYSCOM with a status of the NOSC plans and exercises, including accomplishments, upcoming exercises, or plan reviews or revisions through the use of a Web-based database maintained by COMNAVSEASYSCOM on a near real-time basis;
j. Ensure 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 and 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 12 NM unless otherwise directed by the naval forces commander; and

n. Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

39-4.8. Shoreside NOSCs (in U.S. areas) shall:

a. Ensure Navy facilities within assigned AOR can control, contain, and cleanup OHS spills, and evaluate impacts to natural resources;

b. Serve as the FOSC under reference (b) 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. Consistent with the cognizant naval forces commander's instructions, develop area-wide NOSC plans, and coordinate the development of the plans with the applicable regional contingency plans (RCP) and ACPs;

d. Ensure an appropriate plan(s) covers all facilities and vessels within their AOR and request assistance from COMNAVFACENGCOM, as needed;

e. Coordinate with other DoD component oil spill contingency (OSC) plans, including Marine Corps plans, to the extent specified by DoD or as required by any Navy or DoD component inter-Service agreement;

f. Maintain the NOSC plan for currency on an annual basis, validate notifications quarterly, conduct a complete review and update of the NOSC plan (including any changes resulting from a
review of SPCR plan changes within the AOR), and submit it for signature at least every 5 years;

g. Coordinate shoreside NOSC plans with fleet planning and operations;

h. Establish a spill response training program consistent with this chapter and regulatory requirements and ensure all staff with OHS response responsibilities are properly trained and maintain their competencies;

i. Coordinate planning efforts for WCD exercises at facilities within the assigned AOR;

j. Thoroughly review and approve Annual Allowance Requirements Requests (A2R2) from each facility within the assigned AOR, forward a consolidated and prioritized request list to COMNAVFACENGCOM, and coordinate an exercise schedule for all facilities in 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 and 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 facilities within the NOSC's AOR receive credit for oil spill removal organization drills and exercises conducted within the response area;

m. Promptly notify Federal, State, regional, and local authorities of spills in their AOR, per all Navy, Federal, State, and local OHS spill notification procedures;

n. Coordinate review of OHS spill messages, NRC reports, and local reports for spills within their AOR and validate reported data on the COMNAVSEASYSCOM-maintained OHS spill database Web site;

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 or revisions through the use of a Web-based database maintained by COMNAVSEASYSCOM on a near real-time basis;
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 regional response team (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 incorporation of WCD response into the NOSC plans;

u. Direct all major response efforts for Navy OHS spills within assigned shoreside boundaries, including coastal areas out to the 12 NM zone unless otherwise instructed by the naval forces commander;

v. Coordinate with Navy's EM program while carrying out responsibilities under this chapter;

w. At least annually, provide COMNAVSEASYSCOM with a status of the NOSC plans and exercises, including accomplishments, upcoming exercises, or plan reviews or revisions; and

x. Review RMPs developed per chapter 22 (Clean Air Ashore) for accidental releases of EPA HS regulated under CAA.

39-4.9. Shoreside NOSCs (in foreign areas) shall:

a. Ensure Navy facilities within assigned AOR can control, contain, and cleanup OHS spills, and evaluate impacts to natural resources;

b. Develop overseas NOSC plans, consistent with the cognizant naval forces commander's instructions, FGS, and OEGBD, and coordinate the development of these plans with applicable host nations;

c. Ensure an appropriate NOSC plan(s) covers all facilities and vessels within their AOR and request assistance from COMNAVFACENGCOM, as needed;
d. Coordinate with other DoD component OSC plans, including Marine Corps plans, to the extent specified by DoD, or as required by any Navy or DoD component inter-Service agreement;

e. Maintain the NOSC plan for currency on an annual basis, validate notifications quarterly, conduct a complete review, update the NOSC plan (including any changes resulting from a review of such changes within the AOR), and submit for signature at least every 5 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 and ensure all staff with OHS response responsibilities are properly trained and maintain their competencies;

h. Coordinate planning efforts for WCD exercises for facilities within assigned AOR;

i. Thoroughly review and approve A2R2 requests from facilities within assigned AOR and 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;

l. Promptly notify foreign country authorities of spills per foreign country notification requirements and within the guidelines established by the OEBGD and applicable FGS;

m. Coordinate review of OHS spill messages for spills within their AOR and validate reported data on the COMNAVSEASYSCOM-maintained OHS spill database Web site;

n. At least annually, provide CNIC with a status of plans and exercises for all facilities within their AOR including accomplishments and upcoming exercises or plan reviews or revisions of NOSC plans and exercises through the use of a Web-based database maintained by COMNAVSEASYSCOM on a near real-time basis;
o. Oversee response operations for Navy OHS spills within assigned areas and coordinate response operations with adjacent NOSCs and with applicable foreign nation agencies;

p. Ensure the health and safety of response personnel at any point during on-scene responses;

q. Pre-assign geographic areas for response by Navy shore facilities;

r. As appropriate with host nation agreements, mitigate OHS spills from Navy vessels and activities and reimburse other commands that provide assistance;

s. As needed, coordinate SUPSALV response assistance for spills beyond local capability including incorporation of WCD response into the NOSC plans;

t. Direct all major response efforts for Navy OHS spills within assigned shoreside boundaries, including coastal areas out to the 12 NM zone unless otherwise instructed by the naval forces commander; and

u. Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

39-4.10. Shoreside COs shall:

a. Develop, annually review, and periodically update FRPs, SCPs, or SPCR plans per this chapter, OEBGD, or applicable FGS and coordinate these plans with the NOSC plans;

b. Review FRPs or SCPs for consistency with appropriate state and local environmental and emergency planning authorities;

c. Provide the NOSC with WCD scenarios from completed FRPs or SCPs so these may be incorporated into the NOSC plans;

d. At least annually, provide the NOSC with the status of plans and exercises including accomplishments and upcoming exercises or plan reviews or revisions;

e. Maintain the readiness of the Navy spill response personnel and equipment assigned to the facility;

f. Forward completed A2R2 requests to the NOSC;
g. Properly train assigned staff responsible for OHS response;

h. Tailor training curricula to include state and local emergency response laws and regulations;

i. Maintain training records and documentation as required by Federal, State, and local regulations;

j. Accomplish all required exercises and support the regional SMT when requested by the NOSC;

k. Incorporate drill and exercise requirements into routine business or other emergency drills wherever practicable;

l. Make all required Federal, State, and local notifications for Navy OHS spills and make Navy chain of command notifications up to the NOSC level;

m. Oversee response efforts for Navy OHS spills as the FIC within pre-assigned areas until response is completed or relieved by the NOSC. If requested by the NOSC, oversee response efforts outside the facility's boundaries until relieved by the NOSC;

n. Mitigate OHS spills from vessels and activities and reimburse other commands that provide assistance when appropriate; and

o. Coordinate with Navy's EM program while carrying out responsibilities under this chapter.

39-5 Definitions

39-5.1. Area Committees. Area committees are the Federal, State, and local agencies that cooperate to prepare an area contingency plan and work with Federal, State, and local officials to pre-plan joint response efforts.

39-5.2. Area Contingency Plan. An ACP is a plan prepared by the area committee 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.
39-5.3. **Complex Facility.** A complex facility is a facility that possesses a combination of transportation-related and non-transportation-related components subject to the jurisdiction of more than one Federal agency under part 311, paragraph (j) of reference (b).

39-5.4. **Discharge.** Discharge includes any spilling, substantial threat of spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil. It excludes:

   a. Discharges permitted under CWA;

   b. Discharges resulting from circumstances identified, reviewed, and made a part of the public record regarding a permit issued or modified under CWA, and subject to a condition in such permit; and

   c. Continuous or anticipated intermittent discharges from a point source identified in a permit or permit application under CWA and caused by events occurring within the scope of a relevant operating or treatment system.

39-5.5. **Facility.** A facility is 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.

39-5.6. **Facility Response Plan.** An FRP is a plan of action for facility spill scenarios required for facilities that meet the threshold requirements of the OPA 90 regulations. These plans, which should be coordinated with the local ACP and NOSC OHS plan, 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.

39-5.7. **Final Governing Standards.** An FGS is a comprehensive set of country-specific substantive environmental provisions containing environmental compliance criteria applicable at DoD installations overseas. FGSs are generally based on the more protective requirements of the OEBGD, host nation or European Union environmental laws and regulations, and applicable international agreements.

39-5.8. **Hazardous Substance.** An HS is:
a. Any substance so designated by 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 CAA;

e. Any imminently hazardous chemical substance or mixture upon which EPA has regulated under the Toxic Substances Control Act; however;

f. The term does not include:

(1) Petroleum, crude oil, 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 Safe Drinking Water Act;

(2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures thereof);

(3) Sewage or sewage and water mix, aqueous film forming foam; or

(4) Other substances not specifically designated by the laws cited above.

39-5.9. Incident Command System. An ICS is 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 and four functional groups (operations, logistics, planning, and finance and administration) that support the incident. 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 (u) mandates the use of NIMS for all federal crisis response. ICS forms a part of the NIMS.
39-5.10. 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 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.

39-5.11. National Oil and Hazardous Substances Pollution Contingency Plan. Per reference (b), the NCP is the legal framework for Federal government OHS pollution contingency planning and response above the facility level. The NCP describes the RRT and the NRC and designates the roles and responsibilities of DoD in national OHS spill response planning.

39-5.12. Navigable Waters

a. "Navigable waters" or "navigable waters of the United States" means, except where Congress has designed them not to be navigable waters of the United States:

(1) Territorial seas of the United States;

(2) Internal waters of the United States that are subject to tidal influence; and

(3) Internal waters not subject to tidal influence that:

   (a) Are or have been used, or are or have been susceptible to use, by themselves in connection with other waters, as highways for substantial interstate or foreign commerce, notwithstanding natural or man-made obstructions that require portage, or

   (b) A governmental or non-governmental body, having expertise in waterway improvement, determines to be capable of improvement at a reasonable cost (a favorable balance between cost and need) to provide, by themselves or in connection with other waters, as highways for substantial interstate or foreign commerce.

b. Navigable waters of the United States and navigable waters, as used in reference (v), mean:
(1) Navigable waters of the United States as defined in paragraph (a) of this section and all waters within the U.S. tributary thereto; and

(2) Other waters over which the Federal government may exercise constitutional authority.

39-5.13. Oil. Oil is any 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.

39-5.14. Public Vessel. A public vessel is owned (or bareboat chartered) and operated by the United States, or by a state or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

39-5.15. Qualified Individual

a. A QI is the individual identified in spill response plans (such as the FRP or NOSC plan) who:

   (1) Is available on a 24-hour basis and able to arrive at the facility in a reasonable time;

   (2) Is familiar with the implementation of the plan;

   (3) Is trained in the responsibilities of the QI under the plan;

   (4) Has authority to activate the OHS spill response organization;

   (5) Has authority to direct the obligation of funds required to carry out response activities; and

   (6) Will act as a liaison with the predesignated FOSC.

b. NOSCs and facility commanders are assigned these responsibilities but may delegate QI responsibility to trained personnel in their respective plans.

39-5.16. Regional Contingency Plans. 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).

39-5.17. **Regional Response Team.** The RRT is 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. DoD is a member of each RRT and assigns an executive agent from one of the services to each RRT. Navy represents DoD at RRT regions I, III, and IX.

39-5.18. **Release.** A release is any spilling or substantial threat of spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any HS (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS, pollutant, or contaminant). The term "release" excludes:

a. Any spilling, leaking, etc. that results in exposure to persons solely within a work place;

b. Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine;

c. 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 reference (w); and

d. 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.

39-5.19. **Reportable Quantity.** A reportable quantity is a release of a CERCLA or EPCRA listed HS or EHS exceeding the threshold planning quantity (TPQ) for reporting the substance (reference (p)). HS or EHS releases that equal or exceed these TPQs must be reported to Federal, State, and local authorities immediately upon discovery.
39-5.20. **Responsible Party.** The responsible party is the person or persons who have caused, or could potentially cause, a HS release or oil discharge, including the following categories:

a. **Vessels:** Any person owning, operating, or bareboat chartering a vessel, other than a public vessel;

b. **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; and

c. **Offshore Facilities (other than a pipeline or a deepwater port licensed under reference (x)):** 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.

39-5.21. **Significant and Substantial Harm.** Under OPA 90 regulations, EPA; USCG, Minerals Management Service; 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" 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 submitted to the applicable regulators.

39-5.22. **Spill.** The term "spill" is used to include both releases of HS and discharges of oil.

39-5.23. **Spill Contingency Plan.** An SCP is 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 OHS issues.

39-5.24. **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.

39-5.25. **Sunken Navy Vessel.** A sunken Navy vessel is an older, historic vessel that has been sunk due to armed conflict, acts of God, or other reason. Navy retains title over these vessels wherever located.
39-5.26. **Territorial Sea.** For purposes of CWA jurisdiction, territorial sea 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 3 miles. Per reference (y), the United States declared a 12 NM territorial sea for international law purposes. The territorial sea is thus considered 12 NM for the purposes of interpreting international law, and for any other treaty, statute, or regulation, or amendment thereto, interpreted by USCG as incorporating the definition of territorial sea as being 12 NM wide, adjacent to the coast of the United States and seaward of the territorial sea baseline.

39-5.27. **United States.** The United States is comprised of the 50 states, District of Columbia, Commonwealth of Puerto Rico, Commonwealth of the Northern Mariana Islands, Guam, American Samoa, U.S. Virgin Islands, and any other territory or possession over which the United States has jurisdiction.

39-5.28. **Vessel.** A vessel is 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 United States.

39-5.29. **Worst Case Discharge.** A WCD is the largest foreseeable discharge in adverse weather conditions. For specific information on calculating WCD, consult references (d), (e), (f), or (g).
CHAPTER 40

SUNKEN NAVY VESSELS

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40-1 Scope. This chapter outlines environmental response procedures for releases of petroleum products from sources that have been reported to be, or may be identified as, sunken U.S. Navy vessels. This chapter in no way implies or creates any legal liability on behalf of the Navy not otherwise provided by existing U.S. law. Under no circumstances do the procedures described in this chapter obligate Navy to perform any action on any vessel, constitute tacit admission of fault, imply legal liability, or grant authority to obligate funds to carry out preemptive response actions on sunken Navy vessels. Further, this chapter does not create any right or benefit, substantive or procedural, enforceable in law or equity by a party against the U.S. Navy, United States, its agencies, its officers, or any person.

40-1.1. Related Chapters. Chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) describes the plans and procedures to be used if a response is determined to be necessary.

40-1.2. References

  (a) OPNAVINST 4740.2G, Salvage and Recovery Program
40-2 Legislation. The Sunken Military Craft Act contains provisions that pertain to salvage and other activities related to sunken military craft. A summary of this legislation is included in appendix A (Laws and Regulations).

40-3 Requirements

a. Many older, historic U.S. Navy vessels have sunk around the world due to armed conflict, acts of God, or other reasons. As these vessels age, corrosion or other natural processes may result in a failure in hull integrity or associated systems, leading to potential releases of petroleum products into the sea. Such situations can present difficult questions of national sovereignty, jurisdiction, political sensitivity, and legal responsibility. Because each situation is unique, the appropriate U.S. response to potential releases of petroleum products from historic U.S. Navy vessels can only be determined on a case-by-case basis.

b. Upon receipt of a report alleging release of petroleum products from a sunken Navy vessel, Navy will evaluate the incident and implement steps that facilitate an appropriate response under the circumstances. These steps will include initiation of a review or decision panel composed of subject matter experts from pertinent commands, allocation of responsibilities, and recommendations for appropriate responses, if any, based on the existing circumstances presented by the release incident on a case-by-case basis.

40-3.1 Review Panel. Upon notification or discovery of a release of petroleum products that may be attributed to a sunken Navy vessel, a review panel, convened by the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), will meet to address issues, coordinate actions, and make recommendations to Deputy Assistant Secretary of the Navy (Environment) (DASN(E)) concerning Navy's response to the event. At a minimum, the review panel should include the commands shown in table 40-1.

<table>
<thead>
<tr>
<th>Command</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPNAV, Afloat/Ashore Environmental Systems Integration Branch (OPNAV (N452)) and Chief of Naval Operations (CNO (N4)) Legal Counsel</td>
<td>Policy guidance, resources, legal, environmental planning, public affairs (in coordination with Navy Office of Information)</td>
</tr>
</tbody>
</table>
**Table 40-2. Outline of Procedures**

<table>
<thead>
<tr>
<th>Command</th>
<th>Functions</th>
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<tbody>
<tr>
<td>CNO, Operations, Plans, and Strategy Division (CNO (N3/N5))</td>
<td>Fleet coordination and operational tasking</td>
</tr>
<tr>
<td>Navy Judge Advocate General Admiralty (OJAG Code 11)</td>
<td>Legal</td>
</tr>
<tr>
<td>Office of Legislative Affairs (OLA) - Legislative Division</td>
<td>Congressional inquiries</td>
</tr>
<tr>
<td>Commander, Naval Sea Systems Command, Supervisor of Salvage (SEA 00C)</td>
<td>Technical support, response actions, and environmental planning</td>
</tr>
<tr>
<td>and SEA, Logistics, Maintenance, and Operations Division (SEA 04RE)</td>
<td></td>
</tr>
<tr>
<td>Commander, U.S. Pacific Fleet COMUSPACFLT N01CE1 (COMUSPACFLT Environmental) or Commander, U.S. Fleet Forces Command (COMUSPLTFORCOM) - N465 (as appropriate)</td>
<td>Local support (e.g., assets, media)</td>
</tr>
</tbody>
</table>

**40-3.2. Navy Actions.** Table 40-2 presents an outline of procedures the review panel may follow when notified of a potential release of petroleum products from a sunken vessel. This is a general outline and the actual process used may vary based on the nature of the release, the resources at risk, and other factors.

**Table 40-2. Outline of Procedures**

<table>
<thead>
<tr>
<th><strong>A. Determine Title</strong></th>
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</thead>
<tbody>
<tr>
<td>(1) Evaluate location and probability of vessel being Navy-owned</td>
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<tr>
<td>(2) Investigate any transfers and chain of custody</td>
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<tr>
<td><strong>B. Determine Risk</strong></td>
</tr>
<tr>
<td>(1) Conduct literature and document research on sinking</td>
</tr>
<tr>
<td>(2) Determine ship condition</td>
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<tr>
<td>(3) Determine expected quantity of fuel aboard</td>
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<tr>
<td>(4) Evaluate need for a physical survey</td>
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<tr>
<td>(5) Evaluate feasibility of conducting surveys (including technical approach and cost)</td>
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<tr>
<td>(6) Evaluate applicable law, if any</td>
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<tr>
<td><strong>C. Determine Appropriate Response</strong></td>
</tr>
<tr>
<td>(1) Assess and survey the scene, as needed</td>
</tr>
<tr>
<td>(2) Determine options and alternatives</td>
</tr>
<tr>
<td>(3) Provide recommendations to the chain of command</td>
</tr>
<tr>
<td><strong>D. Respond if Appropriate for the Circumstances</strong></td>
</tr>
</tbody>
</table>

**40-3.3. Coordination with Other Agencies.** The review panel shall assist DASN(E) in coordinating with other Federal and State agencies that may have jurisdiction over property or resources that may be affected by operations on sunken vessels, or with delegating authority to coordinate with other agencies. The Federal agencies involved may include such entities as the Department of State, Department of Interior, U.S. Coast Guard,
Environmental Protection Agency, and National Oceanic and Atmospheric Administration. The level of assistance required will vary depending on the nature of the actions considered or taken.

40-3.4. **Funding.** Advance programming for funds is not an available option in the case of unspecified future release response actions. If the review panel determines site surveys are needed to fully assess the risk or response, or follow-on remediation operations are warranted for a specific incident, coordination with Assistant Secretary of the Navy (Financial Management and Comptroller) and Office of Budget shall be initiated to identify potential funding options for each incident on a case-by-case basis. When advance planning is possible, claimants shall use the program objective memorandum and program review process to identify necessary funds.

40-4. **Responsibilities.** The review panel will make recommendations to DASN(E) concerning the Navy’s appropriate response for each vessel on a case-by-case basis. Pertinent factors to be considered when addressing releases from sunken Navy vessels include legal liability, political implications, technical feasibility of response, magnitude of the release, historical significance of the vessel, whether the vessel may contain human remains, environmental impacts, interest by foreign governments, and interest from other U.S. government agencies. Release of information and decisions from review panel deliberations must be carefully managed. DASN(E) or a designee shall approve any release to outside agencies of information developed or decisions reached by the review panel. OPNAV (N45) and DASN(E) shall approve the distribution to the media of any information developed or decisions reached. Responsibility for other actions shall be assigned as follows:

40-4.1. **OPNAV (N45) shall:**

   a. Convene and chair a review panel as required after receipt of a report alleging release of petroleum products from a sunken Navy vessel;

   b. Provide policy guidance, resources, legal, environmental planning, and public affairs information and guidance; and

   c. CNO (N4) Legal Counsel shall coordinate any legal issues that arise with OJAG Code 11 and Office of the General Counsel (Installations and Environment), as well as legal
representatives from other commands represented on the review panel.

40-4.2. CNO (N3/N5) shall provide fleet coordination and operational tasking information and guidance; and program, budget, and allocate funds for all identified installation Emergency Planning and Community Right-to-Know Act requirements.

40-4.3. OJAG Code 11 shall provide legal advice and information relating to admiralty and salvage issues.

40-4.4. Navy OLA shall perform duties relating to receiving and responding to Congressional inquiries about sunken vessel issues.

40-4.5. SEA 00C and SEA 04RE shall:

   a. Work with the Navy Historical Center to research the subject vessel as a potential source of the release. If there are any questions surrounding ownership or title, OJAG Code 11 shall provide support to resolve such issues prior to conducting a risk assessment. Only where the vessel in question is determined to be a Navy vessel will the review panel determine the appropriate actions, if any; and

   b. Per reference (a), work with the applicable fleet staff in developing risk assessments including ship information, alternative response actions, and potentially affected resources. SEA 00C and fleet staff representatives shall summarize the information and present options for action to the review panel for consideration. If DASN(E) determines on-scene response actions are appropriate, SEA 00C shall assume technical lead and work with the appropriate fleet to ensure effective use of Navy resources. Environmental planning, if required for proposed actions, shall be coordinated through OPNAV, Operational Readiness and Planning Branch (OPNAV (N456)) and SEA 04RE.

40-4.6. COMUSFLTFORCOM or COMUSPACFLT shall provide local support (e.g., assets, media) as needed.

40-5 **Definitions.** There are no definitions for this chapter.
CHAPTER 41

NATURAL RESOURCE DAMAGE

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41-1 Scope. This chapter establishes Chief of Naval Operations (CNO) requirements, guidelines, and standards for the assessment of damages arising from the sudden and or current release of oil and hazardous substance (OHS) and historical contamination that injures or threatens to injure the natural resources of the United States. This chapter also describes the responsibilities and conduct of the Navy regional environmental coordinator (REC) when acting as the Federal trustee for natural resources on behalf of the Assistant Secretary of the Navy (Energy, Installations, and Environment (ASN(EI&E))).

41-1.1. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) provides guidance on National Environmental Policy Act (NEPA) regulations, chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) identifies requirements to prepare for and respond to OHS spills, chapter 42 (Environmental Restoration) provides information regarding the cleanup process under the Comprehensive Environmental Response, Compensation,
and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) for past releases of OHS, and appendix C (Message Formats) provides message formats.

41-1.2. References

(a) DoDI 4715.6

(b) 33 U.S.C. §2701

(c) 15 CFR 990

(d) E.O. 12777, Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as amended, and the Oil Pollution Act of 1990

(e) 40 CFR 300

(f) USD(AT&L) Memorandum of 18 Feb 2011, Delegation of DoD Trustee Responsibilities for Future Natural Resources Damage Assessment Issues

(g) SECNAV Memorandum of 13 Jun 2011, Delegation of Natural Resources Trustee Authorities under The Oil Pollution Act of 1990

(h) PDASH (E,I&E) Memorandum of 11 Mar 2013

(i) 42 U.S.C. §9607

(j) 43 CFR 11

(k) E.O. 12580, Superfund Implementation

(l) DOD Instruction 4715.7 of 22 April 1996

(m) CNO ltr 5090 Ser N453E/1U595846 of 21 Dec 01 (NOTAL)

(n) 43 U.S.C. §1651

(o) 40 CFR 6

(p) U.S. Coast Guard, NPFC User Reference Guide

41-1.3. **Applicability.** This chapter applies to sudden and or current releases of OHS from any source and from historical contamination from any source that injures or threatens to injure natural resources of the United States within Navy management or control. In addition, it also applies to sudden and or current and historical OHS releases originating from Navy sources (including public vessels) that injure or threaten to injure the natural resources of the United States wherever found.

41-2 **Legislation**

a. The following legislation contains provisions that assign trustee responsibilities for the protection of natural resources and the assessment of damages caused by OHS releases:

   (1) Clean Water Act (CWA);

   (2) CERCLA;

   (3) Federal Water Pollution Control Act;

   (4) NEPA; and

   (5) Oil Pollution Act of 1990 (OPA 90).

b. A summary of this legislation is included in appendix A (Laws and Regulations).

41-3 **Requirements**

a. 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. Reference (a) states that it is DoD policy to comply with applicable Federal, State, and local environmental requirements. If natural resources under DoD control are damaged by an HS releases by another party, that party is potentially liable.

b. This manual maintains a distinction between physical injury to natural resources (natural resources injury (NRI)) and monetary damages arising by law from such injury (natural resources damage (NRD)). Additionally, there is a distinction between response to a sudden and or current release of OHS and
remediation of historical releases from past Navy activities that cause or potentially cause NRI under Navy management and control.

41-3.1. **Navy Roles as Trustee and Potentially Responsible Party**

a. **Trusteeship.** Natural resources trustees (NRT) are Federal, State, and Indian tribe officials authorized to act on behalf of the public for natural resources under their respective trusteeship.

   (1) **In the Case of an Oil Spill**

   (a) Reference (b) provides for the designation of Federal, State, Indian tribe, and foreign NRTs 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 NRD 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) Reference (b) also provides that the President, acting through the Department of Commerce or the National Oceanic and Atmospheric Administration (NOAA), shall issue regulations for the assessment of NRD 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 per reference (c) for the use of authorized trustees in executing such assessments.

   (d) Reference (d), in turn, designates the Secretary of Defense (SECDEF) as an authorized Federal trustee for natural resources and directs trustees to exercise the duties defined in reference (e). It also designates the Secretaries of Interior, Agriculture, Commerce, and Energy as federal trustees for natural resources.

   (e) Per reference (f), SECDEF has permanently delegated trustee authority under OPA 90 to the services, and,
per reference (g), Secretary of the Navy in turn has permanently delegated trustee authority to ASN(EI&E). ASN(EI&E) has delegated trustee authority to OPNAV (N45) under OPA 90 in reference (h). The delegation requires that OPNAV (N45) obtain prior approval from the Deputy Assistant Secretary of the Navy, Environment before pursuing any affirmative monetary claim against a private party. The delegated NRT authority may be further delegated to appropriate Senior Executive Service civilians or flag or general officers. Accordingly, Navy RECs should ask the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)) for assistance in securing authority to proceed as a NRT when required.

(2) In the Case of HS Releases

(a) Reference (i) provides for the designation of Federal and State NRTs 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 an HS. Reference (i) also recognizes the authority of Indian tribes to commence actions as NRTs. Damages recovered by 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) Reference (i) requires the issuance of two types of procedures for the assessment of these NRD. Assessments performed by Federal and State trustees under either regulation are accorded a rebuttable presumption of reasonableness.

(c) Department of Interior (DOI) has issued reference (j), establishing two types of NRD assessment (NRDA) regulations: Types A and B. The Type A procedure 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 procedure is only applicable to minor spills in coastal and marine environments or the Great Lakes. The Type B procedure establishes alternative protocols for calculating NRD based upon the cost of restoring, rehabilitating, replacing, or acquiring equivalent resources and is used when the Type A procedure is not applicable. The Type B procedure also allows for the assessment of all uses lost to the public pending restoration or rehabilitation of the injured resource.
(d) Reference (k) also designates the Secretaries of Defense, Interior, Agriculture, Commerce, and Energy as federal trustees for natural resources under CERCLA. Reference (k), in turn, delegates that authority from SECDEF to the Secretaries of the Military Departments.

(e) At the time of the publication of this manual, ASN(I&E) has not delegated standing trustee authority under CERCLA to CNO.

(3) Sudden and or Current Release. In the event of a sudden and or current release to, or historical contamination of, property under Navy management and control, Navy, in its role as NRT, is to seek compensation or financial participation from parties responsible for injuries to natural resources within Navy management or control.

b. Potentially Responsible Party. Section 107 of reference (i) provides the circumstances under which a person (defined to include the United States) may be a potentially responsible party (PRP) for HS releases. As a PRP for sudden and or current releases of OHS, Navy will participate in NRDA and restoration processes instituted by lawfully directed NRTs. In the case of historical contamination due to past releases for which Navy has been identified as a PRP, the Environmental Restoration (ER) Program discussed in chapter 42 (Environmental Restoration) provides policy guidance. Under the ER Program, Navy participation in the process to ascertain monetary damages for NRI is constrained by budgetary considerations. According to reference (m), ER, Navy funds may not be used to determine monetary damages resulting from NRI, whether the resource is owned by Navy or another party. Refer to chapter 42 (Environmental Restoration) for a full discussion of ER matters.

c. Navy Policy when Navy is Both an NRT and a PRP. There may be circumstances where Navy is both an NRT and a PRP. In such circumstances there may be other PRPs that share responsibility for the NRI, and other state or tribal trustees with whom Navy acts as co-trustee. In such cases, the role of the NRT and PRP is inherently in conflict. Navy RECs that have been delegated responsibility as NRTs when Navy is also a PRP shall seek guidance from REC counsel, who shall coordinate with OPNAV (N45) and the Secretariat, as necessary, to determine the appropriate course of action.
41-3.2. Injury or Potential NRI Resulting from a Sudden and or Current Release of OHS. For an incident resulting from a sudden and or current release of OHS by a party that injures, or threatens to injure, natural resources under Navy management and control, the Navy REC may be delegated responsibility from ASN(EI&E) to act as NRT. As the on-scene officer with oversight over natural resources under Navy management and control, and if designated as NRT subsequent to a release, the Navy REC is responsible to execute certain actions before, during, and after a sudden and or current release of OHS incident.

a. Prior to the Incident. As a trustee of resources under the Navy's management and control, the Secretary is responsible for conducting pre-incident planning to help ensure any assessment results in technically sound and cost-effective restoration and to restore to baseline resources injured by OHS releases.

(1) Pre-Incident Planning. In anticipation of being called upon to act as NRT for natural resources under its management or control, the Navy REC shall coordinate with OHS response organizations and other trustees in its area of responsibility (AOR) to identify:

(a) NRDA teams;
(b) Trustee notification systems;
(c) Support services;
(d) Natural resources and services at risk;
(e) Area and regional response agencies and officials;
(f) Available baseline information;
(g) Data management systems;
(h) Assessment funding issues and options; and
(i) State trustee NRDA methodologies with reduced procedural requirements for small-scale restoration plans.

(2) Regional and Area Contingency Planning. The Navy REC shall represent the interests of Navy in regional and area
contingency planning activities, including but not limited to contingency plan development, drills, and exercises. The Navy REC shall ensure Navy on-scene coordinator (NOSC) plans incorporate Navy natural resource expertise into the management of spill response, both real time and on-scene, to evaluate and mitigate potential NRI. NOSC plans should be seamlessly integrated with regional and area contingency plans and provide for coordination between DoD and non-DoD NRTs.

(3) **Baseline Assessment.** The collection and maintenance of ecological information required by chapter 35 (Environmental Compliance Afloat) are essential to pre-incident planning on behalf of the Navy REC. Baseline data may include, but should not be limited to:

(a) U.S. Coast Guard (USCG) shoreline assessment maps;

(b) NOAA environmental sensitivity index maps;

(c) Studies conducted by and reports issued by regional educational institutions or governmental agencies that describe natural resources within Navy management or control;

(d) Integrated natural resource management plans; and

(e) Navy studies and 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).

b. **During the Incident**

(1) **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. Each Navy activity facility response team (FRT) shall execute OPNAV Form 5090/4 Preliminary Impact and Exposure Report (PIER) within 6 hours of release notification. The PIER records observable NRI and services by an OHS release. The FRT shall, by close of business the next business day, deliver the PIER to the Navy REC. When, in the view of the Navy REC, the PIER warrants a more detailed survey of NRIs, the Navy REC shall activate
facilities engineering commands (FEC), regional counsel, and comptrollers to execute the responsibilities outlined in section 41-4. The Navy REC staff shall, in turn, maintain a record of all command PIERs for at least 3 years.

(2) Mitigation of Damages. Upon notification or discovery of an injury or threat of NRI within Navy management or control, the Navy REC shall take appropriate action to mitigate such injury both during and after spill response activities.

(3) Coordination with the Federal On-Scene Coordinator. Some damage assessment activities, such as data collection and analysis, will require coordination with the federal on-scene coordinator (FOSC) in charge of the spill response. The FOSC 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 FOSC via the government liaison official in the FOSC's unified command.

(4) Coordination with Other Trustees

(a) 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. 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 exclusive economic zone (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. The Secretary of Interior acts as the 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. 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.

(b) States and Indian tribes may exercise trustee roles. For example, ASN(EI&E) 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. 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 or her primary and immediate concerns when notified of potential NRI.

(5) **Coordination with the PRP**

(a) The trustees are required to invite the party or parties responsible for NRD to participate in the damage assessment and restoration planning process. Reference (c) requires delivery of such invitations in writing to the PRP not later than the notice of intent to conduct restoration planning. Reference (j) requires delivery of written invitations to the PRP before preparation of an assessment plan.

(b) To mitigate the adversarial nature of the damage assessment process, the Navy REC shall endeavor to include the PRP in trustee activity at the earliest possible opportunity to promote a climate of cooperation and mutual trust. To facilitate cost-effective cooperation, the Navy REC shall negotiate with the PRP and endeavor to enter into a memorandum of understanding (MOU) that provides, among other things, for:

1. Funding of Navy assessment and restoration activities;
2. Consolidation of technical expertise;
3. Review of relevant data;
4. Assessment, planning, implementation, and monitoring milestones; and
5. Dispute resolution procedures.

c. **After the Incident.** The trustees are responsible for assessment of damages to natural resources, presentation of claims for damages to the PRP, recovery of damages, and the development and implementation of a plan for restoration of the injured natural resources or services.

(1) **Formal Assessment.** The trustees must quantify the degree and extent of injuries to natural resources and must determine the source of exposure, pathway, and adverse change to
natural resources or services because of an OHS release incident. They must also assess injuries to a natural resource caused by spill response and cleanup activities.

(2) Restoration Planning Phase. Part 990.23, paragraph (b) of reference (c) requires that the restoration planning by federal trustees be subject to NEPA. Restoration actions required by reference (j) 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.

(a) Evaluation and Selection of Restoration Alternatives. The trustees must evaluate the restoration alternatives developed based upon the criteria listed in references (c) or (j) as appropriate.

(b) 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. 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 Navy is a trustee, the Navy REC should promote Navy's NEPA procedures found in chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114) and shall consult with OPNAV (N45) on relevant NEPA requirements before initiating negotiations with co-trustees.

(c) 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.

(d) Final Restoration Plan. Once trustees have taken public comment on the draft restoration plan, they must develop a final restoration plan.

(3) Damage Claims
(a) Oil. Under reference (c), the trustees may settle claims for NRD, 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 per the restoration plan. Costs incurred by the trustees in the assessment, planning, and implementation process may be reimbursed from these funds.

(b) Hazardous Substances. Under reference (j), the trustees may settle claims for NRD, with or without completing the damage assessment process, provided 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 per the final restoration plan. Costs incurred by the trustees in the assessment, planning, and implementation process may also be reimbursed from these funds.

(4) Restoration Implementation. At the conclusion of damage assessment and restoration planning activities, as described by references (c) and (j), the trustees:

(a) Shall open an administrative record to document restoration implementation phase decisions, actions, and expenditures, as well as modifications to the final restoration plan;

(b) Shall present the PRP with a written demand for the damages determined per references (c) and (j) by certified mail or such other means to establish the date of receipt by the PRP. The demand must also include:

1. Identification of the incident from which the claims arise;

2. Identification of the trustees asserting the claims and a statement of the statutory basis for trusteeship;

3. A brief description of the injuries for which the claim is being sought;
4. An index to the administrative record;

5. A final restoration plan or notice of intent to use a regional restoration plan or existing restoration project; and

6. A request for reimbursement of reasonable assessment costs, the costs of emergency restoration, and interest on the amounts so claimed.

(c) Shall open an account for recovered damages per references (c) and (j). 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.

(5) Restoration Monitoring. The trustees shall assess the success of restoration implementation under the monitoring provisions of the final restoration plan.

41-3.3. NRI from Historical Contamination. If there are natural resources injured or potentially injured by historical contamination due to Navy OHS releases, the provisions of chapter 42 (Environmental Restoration) apply to the response and removal actions. In summary, a preliminary assessment or site inspection is conducted, followed by a remedial investigation or feasibility study (RI or FS). Potential NRI shall be investigated during the ecological risk assessment (ERA) process in the RI phase. NRTs shall be consulted as appropriate during the ERA. To the extent practicable, a response alternative that addresses and minimizes the NRI shall be selected during the FS. It must be noted that NRI is separate and distinct from monetary damages that may be recovered due to NRD. While there is no prohibition against engaging in or participating in NRDA in environmental restoration of historical contamination, ER,N and base realignment and closure funding shall not be used to conduct NRDA whether the resource is owned by Navy or another party.

41-3.4. Damage Assessment

a. Oil Spills. The three phases (i.e., pre-assessment, restoration planning, restoration implementation) of the NRDA process incident to a discharge of oil as detailed in reference (c) are summarized below. Navy policy calls for the use of these procedures regardless of the location of the spill, the

41-13
provisions of OPA 90 notwithstanding. Where an oil spill, regardless of source or physical location, injures or threatens to injure natural resources within Navy management or control, reference (c) shall serve as guidance to Navy activities in the mitigation, assessment, and collection of NRD occasioned by such spill. Where oil spills from Navy vessels or facilities result in NRI not within Navy control, Navy will encourage trustees conducting NRDA to use the procedures in reference (c).

(1) Pre-Assessment Phase. The pre-assessment phase is a preliminary fact-finding exercise that provides the information necessary to determine whether the trustee has jurisdiction over a particular incident and if restoration planning is necessary.

(a) 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 subpart (c) of reference (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 the release is not:

1. Permitted under a permit issued by Federal, State, or local authority;

2. From a public vessel; or

3. From an onshore facility subject to reference (n).

(b) 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:

1. NRI has resulted from or is likely to result from the incident;

2. Response actions have adequately addressed or are expected to address the injury; and

3. Feasible primary and compensatory restoration alternatives exist to address potential injury.
(c) **Threshold Requirements.** If the criteria of sections 41-3.4.a.1.a or b above 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 PRP all reasonable assessment costs.

(d) **Notice of Intent to Conduct Restoration.** If the criteria of sections 41-3.4.a.1.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 PRP (part 990.44 of reference (c)).

(e) **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 (part 990.45 of reference (c)).

(2) **Restoration Planning Phase.** If restoration planning is justified, the trustees must conduct injury determination, injury quantification, and restoration selection.

(a) **Injury Determination**

1. The trustees must determine whether:

   a. The definition of injury has been met; and

   b. 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

   c. 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.

2. When selecting the potential injuries to assess, the trustees should consider the following factors:

   a. Natural resources and services of concern;
b. Procedures available to evaluate and quantify injury including time and cost requirements;

c. Evidence indicating exposure;

d. Pathway from the incident to the natural resource or service of concern;

e. Adverse change or impairment constituting injury;

f. Evidence indicating injury;

g. Mechanism by which injury occurred;

h. Potential degree, spatial, and temporal extent of the injury;

i. Potential natural recovery period; and

j. Kinds of primary and compensatory restoration actions which are feasible.

(b) Injury Quantification. Upon determining injury has occurred, the trustees must quantify the extent of injury relative to the baseline by estimating, quantitatively or qualitatively, the time for natural recovery without restoration through consideration of the following factors:

1. Nature, degree, and spatial and temporal extent of injury;

2. Sensitivity and vulnerability of the injured resource or service;

3. Reproductive and recruitment potential;

4. Resistance and resilience of the affected environment;

5. Natural variability; and

6. Physical and chemical processes of the affected environment.
(c) **Primary Restoration.** Primary restoration is the action of returning injured natural resources and services to baseline.

1. **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.

2. **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.

(d) **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.

(e) **Draft Restoration Plan.** The draft restoration plan is generally subject to the requirements of NEPA and reference (o). 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:

1. Summary of injury assessment procedures used;

2. Description of the nature, degree, spatial extent, and temporal extent of injuries resulting from the incident;

3. Goals and objectives of restoration;

4. Range of restoration alternatives considered and a discussion of how they were developed and evaluated under reference (c);
5. Trustees' tentative preferred alternatives;

6. Description of the past and proposed involvement of the PRPs in the assessment; and

7. 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.

(f) Final Restoration Plan. Following an opportunity for public review and comment, the trustees should develop a final restoration plan that will include responses to public comments, indicating where changes were made to the draft restoration plan, if any. The trustees must then present a written demand to the PRP per part 990.62 of reference (c).

(3) Restoration Implementation Phase. The trustees should give the PRP a reasonable opportunity (90 days per reference (p)) to either implement the final restoration plan or to fund the trustees' implementation of the plan. While PRP 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 PRP decline to settle the claim, the trustees should refer the claim to the Environment Division of the Department of Justice (DOJ) for collection and civil action in Federal court if required.

(4) Restoration Monitoring. Per the monitoring component of the final restoration plan, 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.

b. Hazardous Substances. The four phases (i.e., pre-assessment, assessment planning, assessment, post-assessment) of the NRDA process for HS per reference (j) is summarized below. Where the release of HS, regardless of source, injures or threatens to injure natural resources within Navy management or control, reference (j) shall serve as guidance to Navy activities in the assessment and collection of NRD occasioned by such release. Where HS releases from Navy vessels or facilities may be responsible for NRI not within Navy control, Navy will
encourage trustees conducting NRDA to use the procedures in reference (j).

(1) Pre-Assessment Phase. The first phase of an NRD assessment conducted under reference (j) 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 evaluates whether:

(a) An HS release has occurred;

(b) Natural resources have been, or are likely to be, adversely affected by the release;

(c) Quantity or concentration of HS is sufficient to cause injury;

(d) Assessment data is readily obtainable or likely to be obtained at reasonable cost; and

(e) Response actions will sufficiently remedy the NRI without further action.

(2) Assessment Planning Phase. The goal of this phase is to draft an assessment plan that adequately describes the methods that the trustees intend to use to conduct NRD 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 the trustees intend to use to conduct injury determination, quantification, and damage determination. During the planning phase, the trustees must choose between Type A and B procedures. The methodology chosen will facilitate the execution of the assessment plan.

(3) Assessment Phase. 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, issued per reference (j).

(a) Type A Procedures. In a Type A procedure, 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 and measure injury to the natural resources using historical data or reference data from appropriate literature from small HS releases in coastal and marine environments or the Great Lakes.

(b) **Type B Procedures.** In a Type B procedure, the trustees perform the same determinations using a range of alternative scientific and economic methodologies to calculate the cost of restoring, rehabilitating, replacing, or acquiring equivalent resources. Type B procedures are more labor intensive in the collection and analysis of available data and, consequently, significantly more expensive and time consuming, and allow for the assessment of all uses lost to the public pending restoration or rehabilitation of the injured resource.

(4) **Post-Assessment Phase.** Whether the trustees elect Type A or Type B procedures, reference (j) 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.

41-3.5. **Funding**

a. **Oil Spill Liability Trust Fund.** OPA 90 states funds shall be made available from the Oil Spill Liability Trust Fund (OSLTF) for the payment of costs incurred by the trustees in assessing NRD and in developing and implementing plans for the restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. The National Pollution Funds Center (NPFC) administers the OSLTF.

(1) **Assessment Costs.** Federal trustees have access to the OSLTF to fund the cost of:

(a) Notifying and coordinating with other trustees and the FOSC;

(b) Pre-assessment determination;

(c) Damage assessment determination;

(d) Data collection and analysis; and

(e) Report preparation.
(2) **Damage Claims.** Under a 1997 interagency ruling, the NPFC may pay uncompensated NRD claims from the OSLTF funds without seeking further appropriation.

(3) **Requests for Funds.** The trustees should first seek funding from the PRP for both the costs of assessment and natural resource damage claims. If the PRP 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.

(a) **Interagency Agreement.** To access the fund, the lead administrative trustee (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 (p), "Procedures for Accessing the Funds."

(b) **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 damage claims. To trigger access to OSLTF funds, the trustees must submit to the NPFC and USCG SF-180 or equivalent together with cost documentation.

(4) **Recordkeeping**

(a) **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.

(b) **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 the OPA claims section of reference (p).

(c) **Trustee Reports.** Where the OSLTF advances funds, trustees are required to submit a final report of costs 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.

b. CERCLA Superfund. CERCLA Section 111 establishes a Hazardous Substance Response Trust Fund (the "Superfund"). CERCLA Section 112 directs the President to establish forms and procedures for the filing of claims against the Superfund. Congressional appropriations language expressly prohibits the payment of NRD claims or assessment costs from the Superfund.

41-3.6. PRP Funding

a. Memorandum of Understanding Accounts. Where an MOU between the trustees and PRP so provides, the PRP may establish an account from which funds may be drawn to cover the cost of pre-assessment and damage assessment activities. Trustees may ultimately be required to invoke the statutory funding mechanisms described at section 41-3.5. Accordingly, trustees may be well advised to establish a cost accounting system similar to that described in section 41-3.5.a.4.

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 NRD 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 ASN(EI&E) as federal trustee for natural resources has yet to be determined by interagency agreement.

41-4 Responsibilities.

41-4.1. OPNAV (N45) shall:

a. Develop, issue, review, and provide execution oversight of Navy policy on natural resource trusteeship, and NRDA and restoration procedures; and

b. Provide assistance to the Navy REC in securing authority to proceed as a NRT when appropriate.

41-4.2. The Navy REC shall:
a. Act on behalf of CNO as federal trustee for natural resources within Navy management or control when so authorized;

b. Establish procedures consistent with the provisions of this chapter and references (c) and (j) 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 regional counsel, regional comptrollers, facility commanders, and FEC representatives;

d. Ensure activities within the REC's AOR incorporate a PIER into the standard operating procedure of the local FRT; and

e. Annually conduct exercises for 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 National Preparedness for Response Exercise Program events. Contracted support personnel relied upon in local contingency plans should also be invited to participate in these exercises.

41-4.3. The Navy REC counsel shall:

a. Coordinate the Navy REC's communications and negotiations with the PRP and non-Navy trustees having jurisdiction over natural resources affected or threatened by the release;

b. Negotiate with the PRP and trustees an MOU regarding the funding of and procedures to be used in NRD assessment and restoration planning;

c. Attend relevant trustee meetings and report the status of trustee negotiations in writing to the Admiralty Claims Division of the Navy Judge Advocate General and OPNAV (N45) biannually;

d. Periodically advise the Environment and Natural Resources Division of the DOJ on the status of NRD claim negotiations and refer such claims to DOJ when negotiations with the PRP 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 NRD assessment and restoration activities within the REC's AOR; and

f. Annually exercise the responsibilities identified above.

41-4.4. The regional comptroller shall:

a. Document all Navy costs related to NRD assessment and restoration activities, including but not limited to pre-assessment, restoration planning, plan execution, and monitoring costs (part 990.30 of reference (c) and part 11.15 of reference (j));

b. Report these costs in writing to OPNAV (N45) each year that NRDA or restoration activities are pending in the REC's AOR;

c. Assist the Navy REC in the planning and execution of NRDA and restoration activities within the REC's AOR; and

d. Annually exercise the responsibilities identified above.

41-4.5. Commander, Naval Facilities Engineering Command shall:

a. Act as natural resource technical consultant to Navy, providing technical support in the planning and execution of NRDA and restoration activities; and

b. Coordinate with the FECs to develop expertise in NRD mitigation, assessment, and restoration.

41-4.6. FECs shall, upon request:

a. Act as the Navy REC's primary point of contact for the planning and execution of NRDA and restoration activities within the REC's AOR;

b. Act as the Navy REC's primary repository of natural resource baseline information until the REC determines local activities in his or her AOR have sufficient resources and training to assume this function;
c. Assist the REC in developing local area guidance on NRD assessment and restoration procedures in consonance with the provisions of this chapter and references (c) and (j), and coordinate the development of this guidance with installation and facilities where they have knowledge concerning on-site resources;

d. Act as the Navy REC's primary contracting authority in retaining technical assistance from the private sector to facilitate the planning and execution of NRDA and restoration activities within the REC's AOR;

e. Assist the Navy REC in the planning and execution of NRD assessment and restoration activities within the REC’s AOR; and

f. Annually exercise the responsibilities identified above.

41-4.7. 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, the form of which is OPNAV 5090/4 (Jul 2012), within 6 hours of being notified of an OHS release in their AOR;

c. Deliver the PIERs to the Navy REC not later than the close of business on the next business day following notification of an OHS release in their AOR; and

d. Annually exercise the responsibilities identified above.

41-4.8 When a Navy vessel or facility is deemed the PRP for a sudden and or current release, the cognizant Navy command shall:

a. Fully cooperate with the trustees in the NRDA 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 section 41-3.2.b.5; and

c. Pay to the trustees the reasonable cost of NRDA planning, restoration, and monitoring activities as may be negotiated between the PRP and the trustees.
41-5 Definitions. In some cases, references (c) and (j) define identical terms differently. In those cases, the definitions provided combine elements of each reference to best accommodate Navy policy. In any case, the definitions are provided only for the purpose of issuing Navy policy guidance.

41-5.1. Baseline

a. Baseline is 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.

b. 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 integrated natural resource management plans, base master plans, natural resource management plans, NEPA documents, special studies, and other such documents.

41-5.2. Cost-Effective. Cost-effective means the least costly activity among two or more activities that, in the judgment of the trustee, provides the same or comparable level of benefit.

41-5.3. Damages. Damages are each party's responsibility for the release or threatened release of OHS affecting the natural resources of the United States including liability for monetary compensation for injury to, destruction of, loss of, or loss of use of natural resources, including the reasonable assessment costs.

41-5.4. Discharge (Spill). A discharge (spill) is any emission (other than natural seepage), intentional or unintentional, including, but not limited to, leaking, pumping, pouring, emitting, emptying, or dumping.

41-5.5. Exclusive Economic Zone. The EEZ is the zone extending 200 nautical miles (NM) from the territorial sea baseline, unless a maritime boundary with another country is closer than 200 NM.
41-5.6. **Exposure.** Exposure is the 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.

41-5.7. **Facility.** A facility is 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.

41-5.8. **Facility Response Team.** The FRT is those emergency response personnel who are designated, trained, and equipped to provide rapid response to OHS releases that occur on or from their facility.

41-5.9. **Federal On-Scene Coordinator.** The FOSC is the U.S. government official pre-designated by the Environmental Protection Agency (EPA) or USCG to coordinate and direct the federal response under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). In the case of HS releases from Navy facilities or vessels, the NOSC is the FOSC.

41-5.10. **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. Executive orders in turn designate the heads of specified departments, including the SECDEF, as NRTs.

41-5.11. **Hazardous Substance.** An HS is:

a. Any substance so designated by 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 hazardous waste as defined under RCRA (but not including any waste that has been exempted by an act of Congress);

d. Any toxic pollutant listed under the Clean Air Act; or
e. Any imminently hazardous chemical substance or mixture for which the administrator of the EPA has taken action under the Toxic Substances Control Act; however, term does not include:

1. Crude oil or any refined petroleum product (such as gasoline or fuel oil) that is not otherwise specifically listed or designated as an HS; and

2. 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.

41-5.12. Historical Contamination. Historical contamination refers to natural resources impacted by a release or releases of OHS resulting from past activities in which Navy is no longer engaged at the affected location.

41-5.13. Incident. An incident is 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.

41-5.14. Injury. An injury is 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.

41-5.15. Lead Administrative Trustee. The lead administrative trustee is the trustee selected by mutual agreement among trustees having jurisdiction over the natural resources affected by an OHS release to coordinate joint assessments, avoid duplicate damage claims, and serve as the trustees' primary point of contact with response agencies, the PRP, and the public. The lead administrative trustee provides general administrative support to the restoration process, unless the trustees decide otherwise.

41-5.16. National Oil and Hazardous Substances Pollution Contingency Plan. The NCP addresses the identification, investigation, and study of, as well as response to, OHS release incidents.
41-5.17. Natural Resource Damage Assessment. The NRDA is the process of collecting and evaluating information to determine the nature and extent of NRI 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.

41-5.18. Natural Resources. Natural resources include land, fish, wildlife, biota, air, surface water, groundwater, 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).

41-5.19. Navigable Waters. Navigable waters are the waters of the United States including the territorial seas and:

   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, sand flats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

      (1) That 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) That are used or could be used for industrial purposes by industries in interstate commerce.

   d. Any impoundment of waters otherwise defined as navigable waters above;

   e. Tributaries of waters identified above; and
f. Wetlands adjacent to waters identified above, provided that waste treatment systems (other than cooling ponds that otherwise meet the criteria of this section) are not waters of the United States (reference (q)).

41-5.20. Navy On-Scene Coordinator. The NOSC is 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 AECs.

41-5.21. Oil. An oil is any 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.

41-5.22. Potentially Responsible Party. A PRP is 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:

a. Vessels, including the owner, operator, or bare boat charter of such vessel;

b. Onshore facilities, including the owner or operator of such facilities;

c. 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;

d. Pipelines, including the owners or operators; and

e. 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 a PRP under CERCLA.

41-5.23. Preliminary Impact and Exposure Report. A PIER is a rapid "first-order" report made on-site by the FRT to determine whether and to what extent natural resources have been exposed to an OHS release.
41-5.24. **Reasonable Assessment Costs.** Generally, reasonable assessment costs are the costs of assessments conducted under the NOAA, Department of Commerce, NRDA procedures; and Department of Interior, NRDA procedures. 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.

41-5.25. **Rebuttable Presumption.** Rebuttable presumption is an evidentiary rule of law that presumes without further proof that damages assessed by the trustees using the procedures specified in either the NOAA, Department of Commerce, NRDA procedures; or the Department of Interior, NRDA procedures are reasonable, shifting the burden of proof to the PRP to demonstrate the damages so assessed are not reasonable.

41-5.26. **Recovery.** Recovery is the return of injured natural resources and services to baseline.

41-5.27. **Release.** A release is 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:

   a. Activities that result in exposure to persons solely within a work space;

   b. Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine;

   c. The release of nuclear material; or

   d. The normal application of fertilizer and herbicides which are applied per the manufacturer's labeled directions.

41-5.28. **Response.** Response is the containment or removal of OHS released into the natural environment; and 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, and public or private property.

41-5.29. Restoration. Restoration is 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.

41-5.30. Services or Natural Resource Services and Functions. Services or natural resource services and functions are 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.

41-5.31. Sudden and or Current Release. A sudden and or current release is a release of OHS requiring response that is recognized upon occurrence or a release that is associated with ongoing Navy activity.

41-5.32. Trustees (Natural Resource Trustees). Trustees (NRT) are 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.

41-5.33. Value. Value is the maximum amount of goods, services, or money an individual is willing to forgo to obtain other goods or services. It can also be minimum amount of goods, services, or money an individual is willing to accept to forgo other goods or services. It is a measure of the public's willingness to pay for a service.
CHAPTER 42

ENVIRONMENTAL RESTORATION

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42-1 Scope. This chapter discusses Navy's Environmental Restoration (ER) Program which includes two components, the Installation Restoration Program (IRP) and the Munitions Response Program (MRP). The purpose of the IRP is to identify, investigate, and cleanup or control releases of hazardous substances (HS), pollutants, and contaminants from past waste disposal operations at Navy commands. The purpose of the MRP is to address environmental and safety hazards from munitions and explosives of concern (MEC) and munitions constituents (MC) used or released on-site from past operations and activities. All IRP requirements identified in this chapter also apply to the MRP. However, there are some MRP requirements that do not apply to installation restoration (IR) and, as such, are identified in section 42-3.28.

42-1.1. Related Chapters. Chapter 15 (Operational Range Assessments), chapter 20 (Clean Water Ashore), chapter 21 (Safe Drinking Water Act Compliance Ashore), and chapter 27 (Hazardous Waste Management Ashore) provide information relevant to the ER Program.

42-1.2. References


(b) DoD Instruction 4715.7 of 22 April 1996

(c) 40 CFR 300

(d) 42 U.S.C. §9601-9675

(e) E.O. 12580, Superfund Implementation, as amended

(f) Department of the Navy, Environmental Restoration Program Manual, August 2006

(g) OASN(I&E) Memorandum of 26 Oct 1995, Department of the Navy Environmental Policy Memorandum 95-04, Guidance for Environmental Restoration Program at Active Bases

(h) CNO ltr 5090 Ser N45/5U901466 of 15 Nov 05
42-1.3. **Applicability.** Reference (a) describes ER Program eligibility requirements and eliminates certain eligibility cutoff dates previously in effect. Therefore, IR sites where releases occurred after 17 October 1986 and MR sites where releases occurred after 30 September 2000 are now eligible for inclusion in the ER Program. Per reference (b), the ER Program is limited to installations within the United States and its territories and possessions, and does not apply in foreign countries.

42-2 **Legislation**

   a. The following legislation contains provisions that pertain to restoration of Department of Defense (DoD) facilities:
(1) Community Environmental Response Facilitation Act (CERFA);

(2) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);

(3) Resource Conservation and Recovery Act (RCRA); and

(4) Superfund Amendments and Reauthorization Act (SARA).

b. A summary of this legislation is included in appendix A (Laws and Regulations).

42-3 Requirements

42-3.1. Environmental Restoration Process

a. Department of the Navy (DON) is the lead agency for conducting response actions at Navy IR and MR sites following the provisions of references (c), (d), and (e). Although CERCLA is the preferred process for conducting response actions, the Environmental Protection Agency (EPA) and states also have authority to impose corrective action under RCRA. During all phases of the CERCLA program, Navy should attempt to incorporate the regulator's substantive requirements to the maximum extent possible and resolve any issues in a manner consistent with both parties' delegated authorities. Additional information is provided in reference (f).

b. The National Oil and Hazardous Substances Contingency Plan (NCP) established by reference (c) sets forth general procedures for initiating and carrying out the remedial process under the ER Program. Navy shall follow EPA guidance in determining reasonable interpretation and application of the NCP regulations. The phases and milestones for implementing the cleanup process are shown in figure 42.1 and described in sections 42-3.3.a through q. Additional information on the cleanup process can be found in reference (f).

c. Navy shall comply with all applicable requirements of CERCLA, SARA, and RCRA in carrying out actions under its ER Program using terminology consistent with that used in the relevant legislation. Navy shall not adopt any guidelines or rules inconsistent with EPA's guidelines and rules.
d. The Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM) Base Realignment and Closure (BRAC) Program Management Office (PMO) administers the BRAC ER Program. Generally, all policies that apply to active installation sites also apply to BRAC response actions.

42-3.2. Funding. Congress provides funding for ER Program response actions through an Environmental Restoration, Navy (ER,N) account for active installations and the BRAC account for installations designated for closure. Per reference (g), it is DON policy to use ER,N or BRAC accounts as the exclusive source of funding for ER Program execution. Other types of funding are not authorized as a substitute or supplement for ER,N and BRAC funds except where the work is within the scope of the military construction (MILCON) or operations and maintenance (O&M), Navy-funded construction projects.

a. ER,N funds can be used for RCRA corrective action for past releases of hazardous waste (HW) at permitted facilities, or
facilities seeking permits, if these are the same types of releases covered by the ER Program (reference (g)). Although CERCLA contains a petroleum exclusion, releases of petroleum, oils, and lubricants (POL) are eligible for ER,N funding under RCRA or other applicable authorities consistent with the Defense Environmental Restoration Program (DERP).

b. Depending on the timing of the spills or leaks involved, Defense Logistics Agency and Defense Energy Support Center (DLA and DESC) will fund remediation costs associated with MILCON projects for POL facilities on Navy installations. Reference (h) provides that DLA and DESC will fund remediation of contamination that occurred after DLA capitalized the existing Navy facility, generally either 1 October 1992 or 1 October 1995. Contamination resulting from leaking or spilling that occurred prior to DLA capitalization remains Navy's responsibility and is eligible for ER,N funding.

c. Per section 4.4 of reference (a), immediate or short-term response actions required to limit or mitigate a spill or release caused by current operations are not addressed by the ER Program and must be funded by installation O&M accounts. However, any required long-term RAs to address spill residuals are covered by the ER Program.

d. DON uses the Defense and State Memorandum of Agreement Program or Navy Cost Reimbursement Cooperative Agreement Program to provide funds to state regulatory agencies for ER Program oversight costs. Reference (f) includes additional information on these programs.

e. In exceptional circumstances, certain other issues, such as off-base contamination at third party sites, may be eligible for funding after consultation with the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)).

42-3.3. Cleanup Process

a. General Procedures. The NCP sets forth general procedures for initiating and carrying out the remedial process under the ER Program. The phases and milestones for implementing the cleanup process are shown in figure 42.1 and described in the following sections. Additional information on the cleanup process can be found in reference (f).
b. **Review and Negotiation.** EPA, appropriate state and local officials, and the public must have an opportunity to review and comment on assessments, studies, and proposals for removal or RAs. In addition, Navy shall negotiate schedules and procedures with state and federal regulators early in the study process. For national priorities list (NPL) sites, EPA is the lead regulator while the state is the lead regulator for non-NPL sites. Failure to meet approved regulatory schedules under both scenarios could lead to fines and penalties.

c. **MRP Response Actions.** MRP response actions also follow the CERCLA process. In most cases, sites known or suspected to contain MEC or MC should not be released from Navy control until munitions response (MR) actions consistent with the reasonably anticipated land use are completed per a DoD Explosive Safety Board (DDESB) approved explosive safety submission (ESS).

d. **Knowledge of a Release.** The commanding officer (CO) of the Navy installation must immediately report a release of a reportable quantity of HS to the National Response Center (NRC) at 800-424-8802 per CERCLA Section 103(a). The reportable quantities can be found in section 9603, paragraph a of reference (d). If notification to the NRC is not practical, the U.S. Coast Guard on-scene coordinator (OSC) or EPA regional OSC should be notified. The appropriate Federal, State, and local regulatory agencies must also be notified of the release.

e. **Discovery and Notification.** Reference (c) requires the immediate notification to regulatory agencies upon the discovery of HS, hazardous constituents, MEC, or MC that has been released to the environment.

f. **Federal Agency HW Compliance Docket.** EPA established a Federal Agency HW Compliance Docket that contains information on federal facilities that manage HW or from which a reportable quantity of HS have been released. A list of the facilities is published in the Federal Register. The docket is updated every 6 months through a process that involves collaboration between EPA, lead Federal agency, states, and tribes as necessary to ensure sites are properly listed. Navy shall submit a PA or SI, as appropriate, including sufficient information for preparing a hazard ranking system scoring package to EPA for each listed site within a reasonable timeframe.

g. **Preliminary Assessment and Site Inspection**

(1) The PA phase identifies potentially contaminated
sites based mostly on review of existing information on disposal practices on the installation. The SI phase will include limited field data. At the conclusion of the PA or SI phase, sites are either determined to have no further action (NFA) or they will move forward in the cleanup process. The site designated NFA may be included in a ROD if acceptable to all stakeholders.

(2) An NFA determination is appropriate when, based on the historical and physical evidence collected, it is determined that either no HS, pollutants, or contaminants that are the responsibility of DON are present at the site, or no releases of HS, pollutants, or contaminants that are the responsibility of DON are present at the site at concentrations that pose a significant threat to public health or the environment.

h. Remedial Investigation and Feasibility Study

(1) The RI phase includes a sampling and analysis program that is adequate to determine the nature and extent of contamination and baseline human health and ecological risk assessments (ERA). If it is determined that RA is necessary, a FS is conducted which includes an initial screening and a detailed evaluation of remedial alternatives. Sites may also be designated as NFA at the RI/FS phase if it is determined that they do not pose an unacceptable risk to human health and the environment. The NFA will be documented in a ROD.

(2) Per reference (i), if there are any natural resources potentially impacted by Navy releases of HS, the injury to natural resources shall be investigated during the ERA process in the RI phase. Natural resources trustees (NRT) shall be consulted as appropriate during the ERA. To the extent practicable, a response alternative that addresses and minimizes the natural resources injury (NRI) shall be selected during the FS. NRI, the actual harm or injury to a natural resource, is separate and distinct from natural resource damage (NRD). NRD, the monetary value assessed for the injury, is addressed in section 42-3.5.

i. Proposed Plan. At the conclusion of the RI/FS phase, the preferred alternative is identified in a proposed plan. 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 (ARAR) for that site, be cost-effective, and use permanent treatment technologies or resource recovery technologies to the maximum extent practicable. This document is made available for public
and regulatory review. A responsiveness summary addressing all stakeholder issues is then prepared by DON at the end of the comment period.

j. **ROD and Other Decision Document**

(1) The ROD or other decision document (DD) is a formal decision document that describes the remedy selection process and the pertinent features of the RA. A ROD is prepared for NPL sites while a DD is prepared for non-NPL sites. The ROD must document any significant changes from the proposed plan and respond to all comments, written and oral, received during the comment period.

(2) COMNAVFACENGCOM shall provide a draft ROD or DD and a recommendation of action to the CO of the Navy installation or COMNAVFACENGCOM BRAC PMO, as appropriate. If the CO or COMNAVFACENGCOM BRAC PMO concurs with the proposed ROD or DD, then he or she shall sign it. If the CO or COMNAVFACENGCOM BRAC PMO disagrees or has questions on the document, he or she shall present the issues to COMNAVFACENGCOM for discussion and resolution. For NPL sites, the CO or COMNAVFACENGCOM BRAC PMO forwards the ROD to the EPA regional office for concurrence. As required under CERCLA Section 117(b), Navy must publish notice of the final ROD and make it available to the public in the administrative record (AR) before adopting any plan for RA.

(3) Although a ROD is not required under reference (d) at non-NPL sites, a DD shall still be prepared and submitted for regulatory agency review. Where such requirements apply, COMNAVFACENGCOM shall prepare a DD for submittal by the installation. If the state remediation law contains no specific requirements for decision documentation, COMNAVFACENGCOM shall prepare a DD that contains the elements of a ROD. If the CO or COMNAVFACENGCOM BRAC PMO concurs with the DD, he or she shall sign and forward the DD to the state with a copy to EPA.

k. **Remedial Design.** After the ROD is signed, Navy will initiate the RD for the selected remedy. This phase involves the preparation of detailed design of the proposed RA selected in the ROD or DD.

l. **RA - Construction.** The designated remedial system is constructed at the site during this phase. 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.
m. **Remedy in Place.** This milestone in the cleanup process is achieved when the construction of the long-term remedy is complete and the remedy is operating as planned. Determination of achieving the RIP milestone is a Navy decision and regulatory concurrence for this milestone is not needed.

n. **RA - Operation.** This phase involves the operation, maintenance, and monitoring actions for the remediation system and site. Periodic monitoring reports are prepared during this phase to document the performance of the remediation system.

o. **Response Complete.** This milestone signifies the cleanup objectives have been met per the ROD or DD. Navy will prepare an RA completion report (RACR) when all RA objectives have been met and the site is protective of human health and the environment. Navy should seek written EPA and state concurrence on the RACR. A final RACR should be prepared once the RA objectives have been met at the last site or operable unit (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.

p. **Long-Term Management.** Following RC, this phase might be required to monitor the long-term effectiveness of the remedy. This phase is required at sites where HS, pollutants, contaminants, MECs, or MCs remain on a site after RC, and are above levels that allow for unlimited use or unrestricted exposure. Activities conducted during this phase may include long-term monitoring, implementing or managing land use controls (LUC), maintaining a containment cap, and preparing 5-year review reports. The start of construction acts as the trigger date for the 5-year review process for sites that require an RA-C phase. For remedies that require an RA-O phase (e.g., monitored natural attenuation or institutional controls), the remedy start date and trigger date is the ROD signature date.

q. **Site Closeout.** This milestone signifies Navy has completed active management and monitoring, the remedy is protective of human health and the environment, no restrictions on future land use are needed, and no additional ER,N or BRAC funds are expected to be expended at the site. However, some sites will achieve protectiveness of human health and the environment while never achieving the SC milestone. These include sites where contaminants are left in place, such as landfills, and require future funding to ensure the
protectiveness of the remedy. The SC milestone can occur at any stage of the restoration process including PA, SI, removal actions, RI/FS, RA-O, or LTMgt phases.

42-3.4. Vapor Intrusion

a. The vapor intrusion (VI) pathway shall be evaluated at Navy ER Program eligible sites contaminated with a chemical compound or compounds that is or are sufficiently volatile to pose an unacceptable VI risk into overlying or nearby existing structures and that meet certain conditions specified in section 6c(1) of reference (a). The VI pathway evaluation can be made at any point in the response process (e.g., investigations, remediation, 5-year reviews) and shall be conducted per references (a) and (j).

b. All VI pathway investigations and response actions shall be consistent with the Navy's policy on background chemical levels (reference (k)) to include establishing and eliminating background chemicals as contaminants of potential concern during the screening steps of an investigation. ER,N or BRAC funds shall not be used to address indoor air contamination due to background or operational sources.

c. Screening tools such as mathematical models may be used to indicate whether a detailed VI pathway investigation and site-specific risk assessment are warranted. When a site-specific risk assessment indicates an unacceptable risk to human health due to a release to the environment that is the responsibility of the Navy, appropriate response actions shall be conducted in any impacted existing structures. Risk-based methodologies, including the use of site-specific exposure scenarios, will be used to evaluate the VI pathway for all residential and commercial settings. When applicable, Occupational Safety and Health Administration (OSHA) standards and workplace requirements will be considered and appropriately incorporated when evaluating potential exposures related to the VI pathway for industrial settings. When there are no existing structures overlying or near a potential VI pathway, the potential VI risk shall be documented and the appropriate notices provided per section 6c(4) of reference (a).

d. When response actions are warranted, the selected remedy must be protective of human health in existing buildings and allow for continued land use at active installations. To the extent practicable, the remedy should also be appropriate for the reasonably anticipated future land use at BRAC installations.
e. Pursuant to CERCLA Section 120(h), in cases where the Navy has conveyed property, the Navy will only become re-involved at the site if the current land owner or regulatory agency demonstrates the existence of a complete VI pathway from a former Navy ER source area. For the Navy to become re-involved at the site and take action, the incremental risk must be above risk-based levels, or OSHA standards where appropriate, based either upon existing Navy land use at the time of transfer or according to Navy imposed LUCs on the property.

42-3.5. Natural Resource Damage and Natural Resource Damage Assessment. Per reference (i), ER,N and BRAC funds are used to evaluate and remediate sites that have been contaminated by past Navy releases of CERCLA HS. Paying NRD and conducting NRD assessments (NRDA) are not ER,N or BRAC funding eligible. Damages are assessed on the injury to the natural resource by the NRTs. NRD can only be recovered by the NRTs and must be obtained using the legal system. For Navy purposes, NRD is a claim against the U.S. government for natural resources injured by Navy. The Department of Justice (DOJ) Judgment Fund typically represents Navy in the defense of such NRD claims. For further information on NRD and NRDA, refer to chapter 41 (Natural Resource Damage).

42-3.6. Emergency Response

   a. Under references (c), (e), and CERCLA Section 104, DON 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 a site appears to be causing an emergency situation, Navy is responsible for taking appropriate action to protect the public and the environment from the threat.

   b. In situations where prompt action is required to address releases or threatened release, the NCP allows for the implementation of a removal action to be performed in an expedited manner. EPA categorizes removal actions in three ways; emergency removal actions, time critical removal actions, and non-time critical removal actions. These categories are based on the type of situation, the urgency of the threat of the release, and the subsequent timeframe in which the action shall be initiated. A removal action could be either the final remedy or an interim action, followed by a longer-term RA as the final remedy.
42-3.7. **Interagency Agreement and Federal Facility Agreement.** CERCLA requires Federal agencies to enter into an interagency agreement (IAG) with EPA within 180 days after completion of each RI/FS for a NPL site. The IAG addresses the expeditious completion of all necessary RAs. To expedite the entire cleanup process, DON shall enter into a federal facility agreement (FFA) with EPA at NPL sites as early as possible after identifying the requirement for an RI/FS. 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. After negotiations with the regulators, FFAs shall be forwarded with appropriate endorsements via the chain of command and OPNAV (N45) to the Deputy Assistant Secretary of the Navy (Environment) (DASN(E)) for signature. For non-NPL sites, a federal facility state remediation agreement may be signed but is not required.

42-3.8. **National Priorities List Delisting.** EPA may delete a site or re-categorize it on the NPL where no further response is appropriate. EPA, 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. Usually, all sites within a federal installation must have achieved RC before delisting from the NPL, although partial delisting are possible.

42-3.9. **Administrative Record**

a. The NCP requires the establishment of an AR for all cleanup sites under the authority of the NCP. The AR contains those documents which form the basis for selection of a response action. Navy must establish an AR and make it available to the public at the start of the RI for RAs, or at the time of the engineering evaluation and cost analysis for removal actions. The AR shall be initiated as soon as the SI shows the program will move into the RI/FS phase.

b. A copy of the AR will be placed in an information repository that is available to the public at or near the site. The information repository is a location where current information, technical reports, and reference materials including site-related documents that may or may not be suitable for inclusion in the AR file are housed. A notice of the availability is part of the record. The AR is a CERCLA requirement. Although not required where Navy conducts cleanup
actions under RCRA corrective action authority, an AR shall be maintained at all cleanup sites, including RCRA sites. Subpart I of reference (b) and reference (f) include additional information on recordkeeping.

42-3.10. Retention of Records. CERCLA requires that any person responsible for providing notification of known, suspected, or likely releases retain records of the facility and the HS release for 50 years. For installations on the NPL, the trigger is the date the installation NPL de-listing announcement appears in the Federal Register. For non-NPL installations, the trigger is the date the NFA or facility closeout document is finalized. 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.

42-3.11. Protection of Health and Safety. Response actions under the NCP must comply with the provisions for health and safety protection for workers engaged in HW operations, found in reference (l). Additional safety concerns are required under the MRP and for any incidental MEC or MC found at IR sites per reference (m).

42-3.12. Five-Year Reviews

a. If an RA results in HS, pollutants, or contaminants, including MEC and MC, remaining at the site above levels that allow for unlimited use and unrestricted exposure, the remedy must be reviewed no less than every 5 years thereafter per reference (n).

b. With respect to MEC or MC, Navy will evaluate MR sites that cannot achieve unrestricted land use. The continued protectiveness of the remedy will be verified and the efficacy and cost-benefit of new technology application will be evaluated. This evaluation includes a determination whether the new technology will reduce life-cycle management costs sufficiently to justify additional MR actions.

42-3.13. 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. Navy shall
coordinate with ATSDR concerning public health assessments by ensuring ATSDR is aware of new NPL listings.

42-3.14. Fines and Penalties. The installation shall not pay fines and penalties assessed concerning ER 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 COMNAVFACENGCOM, the installation shall immediately forward the notice to COMNAVFACENGCOM 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. Any fines or penalties assessed against BRAC sites shall immediately be forwarded to the COMNAVFACENGCOM BRAC PMO for action.

42-3.15. Public Participation. The function of public participation activities is to inform the community of planned and ongoing activities, give them an opportunity to comment on and provide input on technical decisions, and allow them to address environmental concerns as early as possible during the remedial process. Opportunities for public participation begin at initiation of the ER process and continue through cleanup. Navy public participation requirements, described in detail in reference (f), are more comprehensive than the NCP.

42-3.16. Restoration Advisory Board

a. Navy policy, per references (a) and (o), is to have a restoration advisory board (RAB) at all installations with cleanup programs. However, 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, Navy shall note this and re-investigate community interest in the RAB every 5 years until SC per reference (a).

b. By increasing the diversity and number of community representatives, establishing a community co-chair, and opening meetings to the public, RABs shall ensure all stakeholders have an increased opportunity to actively participate in the timely review of ER 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 ER activities as a group, but shall provide information, suggestions, and community input for use by Navy in making decisions on actions concerning
releases or threatened releases. ER, N or BRAC funding, as appropriate, is used for RAB support.

42-3.17. Technical Assistance for Public Participation. Opportunities for technical assistance through DoD's Technical Assistance for Public Participation (TAPP) Program are made available to community members of RABs per reference (p). TAPP provides funding for RABs to buy independent (third party) technical expertise that may assist them in understanding or evaluating technical documents, concepts, or other information related to the restoration activity. Community members of a RAB may ask the CO or appropriate DoD official for assistance. All TAPP requests are approved by the installation CO for eligibility. Reference (f) contains additional information on the TAPP Program.

42-3.18. Regulatory Coordination. CERCLA exempts actions occurring entirely on-site that are consistent with CERCLA Section 121 from obtaining Federal, State, or local permits. However, substantive requirements must be followed and therefore interagency coordination is often required to ensure consistency with ARARs or other environmental laws. To assist in this interaction, early involvement of other Navy specialists, including natural and cultural resources personnel, is required 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 ER Program investigation including PA, SI, RI/FS, removal action, interim action, or RA. ER Program actions that follow the NCP and fulfill public participation requirements are deemed to have complied with the National Environmental Policy Act.

42-3.19. Cleanup Management Review. The cleanup management review is conducted annually by the Deputy Under Secretary of Defense (Installations and Environment) (DUSD(I&E)). The purpose of the review is to provide oversight, share information, and conduct a detailed assessment of DoD component efforts to implement the DERP. This review is a critical mechanism to ensure the cleanup program is moving toward completion per departmental policy, guidance, and program goals.

42-3.20. 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:

a. If an installation discovers contamination during the planning stage, COMNAVFACENGCOM may investigate to determine if the site can be cleaned up following ER procedures using ER,N funds. However, the SI and cleanup actions must compete with other ER sites based on relative risk ranking. In most cases, this will take several years and the site may not be available in time for the project; and

b. If contamination is discovered during construction and it is ER eligible, COMNAVFACENGCOM can carry out the SI and cleanup actions using ER,N funds. However, the site will compete with other sites based on relative risk ranking. If funding is not available in time to meet the construction schedule, the installation may use project funds to investigate and cleanup the site. If neither ER,N 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 ER eligible work with installation operation and maintenance, Navy (O&M,N) funds except to accomplish ER eligible work within the scope of an O&M,N funded construction project.

42-3.21. Radiological Concerns

a. Any radioactivity present at DON installations may be broadly characterized as Naval Nuclear Propulsion Program (NNPP) radioactive material (NRAM) or general radioactive material (G-RAM). NRAM refers to radioactive material used by, or under the cognizance of, NNPP and is not addressed in this policy. G-RAM is DON radioactive material that is not used by, controlled by, or associated with the NNPP.

b. Investigation and cleanup of G-RAM is technically challenging and requires specialized knowledge and expertise. G-RAM management entails overlapping Federal and State regulatory authority, including some exercised by DON. Additional information on activities involving G-RAM on ER Program sites can be found in references (f) and (q).

42-3.22. Formerly Used Defense Sites. The U.S. Army Corps of Engineers (USACE) is responsible for the Formerly Used Defense Sites (FUDS) Program. The Navy's responsibility for FUDS that were formerly Navy sites is informational only. Should local interest arise, Navy installations, in consultation with
COMNAVFACENGCOM, should pass questions regarding the status of FUDS sites to appropriate USACE officials. In special circumstances, USACE can grant authority for Navy to address FUDS located on property formerly owned or operated by Navy. This requires OPNAV (N45) concurrence.

42-3.23. Training Requirements

a. Personnel involved in the ER Program shall obtain the appropriate, job-specific training to effectively perform their assigned tasks. ER Program staff must acquire knowledge and skills in several categories including health and safety, technical, regulatory, and contract administration to ensure effective ER Program implementation.

b. OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) rules (reference (1)) require HW site training. All Navy and contractor employees working on-site exposed to HS and health or safety hazards, and 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.

(1) All employees exposed to HW, 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;

(2) On-site management personnel and supervisors of personnel engaged in HW operations must receive training equal to the above, plus 8 additional hours on managing such operations;

(3) Navy shall provide employees and managers with 8 hours of refresher training annually; and

(4) All personnel authorized for access to MR sites must be appropriately trained on MEC and MC health risks and explosives safety hazards.

c. The Naval Civil Engineer Corps Officers School (CECOS) (refer to appendix E (Web Sites) for Web site address) is the primary source for Navy ER Program training and provides course descriptions and registration information. The following 8-hour HAZWOPER course is available through CECOS and, although the 40-hour HAZWOPER course is no longer offered by the Navy, the following 40-hour course is available through EPA via the
Training Exchange Web site (refer to appendix E (Web Sites) for Web site address) or through various private vendors:

(1) 40-hour HAZWOPER, and

(2) 8-hour HAZWOPER for Uncontrolled Hazardous Waste Site Workers – Refresher (A-4A-0074).

d. Although each COMNAVFACEENGCOM field engineering command is responsible for establishing specific training plans for its remedial project managers (RPM) and technical support staff, the following CECOS and non-Navy Inter-Service Environmental Education Review Board courses are recommended to fulfill technical and regulatory competencies needed in the ER Program:

(1) Basic Environmental Law (A-4A-0058);

(2) Navy Environmental Restoration Program (A-4A-0069);

(3) Environmental Background Analysis (A-4A-0092);

(4) Human Health Risk Assessment (A-4A-0078);

(5) Munitions Response Site Management (A-4A-0093);

(6) Uniform Federal Policy for Quality Assurance Project Plans (A-4A-0095);

(7) Ecological Risk Assessment (A-4A-0081);

(8) Environmental Negotiation Workshop (A-4A-0067);

(9) Health and Environmental Risk Communication Workshop (A-4A-0072);

(10) Environmental Sampling Design and Data Quality Assurance (Air Force Institute of Technology) (WENV 441);

(11) Optimizing Remedy Selection and the Site Closeout Process (A-4A-0089); and


e. Additional courses may be required for personnel working in the ER Program depending on duties and responsibilities. The
following CECOS courses are also available for supplemental training:

(1) Advanced Environmental Law (A-4A-0068);

(2) Advanced Health and Environmental Risk Communication;

(3) Environmental Protection (A-4A-0036);

(4) Environmental Quality Sampling (A-4A-0026); and


f. In addition to the technical training described above, ER personnel also must have a strong foundation in contract administration. The Naval Facilities Acquisition Center for Training provides the following procurement training relevant to the acquisition process for the ER Program:

(1) Contracting Officer Representative (CTC-342);

(2) Architect-Engineer Fixed Price Contracting (CTC-466); and

(3) Environmental Contracting (CTC-423).

g. ER Program personnel should have an individual training plan that is directly related to their current duties and needed competencies. Further training information including other organizations that provide training relevant to the Navy ER Program is available in reference (f).

42-3.24. Remedy Optimization and Green and Sustainable Remediation. Navy shall continue to identify and implement remedy optimizations and green and sustainable remediation practices using ER,N funds at sites that require future funding per reference (a). Once a response action at the ER 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 ER actions, including remedy optimization and green and sustainable remediation activities, solely to accommodate a change in land use not reasonably anticipated at the time of remedy selection.

42-3.25. Navy as Potentially Responsible Party
a. Navy has historically contracted with private companies to transport and dispose of HW generated at its installations. There may be instances where the disposal sites selected by contractors are themselves threatening or contaminating the environment and need to be investigated and subsequently remediated. Because such sites were never owned or controlled by Navy, they are referred to as "third party" sites, for which specific funding and liability resolution policies apply. Reference (r) provides that ER,N funding is not available for remediation expenses, settlements, or judgments at third party sites. Remediation expenses are to be provided through settlements negotiated by the DOJ and paid through the Judgment Fund. However, Navy may use ER,N funding for specified expenses prior to determination or acknowledgement of liability such as attendance at potentially responsible party (PRP) meetings and pre-litigation case evaluation expenses.

b. Upon receipt of a formal notice from EPA or 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 regional environmental coordinator; COMNAVFACENGCOM headquarters; cognizant COMNAVFACENGCOM Facilities Engineering Command (FEC); Office of the Assistant General Counsel (Energy, Installations, and Environment) (OAGC)(EI&E); Office of the General Counsel (OGC), Litigation Office; and OPNAV (N45). The message shall describe the salient points of the formal notice. Simultaneously, the installation will mail a copy of the formal notice and other appropriate documents to the same addressees. COMNAVFACENGCOM shall take the lead role in negotiations. Any communication acknowledging possible Navy involvement in a particular site shall be coordinated with the OGC Litigation Office.

42-3.26. Government-Owned, Contractor-Operated Facility. Navy's liability and responsibility for cleanup of sites at government-owned, contractor-operated (GOCO) facilities arise 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 is to require GOCO contractors to pay for all cleanup costs associated with their operation of Navy facilities.

42-3.27. Real Property Transactions and Management. ER issues in Navy property transfers including BRAC and non-BRAC transfers to both Federal and non-Federal entities shall be conducted per reference (a).
a. BRAC Installations

(1) As Navy installations are closed and realigned, ER Program efforts must continue. Navy shall identify ER Program requirements and complete them per CERCLA, SARA, CERFA, and the NCP. Congress has established guidelines for funding the necessary investigations and cleanups and has similarly established a specific fund account for ER Program work at BRAC installations.

(2) CERFA requires all Federal agencies entering into a contract for the sale or other transfer of real property include a notice that identifies whether HS 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.

(3) 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 known to have been released or disposed of. Navy will identify uncontaminated property based on an investigation of the real property and preparation of an environmental baseline survey. It must obtain concurrence with the identification from EPA for NPL sites. For non-NPL sites, Navy must provide the state 60 days for review and comment. If Navy receives no comments, it may deem concurrence.

b. Non-BRAC Installations or Property. Navy shall consider the ER Program ramifications before any real property transactions and as part of all land management decisions.

(1) Acquisition. Navy does not acquire known contaminated property without careful consideration of the cleanup liability involved. Navy should acquire contaminated property only in cases of the most critical operational necessity, and only with OPNAV (N45) approval to ensure insertion of incurred cleanup liabilities into the ER Program.

(a) From Other DoD Services or Federal Agencies. For inter-Service transfers of property, DoD policy requires that a service acquiring known contaminated real property will normally assume the responsibility for managing restoration actions at the property. However, Navy policy is to try to negotiate a transfer
agreement that leaves funding and management of restoration actions of the property with the transferring service. In either case, transfer agreements must clearly assign continuing responsibility for cleanup after the transfer. Where Navy assumes funding and management of restoration activities, the transferring service is responsible for providing Navy with all reports and a history of restoration actions taken prior to property transfer. If appropriate, the transferring service will also be responsible for transferring the cleanup funding as planned for the property in the Future Years Defense Program. For transfers of property from another Federal agency, 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.

(b) 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 associated cleanup liability.

(2) Lease, Transfer, or Disposal of Property. For non-BRAC property, Navy shall prepare an environmental condition of property (ECP) for all leases, easements, transfers, and disposals of real property per reference(s). 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 use, and presence of any contaminants on the property. In the preparation of these documents, Navy shall consult with Federal, State, and local regulators as necessary and appropriate (e.g., EPA should be consulted if the parcel involved is part of a NPL site).

(3) Non-BRAC Disposal of Contaminated Navy Property. Navy shall cleanup 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.

42-3.28. MRP-Specific Requirements. The following requirements and policy guidance apply only to the MRP. Reference (f) includes a discussion of the distinction between MR and IR sites.

a. Explosives Safety and Chemical Warfare Material Hazards. MR sites present the potential for explosives hazards; therefore,
explosives safety procedures and requirements must be followed during all phases of site response activities. In addition, unique hazards from chemical warfare materials may be present on some sites. 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 the Naval Ordnance Safety and Security Activity (NOSSA) who will coordinate Army assistance, as required.

(1) An ESS (or a request for determination that an ESS is not required) must be prepared for review and approval by NOSSA prior to conducting any MR 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 or MC.

(2) Installations shall prohibit and prevent unauthorized access as well as limit access to MR sites by authorizing personnel entry to Navy property only after full consideration of the type, amount, and location of MEC or MC present and the MRP planned activities.

b. Inventory. Reference (t) requires DoD and its components develop and maintain an inventory of sites known or suspected to contain unexploded ordnance, discarded military munitions, and munitions constituents. This inventory of MR sites is updated annually, provided to DUSD(I&E), and shared with public stakeholders and regulators to ensure all MR sites are identified.

c. Eligibility Considerations

(1) Eligible Response Activities. Activities (i.e., identification, investigation, removal actions, RAs, or a combination of removal and RAs) to address MEC and MC under the MRP can be conducted where sites or areas of concern (AOC) are known or suspected to contain MEC and MC that are located at:

(a) Former ranges and disposal sites at active, BRAC, and non-BRAC closure installations; and

(b) Shallow water areas where munitions releases are known or suspected to have occurred, where Navy actions were responsible for the release, and where the site or AOC is not:

1. Part of, or associated with, a designated
operational range;

2. A designated water disposal site;

3. A FUDS;

4. A result of combat operations;

5. A maritime wreck; or

6. An artificial reef.

(c) If an eligible munitions response site (MRS) encompasses water, the MRS-specific evaluation of explosive hazards and human health risk associated with munitions underwater should consider munitions at depths greater than 120 feet (the maximum depth to which most recreational divers may descend) to have a physical constraint equivalent to a barrier that prevents direct access and to be beyond potential human exposure.

(2) Ineligible Response Activities. The following are not eligible for inclusion in the MRP:

(a) Operational ranges which are covered by the Range Sustainability Environmental Program Assessment Implementation Policy;

(b) An active munitions demilitarization facility;

(c) A site that is currently being addressed as part of the IRP;

(d) Indoor firing ranges;

(e) MEC and MC sources that are incidental to an IRP cleanup; or

(f) Response to address releases solely the result of an act of war. When the act of war ineligibility provision pursuant to CERCLA Section 9607(b)(2) is being considered, the issue shall be elevated to the DUSD(I&E) for approval before proceeding with the exclusion per reference (a).

(3) Military Munitions Burial Sites. Although reference (a) prohibits burial of unused munitions as a means of disposal, OPNAV (N45) should be consulted for specific guidance on any past
military munitions burial sites located on an operational range.

d. Site Priority Considerations

(1) Using reference (u), Navy shall assign a priority to each MR site in the inventory. The munitions response site prioritization protocol (MRSPP) process requires consultation with Federal agencies, Indian tribes, states, and public stakeholders. Site priorities will be reviewed annually and updated based on new information and site conditions. An independent quality assurance (QA) panel shall be established to review all prioritization decisions to ensure consistent and appropriate application of the MRSPP.

(2) In consultation with appropriate regulators and public stakeholders, Navy will apply the MRSPP to all MR sites to determine a 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 PA or SI. However, an MR site must be prioritized as soon as sufficient information is available to evaluate at least one of the three modules that comprise the MRSPP. The module producing the highest hazard ranking will determine the overall site priority. The site priority may change when additional data are collected and all three modules are evaluated. Module(s) for which there are insufficient data will be assigned a status of "evaluation pending." Documentation of scores and any adjustments shall be included in the AR.

(3) 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:

(a) Upon completion of a response action that changes MR site conditions in a manner that could affect the evaluation under the protocol;

(b) To update or validate a previous evaluation at a MR site when new information is available;

(c) 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
(d) To categorize an MR site previously classified as "evaluation pending."

e. Quality Assurance. An independent MRSSPP QA panel will be established per reference (v). The panel shall review all prioritization decisions to ensure appropriate and consistent application of the MRSSPP. The MRSSPP QA panel may adjust an MR site priority; however, they 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 AR, and provide changes in priority to DUSD(I&E).

f. 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, Navy shall provide specific justification for this action. Information that influences the sequencing of a site shall be included in the AR and the information repository.

42-3.29. Program Goals

a. Office of the Secretary of Defense (OSD) has established specific program goals to enable each DoD component to properly plan, program, and budget for future year execution and to ensure all legal requirements are fulfilled. Reference (a) established that 100 percent of all IR sites will achieve RIP or RC by the end of fiscal year (FY) 2014.

b. In addition, reference (a) established that 100 percent of all MR Sites will achieve RIP or RC by the end of FY 2020 and set the following RC goals for the IR and MR Programs, including any newly qualified sites that resulted from rescinding prior program eligibility cutoff dates as described in reference (a):

   (1) 90 percent of all IR and MR sites at active installations will achieve RC by the end of FY 2018, and

   (2) 95 percent of all IR and MR sites at active installations will achieve RC by the end of FY 2021.

42-4 Responsibilities

42-4.1. OPNAV (N45) shall serve as the ER resource and
assessment sponsor, overall Navy program manager, and Navy advisor in matters related to the ER Program, including, but not limited to:

a. Developing overarching programmatic ER policy guidance;

b. Providing oversight of COMNAVFACENGCOM for the execution of the ER Program;

c. Coordinating the ER Program requirements with, and providing support to, (DASN(E));

d. Coordinating all docket listings with the appropriate EPA headquarters and regional docket coordinators with the assistance of COMNAVFACENGCOM and installation personnel;

e. Reviewing and forwarding FFAs to DASN(E) for signature;

f. Reviewing and signing federal facility state remediation agreements (FFSRA);

g. Coordinating with other military service headquarters and OSD with respect to the ER Program;

h. Serving as chair of the MRSPP QA panel;

i. Serving as the advisor for DON in matters related to the ER Program cleanup of G-RAM; and

j. Reviewing waiver requests to TAPP funding limits.

42-4.2. Budget submitting offices (BSO) other than COMNAVFACENGCOM shall:

a. Pass ER Program information and guidance to their installations;

b. Ensure installations with ER Program sites meet public participation and other legal requirements;

c. Ensure subordinate installations fulfill their responsibilities under Navy's ER Program and appoint an ER coordinator, as necessary;

d. Ensure subordinate commands review all facility site proposals against the requirements of the ER Program, especially
where an ER DD has identified or put in place land use restrictions; and

e. Obtain OPNAV (N45) approval before acquiring known contaminated property from another DoD component, other Federal agency, or private party.

42-4.3. COMNAVFACENGCOM shall:

a. Program manage and execute the ER Program for OPNAV (N45);

b. Develop ER Program technically oriented policy guidance as directed by OPNAV (N45). Also provide site-specific technical, progress, and budgeting information to satisfy program reporting requirements;

c. Develop and support ER,N resource requests and manage funds allocated for program execution;

d. Resolve issues and problems associated with ER Program conduct and raise issues and problems to OPNAV (N45) where clarification of policy is necessary;

e. Provide technical and financial oversight during project performance;

f. Respond to emergency situations at ER sites through the geographical FEC using ER,N or BRAC funds as appropriate;

g. Assist the coordination of all docket listings;

h. Update the ER database at least semi-annually;

i. Track project progress to meet schedule requirements;

j. Assist the CO of the Navy installation in establishing a proactive public information program, including a formal community relations plan (CRP) for both NPL and non-NPL installations;

k. Be responsible for implementing the RAB;

l. Develop and implement an LTMgt plan that identifies the specific requirements for each site;
m. Ensure the requirements for protecting site worker health and safety are developed and enforced;

n. Ensure COMNAVFACENGCOM FECs coordinate the ER Program with installation COs and the BRAC PMO, as necessary;

o. Perform ER studies and RA projects and prepare SC documentation by contract, in-house effort, or combination;

p. Prepare and submit ESSs and other explosives safety documentation;

q. Coordinate with NOSSA to schedule explosive safety audits of MR projects;

r. Identify and train ER Program staff;

s. Negotiate FFAs or FFSRAs on behalf of DON. Forward draft final FFAs to OPNAV (N45) for review and submission to DASN(E) for signature. Forward draft final FFSRAs to OPNAV (N45) for signature. When substantial changes to model language or policy are contemplated, the changes should be referred to OAGC(EI&E) and OPNAV (N45) as early as possible;

t. With respect to PRPs, participate in remediation planning meetings with other PRPs and agencies, forward proposed remediation agreements to OPNAV (N45) and OGC for review and comment, sign and administer the agreements, and disseminate information to all interested parties at all stages of the process;

u. Represent Navy in matters relating to the assessment of fines or penalties associated with ER Programs;

v. Develop and perform site-specific projects to assess and control contamination from past HW disposal and MEC and MC sites;

w. Ensure ER work plans and ERAs are reviewed by health and safety and natural resources professionals familiar with the site;

x. Coordinate, at all stages, with COs, BRAC PMOs, and regulatory agencies;

y. Prepare project plans, reports, and contract documents; coordinate review and comments; and distribute final documents to the appropriate installation for CO signature, as necessary;
z. Prepare the ROD or DD and forward to the CO of the Navy installation with a recommended alternative;

aa. Maintain AR files and distribute copies as required;

bb. Provide ER study results to installation planning, real estate, and natural resources personnel;

cc. Work with acquisition project managers to ensure HS, MEC, and MC site conditions are taken into account before project decisions are finalized;

dd. Validate installation facility planning proposals against ER Program site installation or land use restrictions;

ee. Participate as member of the MRSPP QA Panel;

ff. Ensure ER response actions addressing CERCLA-listed G-RAM at active installations and BRAC sites work with Naval Sea Systems Command Detachment, Radiological Affairs Support Office (NAVSEADET RASO) to evaluate and select appropriate response actions;

gg. Prepare 5-year reviews of completed remedies for COs of Navy installations, FEC COs, or BRAC environmental coordinator signature, as appropriate;

hh. Develop ER Program cost and budget estimates to establish funding requirements for the DON planning, programming, and budgeting process; and

ii. Prepare and issue ER Program manuals and procedures (e.g., NERP Manual, optimization procedures) as necessary and required to enable effective implementation of DoD or DON policy by COMNAVFACENGCOM FECs.

42-4.4. Chief, Bureau of Medicine and Surgery (BUMED) (through the Navy and Marine Corps Public Health Center) 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 and medical related support to DON ER Program for risk assessments and other cleanup program documents including work plans, sampling plans, RI/FS documents, quality assurance plans, and health and safety plans as requested by COMNAVFACENGCOM;

d. Provide technical support for risk communication, risk assessment, health and safety, MR, and other health related training courses;

e. Conduct human health risk assessments, as required;

f. Provide assistance in developing ARARs for cleanup program activities; and

g. Assist COMNAVFACENGCOM and installations in preparing for public meetings and respond to community concerns regarding health and safety aspects of projects.

42-4.5. COs of active Navy installations shall:

a. Notify Federal, State, and local officials and the chain of command upon discovery of a release of HW, MEC, or MC;

b. Assist in coordinating all docket listings;

c. Provide logistic support for ER projects at their installation including support for periodic meetings with the RAB on ER Program sites;

d. Provide necessary review and comment on ER plans of action, reports, etc., to the cognizant COMNAVFACENGCOM FEC;

e. Prepare and implement a public participation program, including a CRP, for ER sites. Consult with COMNAVFACENGCOM. Place appropriate information in the information repository;

f. Appoint a contact or spokesperson for community relations activities that shall be responsible for receiving all inquiries and releasing information concerning the installation's ER Program. This may be the DON public affairs officer or RPM;

g. Forward, or authorize COMNAVFACENGCOM to forward, all final primary documents to EPA and state regulatory agencies prior to deadlines in either FFAs or state agreements and orders;
h. In conjunction with the COMNAVFACENGCOM FEC, select the remedy and sign the decision documents for all ER Program sites;

i. Ensure installation OM,N funds are not used to perform work eligible for ER,N funding;

j. Notify appropriate commands of any EPA or state notice of PRP action and support PRP response;

k. Consider ER Program site conditions or land use restrictions before land use planning, development, or operation, especially for MILCON and special projects;

l. Ensure the shore facilities planning process incorporates a review of the ER efforts being done at the installation;

m. Establish, in coordination with affected parties (e.g., the current owner or tenant; in the case of BRAC property, the prospective transferee), clearly defined and enforceable LUCs when appropriate;

n. Implement LUCs through established real estate and land use management mechanisms and ensure LUCs remain effective; and

o. Review and sign 5-year review reports prepared by COMNAVFACENGCOM.

42-4.6. NOSSA shall:

a. Provide an explosives safety oversight role in the MR Program and at any IRP sites where MEC or MC has been identified;

b. Maintain an archive of MR site-related documents;

c. Review MR notification reports;

d. Review and approve ESSs prepared by COMNAVFACENGCOM FEC and submit the approved ESSs to DDESB;

e. Review after action reports and submit to DDESB, as appropriate;

f. Review explosive mishaps reports and explosive ordnance disposal incident reports;

g. Conduct audits to ensure compliance with explosives safety requirements at MR sites;
h. Provide formal verification that the final response action was completed per approved explosives safety related requirements;

i. Provide explosives safety oversight for all MR actions with BSOs, COMNAVFACENGCOM, BRAC PMO, installations, and activities; and

j. Review proposed language for deeds, activity master plans, or other LUCs in collaboration with BSOs, COMNAVFACENGCOM, installations, and activities, with respect to explosive safety requirements.

42-4.7. NAVSEADET RASO shall:

a. Provide technical and policy assistance and support to Navy personnel (COMNAVFACENGCOM RPMs at active installations and BRAC PMO environmental coordinators at BRAC installations) authorized to select CERCLA response actions addressing CERCLA-listed G-RAM;

b. Assist COMNAVFACENGCOM and BRAC PMO in the evaluation and selection of appropriate ER response actions;

c. Perform on-site evaluations of work efforts and make available written notification of significant findings to the RPM to assess technical compliance with work documents; Federal, State, and local regulations; radiological controls; and health physics practices. During these evaluations, NAVSEADET RASO personnel may take confirmatory surveys or samples, and observe field work, but will not participate in field activities;

d. Recommend work stoppages to BRAC PMO or COMNAVFACENGCOM as a result of unsafe work practices in the field or unsatisfactory findings during evaluations of G-RAM work practices. Should work stoppages occur, review and concur on corrective actions prior to resumption of field activities;

e. Participate in the drafting and technical review process for documents involving G-RAM issues or radiologically-impacted sites. These documents include but are not limited to CERCLA and RCRA documents, historical radiological assessments, contractor field work documents, and presentations pertinent to G-RAM aspects of the ER Program; and
f. Investigate radiological incidents involving G-RAM in the ER Program upon notification.

42-5 Definitions

42-5.1. After Action Report. An after action report is a document required to be submitted to NOSSA within 6 months of completion of an MR. It documents that the explosives safety aspects of the response have been completed as outlined in the approved ESS and addresses the MECs found, effectiveness of the response techniques, any LUCs, LTMgt provisions for the residual risk, and other pertinent information.

42-5.2. Discarded Military Munitions. Discarded military munitions 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 unexploded ordnance, 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.

42-5.3. Ecological Risk Assessment. An ERA is an evaluation of whether adverse ecological effects could occur or have occurred from exposure to one or more stressors.

42-5.4. Environmental Restoration, Navy. SARA Section 211 established the Defense Environmental Restoration Account (DERA) to pay the cost of DoD responses to cleanup HS sites. Funds from DERA were transferred to the ER,N account for uses consistent with DERP.

42-5.5. Federal Facility Agreement. An FFA is a negotiated legal agreement between DON and EPA governing 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 RA less adversarial. States may participate in the FFA at their discretion.

42-5.6. Federal Facility State Remediation Agreement. An FFSRA is a negotiated agreement governing the CERCLA and RCRA administrative process for cleanup at non-NPL sites. As with FFAs, provisions of FFSRAs are factors in setting project execution priorities through risk management and are tools for formalizing commitments, making selection of RA less adversarial.
42-5.7. **General Radioactive Material.** G-RAM is Navy radioactive material, (e.g., byproduct, source, and special nuclear materials; naturally occurring radioactive materials; technologically enhanced naturally occurring radioactive materials; and naturally occurring and accelerator-produced radioactive materials) not used by, controlled by, or associated with the NNPP.

42-5.8. **Hazardous Substance.** For purposes of the IRP, HS is as defined in CERCLA Section 101(14). This includes materials that, because of their quantity, concentration, or physical, chemical or infectious characteristics, may pose a hazard to human health or the environment when released or spilled.

42-5.9. **Historical Radiological Assessment.** A historical radiological assessment is a document prepared to describe the radiological history of a site and designate radiologically-impacted areas.

42-5.10. **Industrial Settings.** Industrial settings are facilities where one or more chemical compounds are used or stored as part of the business operation of the facility, such as plating facilities, maintenance shops, manufacturing facilities, hangars, and welding shops. An office within an industrial setting, such as a foreman's office in a plating shop, is also considered to be part of the industrial area.

42-5.11. **Installation.** An installation is the real property owned, formerly owned, or leased by Navy, including a main base and any associated contiguous real properties identified by the same real property number.

42-5.12. **Land Use Controls.** LUCs include engineering controls (EC) and institutional controls (IC). ECs are remedies to contain or reduce contamination, 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.

42-5.13. **Long-Term Management.** LTMgt is the period of site management (e.g., maintenance, monitoring, recordkeeping, 5-year reviews) initiated after the RA objectives have been met, but HS, pollutants, or contaminants, including MECs and MCs, remain on-
site and are above levels that would allow for unlimited use and unrestricted exposure.

42-5.14. Military Munitions. Military munitions are 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, U.S. Coast Guard, Department of Energy, and 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, nuclear weapons, nuclear devices, and nuclear components, except 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.

42-5.15. Military Munitions Burial Site. A military munitions burial site is 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.

42-5.16. Munitions and Explosives of Concern. MECs include unexploded ordnance, discarded military munitions, and munitions constituents in high enough concentrations as to present an explosive hazard.

42-5.17. Munitions Constituents. MCs are any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

42-5.18. Munitions Response. MR actions include investigation, removal, and RAs to address the explosives safety, human health,
or environmental risks presented by unexploded ordnance, discarded military munitions, or munitions constituents.

42-5.19. Munitions Response Site. A MRS is a discrete location known or suspected to contain unexploded ordnance, discarded military munitions, or MCs. 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.

42-5.20. National Priorities List. The NPL is EPA's list of the nation's highest priority sites that need to be cleaned up. EPA bases a site's inclusion on the list on its threat to public health, welfare, or the environment using the hazard ranking system. Sites receiving scores above 28.5 are added to the NPL.

42-5.21. Natural Resource Damage. NRD is the amount of money sought by the NRT as compensation for injury, destruction, or loss of natural resources as set forth in CERCLA Section 107(a) or 111(b).

42-5.22. Natural Resource Damage Assessment. NRDA is the process of collecting, compiling, and analyzing information, statistics, or data through prescribed methodologies to determine damages for injuries to natural resources.

42-5.23. Natural Resources Injury. NRI is a measurable adverse change, either long- or short-term, in the chemical or physical quality of the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil or release of a HS. The aspects of injury could be determined during the site's ERA.

42-5.24. Natural Resources Trustee. An NRT is any Federal natural resources management agency designated in the NCP and any State agency designated by the governor of each state pursuant to CERCLA Section 107(f)(2)(B).

42-5.25. Naval Nuclear Propulsion Program Radioactive Material. NRAM is radioactive material used by, controlled by, or associated with the NNPP.

42-5.26. Preliminary Assessment. A PA is a review of existing site information to determine if a release may require additional investigation or action; it may include on-site reconnaissance, if appropriate.
42-5.27. Public Health Assessment. A public health assessment is the evaluation of data and information on the release of HS into the environment 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.

42-5.28. Radiologically-Impacted Site. A radiologically-impacted area is an outdoor area, building, or underground system (i.e., sewer) that has a potential of being affected by use of G-RAM or has been determined to be contaminated by G-RAM.

42-5.29. Record of Decision. A ROD is the official term used by CERCLA and the NCP for the documentation of a final remedial response action decision at a NPL site. It describes the remedy selection process and the remedy method selected. For non-NPL sites, the term "DD" is used. The DD is developed in the manner as a ROD.

42-5.30. Release. As defined by CERCLA Section 101(22), 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). The term 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 reference (c); and the normal application of fertilizer. For purposes of the NCP, release also means threat of release.

42-5.31. Remedial Action. An RA is an 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. Remedial Action - Construction. During RA-C, the designed remedial system is constructed at the site. This phase also may include any construction related to the implementation of LUCs.
b. Remedial Action - Operation. RA-O (formerly long-term operation) is that period of operation and maintenance 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 DD. Monitoring programs on a site during the RA-O phase are part of the RA-O; they are not LTMgt.

42-5.32. Remedial Action Objectives. RA objectives are site-specific goals 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.

42-5.33. Remedial Design. RD includes preparation of technical work plans, drawings, and specifications to convert the conceptual design for the remedy selected for a site from the FS into a full-scale detailed design for implementation.

42-5.34. Remedial Investigation and Feasibility Study. An 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.

42-5.35. Remedy in Place. The RIP milestone is achieved when the construction of a long-term remedy is complete and the remedy is operating as planned to meet project RA goals in the future, or a short-term remedy has been successfully implemented and the final documentation is being prepared.

42-5.36. Removal Action. A removal action is a response implemented in an expedited manner to address releases or threatened releases of HS or MEC that require prompt action.

42-5.37. Reportable Quantity. The reportable quantity is the amount 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.

42-5.38. Residential and Commercial Settings. Residential and commercial settings are housing units and businesses which do not use substantial amounts of chemical compounds as part of the business operation such as single family homes, condominiums,
apartments, hospitals, nursing homes, offices, stores, banks, and exchanges.

42-5.39. **Response Complete.** The RC milestone signifies the RA objectives have been met and the RA-O phase has achieved cleanup goals specified in the ROD or DD. Formal documentation for the RC milestone is essential to ensure recognition of completion of cleanup goals at the site. Prior to claiming completion of the RC milestone, regulatory concurrence of this documentation is required.

42-5.40. **Restoration Advisory Board.** The RAB is a group established to serve as a focal point for the exchange of cleanup information between Navy, regulators, and an installation's local community. Members of the RAB include Navy, EPA officials, appropriate state and local authorities, Federal and State natural resources trustees, and representatives of the affected community.

42-5.41. **Site.** A site is a location on or off an installation's property where HS or MEC has been deposited, stored, disposed, placed, or has otherwise come to be located. 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.

42-5.42. **Site Closeout.** The SC milestone signifies 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 the site, and no additional ER,N or BRAC funds are expected to be expended at the site.

42-5.43. **Site Inspection.** An SI is an on-site inspection to determine whether there is a release or potential release and the nature of the associated threats.

42-5.44. **Stakeholder.** Stakeholders include interested parties such as 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.
42-5.45. **Unexploded Ordnance.** Unexploded ordnance are military munitions that:

a. Have been primed, fused, armed, or otherwise prepared for action;

b. Have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and

c. Remain unexploded either by malfunction, design, or any other cause.

42-5.46. **Vapor Intrusion.** VI is the migration of vapor of sufficiently volatile chemical compounds from the subsurface environment into the indoor air of overlying buildings.
MAJOR LEGISLATION, REGULATIONS, EXECUTIVE ORDERS, AND INTERNATIONAL AGREEMENTS


A-1.1. Description. The 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. Guidance regarding implementation of this statute can be found in 43 CFR 3.

A-1.2. Related Chapters. Chapter 13 (Cultural Resources Compliance and Management).


A-2.1. Description. The Act to Prevent Pollution from Ships (APPS) applies to U.S. vessels worldwide and implements the requirements of annexes I (Oil Pollution), II (Noxious Liquid Substances Carried in Bulk), V (Ship-Generated Garbage), and VI (Air Pollution) of the International Convention for the Prevention of Pollution from Ships (MARPOL) for the United States. APPS excludes warships and naval auxiliaries from the preventive measures in annexes I, II, and VI. For annex V, APPS requires Navy ships and submarines to comply fully with discharge restrictions applicable outside of "special areas" designated under annex V and places limitations on Navy ship discharges within annex V special areas.

A-2.2. Related Chapters. Chapter 35 (Environmental Compliance Afloat).


A-3.1. Description. The American Indian Religious Freedom Act protects and preserves American Indians' rights to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians. Such protection and preservation includes access to sites, allowing the use and possession of sacred objects, and preserving freedom to worship through ceremonial and traditional rites.
A-3.2. **Related Chapters.** Chapter 13 (Cultural Resources Compliance and Management).

A-4 **Anti-Deficiency Act, 31 U.S.C. §1341**

A-4.1. **Description.** The Anti-Deficiency Act provides that government officials may not make payments or commit the United States to make payments at some future time for goods or services unless there is enough money in the available appropriation.

A-4.2. **Related Chapters.** Chapter 12 (Natural Resources Conservation).

A-5 **Archaeological and Historic Preservation Act, 16 U.S.C. §469-469c**

A-5.1. **Description.** The Archaeological and Historic Preservation Act, also known as the Reservoir Salvage Act, requires all Federal agencies to notify the Secretary of the Interior when a dam construction project threatens to irreparably harm or destroy significant scientific, prehistoric, historic, or archeological data, including paleontological resources. Additionally, the Act requires Federal agencies that determine, or are notified, its activities in connection with any federal construction project or federally licensed project, activity, or program may cause irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, to notify the Secretary of the Interior, who is given authority to act to survey and preserve the data.

A-5.2. **Related Chapters.** Chapter 13 (Cultural Resources Compliance and Management).

A-6 **Archaeological Resources Protection Act, 16 U.S.C. §470aa-470mm**

A-6.1. **Description.** The Archeological Resources Protection Act authorizes federal land managers to protect archaeological resources through permits authorizing excavation or removal of archaeological resources; civil and criminal penalties for unauthorized excavation or removal, damage, alteration, or defacement of archaeological resources or attempts to perform such unauthorized acts; provisions for the preservation of archaeological resource collections and data; and provisions for ensuring confidentiality of information about archaeological resources when disclosure would threaten the resource. It also
requires Federal agencies to create programs to promote public awareness of archaeological resources and authorizes criminal and civil penalties against any person who violates any prohibition of the Act.

A-6.2. Related Chapters. Chapter 13 (Cultural Resources Compliance and Management).


A-7.1. Description. The Atomic Energy Act assures the proper management of source, special nuclear, and byproduct material. The Atomic Energy Act and the statutes that amended it delegate the regulation of radioactive materials to the Department of Energy (DOE) and Nuclear Regulatory Commission (NRC), while the Environmental Protection Agency (EPA) is tasked in establishing standards. The Atomic Energy Act covers both civilian and military uses and disposal of nuclear materials. DOE controls material used for the production of nuclear fuel and weapons for national defense and NRC controls the rest.


A-8 Bald and Golden Eagle Protection Act, 16 U.S.C. §668-668d

A-8.1. Description. The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds.

A-8.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-9 Clean Air Act, 42 U.S.C. §7401-7671q

A-9.1. Description

a. The purpose of the Clean Air Act (CAA) is "to protect and enhance the quality of the nation's air resources so as to promote public health and welfare and the productive capacity of its population." CAA regulates air emissions from stationary and mobile sources. CAA establishes National Ambient Air Quality Standards (NAAQS) for six common air pollutants ("criteria pollutants") and requires states to institute controls with established air quality control regions to achieve the NAAQS. CAA requires EPA to establish necessary air quality control where
states fail to do so; mandates EPA to regulate 188 identified hazardous air pollutants; and implements the Montreal Protocol on ozone-depleting substances (ODS), mandating phase-out of ODS production, prohibiting intentional venting of ODS refrigerants during appliance servicing, and requiring technician certification.

b. CAA requires Federal agencies to comply with Federal, State, interstate, and local air pollution requirements in the same manner, and to the same extent as any nongovernmental entity. Although most air pollution regulations address shoreside sources, Navy ships operating within the United States may also be subject to certain regulations. Navy shore facilities typically have numerous sources of air pollutant emissions that are regulated and may require permits for construction and or operation. In addition, emissions from facility operations are of special concern in areas that do not meet air quality standards. Maintaining clean air can consist of preventing new sources of pollution or reducing or eliminating pollutant emissions from existing sources.

A-9.2. Related Chapters. Chapter 3 (Environmental Readiness Training), chapter 7 (Sampling and Laboratory Testing), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations), chapter 22 (Clean Air Ashore), chapter 23 (Hazardous Materials Management Ashore), chapter 25 (Toxic Substances Control Act), chapter 27 (Hazardous Waste Management Ashore), chapter 35 (Environmental Compliance Afloat), and chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response).

A-10 Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. §1251-1387

A-10.1. Description

a. The Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (CWA), regulates the discharge of pollutants from both point and non-point source discharges to surface waters. Non-point sources of pollution are managed through state or local controls.

b. CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) Program, which requires permits to discharge pollutants into waters of the United States. Sampling and laboratory testing are required to demonstrate
compliance with NPDES permits. Discharges incidental to the normal operation of a vessel of the Armed Forces are not subject to the NPDES Program but are subject to the Uniform National Discharge Standards (UNDS) Program. A list of Armed Forces vessel discharges regulated under the UNDS Program may be found in 40 CFR 1700. In addition, CWA Section 312 authorizes DoD to issue regulations governing the design, construction, installation, and operation of marine sanitation devices aboard vessels owned and operated by DoD.

c. CWA Section 404 provisions require permits to dispose of dredged and fill materials into navigable waters, which is important for wildlife protection purposes. CWA Section 319 describes guidelines for the control of non-point source pollution. Federal consistency provisions also authorize states to review federal activities for consistency with state non-point source programs. In addition, CWA Section 303(d) requires each state to develop total maximum daily loads for impaired water bodies.

d. CWA also regulates the discharge of oil and hazardous substances (OHS) and pollutants into or upon navigable waters including the contiguous zone, exclusive economic zone (EEZ), and adjoining shorelines. It provides for the establishment of the National Response Team, NRC, and National OHS Pollution Contingency Plan. For additional information, see the Oil Pollution Act of 1990.

A-10.2. Related Chapters. Chapter 3 (Environmental Readiness Training), chapter 7 (Sampling and Laboratory Testing), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 12 (Natural Resources Conservation), chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations), chapter 23 (Hazardous Materials Management Ashore), chapter 27 (Hazardous Waste Management Ashore), chapter 30 (Oil Management Ashore), chapter 31 (Storage Tanks), chapter 35 (Environmental Compliance Afloat), chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response), and chapter 41 (Natural Resource Damage).

A-11 Coastal Barrier Resources Act, 16 U.S.C. §3501-3510

A-11.1. Description. The Coastal Barrier Resources Act restricts federally subsidized development of undeveloped coastal barriers along the Atlantic and Gulf of Mexico coasts.

A-11.2. Related Chapters. Chapter 12 (Natural Resources
A-12 Coastal Zone Management Act, 16 U.S.C. §§1451-1466

A-12.1. Description

a. The Coastal Zone Management Act (CZMA) establishes a voluntary national program to encourage coastal states to properly manage the use of their coasts and coastal resources, prepare and implement coastal management programs, and provide for public and governmental participation in decisions affecting the coastal zone. CZMA provides incentives for coastal states to develop and implement coastal area management programs, which frequently incorporate flood control, sediment control, grading control, and stormwater runoff control statutes.

b. Federal actions must be conducted in a manner consistent with a federally-approved state plan. To this end, 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.

A-12.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 12 (Natural Resources Conservation), chapter 14 (Coastal Zone Management), and chapter 20 (Clean Water Ashore).


A-13.1. Description. The Community Environmental Response Facilitation Act (CERFA) amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provisions relating to federal activities on real property owned by the Federal government. CERFA requires the Federal government, before termination of federal activities on any real property owned by the government, to identify uncontaminated real property (where no hazardous substance (HS) was stored, released, or disposed of). It amends CERCLA Section 120(h) to allow expedition of reuse and redevelopment of federal facilities being closed. CERFA recognized that the closure of certain federal facilities was having adverse effects on the economies of local communities by eliminating jobs associated with such facilities, and delay in remediation of environmental contamination of real property at such facilities was preventing transfer and private development of such property.
A-13.2. Related Chapters. Chapter 42 (Environmental Restoration).


A-14.1. Description

a. CERCLA establishes requirements concerning closed and abandoned hazardous waste (HW) sites, provides for liability of responsible parties, and establishes a trust fund to provide for cleanups when responsible parties cannot be found. CERCLA establishes the planning and response framework for HS releases and authorizes natural resource trustees (Federal and State officials and Indian tribes) to recover damages for injury to, destruction of, or loss of natural resources resulting from the release of a HS. It requires releases of covered HS meeting or exceeding thresholds to be reported to NRC. It also requires sampling and testing at CERCLA sites to characterize the nature and extent of contamination, estimate risks to human health and the environment, select remedial alternatives, and evaluate the effectiveness of selected remedies.

b. CERCLA gives EPA (for inland zones) and the U.S. Coast Guard (for coastal zones) authority to designate a federal on-scene coordinator (FOSC) to direct emergency response and HS removal activities. The FOSC has the administrative and enforcement authority to implement the provisions of CERCLA. Under 40 CFR 300, 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. Additionally, CERCLA enables FOSCs to conduct cleanup.

A-14.2. Related Chapters. Chapter 3 (Environmental Readiness Training), chapter 7 (Sampling and Laboratory Testing), chapter 24 (Pesticide Compliance Ashore), chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act), chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response), chapter 41 (Natural Resource Damage), and chapter 42 (Environmental Restoration).

A-15 Data Quality Act, 44 U.S.C. §3504(d)(1) and 3516

A-15.1. Description. The Data Quality Act, also known as the Information Quality Act, was part of the Treasury and General Government Appropriations Act for Fiscal Year 2001. Section 515
directs the Office of Management and Budget to issue government-wide guidelines to ensure and maximize "the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." It requires influential scientific information, including environmental data, be capable of being substantially reproduced.

A-15.2. Related Chapters. Chapter 7 (Sampling and Laboratory Testing).


A-16.1. Description. This Act establishes the Legacy Resource Management Program which provides financial assistance to DoD for efforts to preserve our natural and cultural heritage.

A-16.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-17  Emergency Planning and Community Right-to-Know Act, 42 U.S.C. §§11001-11050

A-17.1. Description. The Emergency Planning and Community Right-to-Know Act (EPCRA) supports emergency planning and provides information to the public about the hazards associated with chemicals present at facilities and toxic chemical releases. Under EPCRA, covered facilities must provide timely and comprehensive information about the storage, use, and release of certain hazardous chemicals. EPCRA also requires immediate notification of releases of extremely hazardous substances, as defined under EPCRA, and HS, as defined under CERCLA, to state and local emergency response planners. Most notably, EPCRA requires all submissions be made publicly available by state and local EPCRA authorities.

A-17.2. Related Chapters. Chapter 23 (Hazardous Materials Management Ashore) and chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act).


A-18.1. Description

a. The Endangered Species Act (ESA) protects listed endangered species by prohibiting unauthorized taking of listed species in the United States or on the high seas. ESA Section 7
requires Federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) to ensure their actions will not jeopardize the continued existence of a listed species. This is done through the preparation of a biological assessment, which is submitted to the resource agency (USFWS or NMFS). The resource agency conducts an assessment of the potential effects of the proposed action in the context of the status of the listed species and issues an opinion to the requesting Federal agency. The majority of the conclusions that are reached for Navy actions will be one of two conclusions: (1) may affect, but not likely to adversely affect, or (2) may affect, but not likely to jeopardize the continued existence of the listed species.

b. ESA also requires the designation of "critical habitat" for listed species when it is judged to be "prudent and determinable." Critical habitat includes geographic areas that contain the physical or biological features essential to the conservation of the species and that may need special management or protection. Critical habitat designations affect only Federal agency actions or federally funded or permitted activities. Federal agencies are required to avoid "adverse modification" of designated critical habitat. Critical habitat may include areas not occupied by the species at the time of listing but that are essential to its conservation. In accordance with National Defense Authorization Act for Fiscal Year 2004 (NDAA 2004) provisions, the resource agency (USFWS or NMFS) cannot designate critical habitat on an installation with an integrated natural resources management plan (INRMP) (see Sikes Act) that the secretary of the resource agency finds has a benefit to the listed species. Additionally, the resource agency must consider national security impacts when designating critical habitat.

A-18.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 12 (Natural Resources Conservation), chapter 24 (Pesticide Compliance Ashore), and chapter 35 (Environmental Compliance Afloat).


A-19.1. Description

a. The Energy Policy Act (EPAct) amends numerous provisions of the U.S. Code, covering topics in the areas of energy and water conservation, alternative energy sources, reduction in
fossil fuel use, and sustainable building design. It includes specific procurement requirements for energy efficient products and the increased use of cement and concrete with recovered mineral content.

b. EPAct Subtitle B (also known as the Underground Storage Tank Compliance Act of 2005) focuses on preventing underground storage tank (UST) releases and includes provisions regarding inspections, operator training, delivery prohibition, secondary containment, financial responsibility, and cleanup of releases that contain oxygenated fuel additives.

c. EPAct Section 15228 waived sovereign immunity for reasonable nondiscriminatory user fees; inspection fees; monitoring fees; civil sanctions; civil fines; and criminal acts in owning, managing, and oversight of USTs.

A-19.2. Related Chapters. Chapter 17 (Environmental Management Systems), chapter 22 (Clean Air Ashore), and chapter 31 (Storage Tanks).

A-20 Executive Order 12580, Superfund Implementation

A-20.1. Description. Executive Order (E.O.) 12580 delegates responsibilities to DoD for implementing CERCLA. Under E.O. 12580, Navy will exercise its authority to address off-range releases of military munitions and munitions constituents in a manner consistent with CERCLA.


A-21 Farm Security and Rural Investment Act, 7 U.S.C. §7901-8001

A-21.1. Description. The Farm Security and Rural Investment Act, also known as the 2002 Farm Bill, establishes the U.S. Department of Agriculture biobased product procurement program, which designates biobased items for Federal agencies to purchase, and provides recommendations for agencies purchasing these items with biobased content.


A-22.1. Description
a. The Federal Facilities Compliance Act (FFCA) amended the Resource Conservation and Recovery Act (RCRA) and subjects federal facilities to all provisions of Federal, State, interstate, and local HW laws and regulations (to include fees, assessments, fines, and penalties). FFCA exempts agents, employees, and officers 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. FFCA also requires payment of any non-discriminatory fees, including 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.

b. RCRA, as modified by the FFCA, provides that HW generated on public vessels is not subject to storage, manifest, inspection, or recordkeeping requirements until the ship transfers such waste ashore or transfers it to another public vessel within 12 nautical miles of the United States and then only after the receiving vessel stores it aboard for more than 90 days after the date of transfer.

A-22.2. Related Chapters. Chapter 20 (Clean Water Ashore), chapter 24 (Pesticide Compliance Ashore), chapter 27 (Hazardous Waste Management Ashore), and chapter 31 (Storage Tanks).


A-23.1. Description. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the principal means for preventing adverse effects from pesticides through product registration (which results in label instructions on each container for use, storage, and disposal) and applicator certification. It is unlawful to purchase, distribute, or use any pesticide that does not have an EPA registration number or for which registration has been cancelled or suspended. EPA approves Federal and State agency plans for training and certification of pesticide applicators.

A-23.2. Related Chapters. Chapter 23 (Hazardous Materials Management Ashore) and chapter 24 (Pesticide Compliance Ashore).

A-24 Federal Water Pollution Control Act
A-24.1. **Description.** Refer to CWA.

A-24.2. **Related Chapters.** Chapter 24 (Pesticide Compliance Ashore) and chapter 41 (Natural Resource Damage).


A-25.1. **Description.** The Fish and Wildlife Conservation Act, commonly known as the Nongame Act, encourages states to develop conservation plans for nongame fish and wildlife of ecological, educational, aesthetic, cultural, recreational, economic, or scientific value.

A-25.2. **Related Chapters.** Chapter 12 (Natural Resources Conservation).

A-26  **Food Quality Protection Act, 7 U.S.C. §136-136y**

A-26.1. **Description.** The Food Quality Protection Act amends FIFRA, adding language directly applicable to the DoD Pest Management Program by defining "maintenance applicator," "vector and public health pesticide," and "integrated pest management (IPM);" establishing a requirement for minimum training; and promoting IPM through procurement and regulatory policies.

A-26.2. **Related Chapters.** Chapter 24 (Pesticide Compliance Ashore).


A-27.1. **Description.** This Act generally prohibits exporting from the United States unprocessed timber originating from federal lands west of the 100th meridian in the 48 contiguous states. It also directs the Secretary of Commerce to issue orders containing a similar prohibition for state and other public lands. Procedures for monitoring and restrictions on sales and transfers of unprocessed timber are established for both types of land.

A-27.2. **Related Chapters.** Chapter 12 (Natural Resources Conservation).

A-28  **Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §6901**
A-28.1. **Description.** The Hazardous and Solid Waste Amendments of 1984 amended RCRA to include provisions addressing waste minimization, restrictions on the land disposal of HW, corrective action for releases, and USTs. The amendments provide for the development and implementation of a comprehensive regulatory program for USTs containing regulated substances and releases of these substances to the environment. They also require federal facilities to 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 memoranda of understanding with EPA have primary enforcement responsibility regarding UST program requirements. Federal facilities must comply with all applicable provisions of approved state UST programs.

A-28.2. **Related Chapters.** Chapter 31 (Storage Tanks).


A-29.1. **Description.** The Hazardous Material Transportation Act regulates the marking, manifesting, labeling, packaging, placarding, and spill reporting provisions for hazardous materials in transit.

A-29.2. **Related Chapters.** Chapter 3 (Environmental Readiness Training), chapter 23 (Hazardous Materials Management), and chapter 27 (Hazardous Waste Management Ashore).

A-30 **International Convention for the Prevention of Pollution From Ships**

A-30.1. **Description**

a. MARPOL is an international agreement designed to minimize pollution of the seas from commercial vessels. While the requirements and standards established by MARPOL do not apply directly to warships, auxiliaries, and other government owned vessels, parties to MARPOL have an obligation to ensure, by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships, they act in a manner consistent with the agreement, so far as is reasonable and practicable.

b. MARPOL currently has six annexes addressing various shipboard pollution sources:
(1) Annex I: Oil Pollution;

(2) Annex II: Noxious Liquid Substances Carried in Bulk;

(3) Annex III: Harmful Substances Carried in Packaged Form;

(4) Annex IV: Sewage;

(5) Annex V: Ship-Generated Garbage; and

(6) Annex VI: Air Pollution.

c. The United States is not party to Annex IV.

d. For additional information on a particular MARPOL annex, refer to the International Maritime Organization Web site (refer to appendix E (Web Sites) for Web site address).

A-30.2. Related Chapters. Chapter 35 (Environmental Compliance Ashore).


A-31.1. Description. The Low-Level Radioactive Waste Policy Act (LLRWPA) gives each U.S. state the responsibility of developing a method for disposing of LLRW generated within its borders. It leaves to the states' discretion whether such methods consist of establishing a site within their territory or joining an interstate LLRW compact. LLRWPA also applies to LLRW produced by the Federal government, making agencies under federal authority responsible for the disposal of their waste.


A-32.1. Description. The Magnuson-Stevens Fishery Conservation and Management Act provides for the conservation and management of the fisheries and other purposes, including a requirement to designate essential fish habitat.

A-32.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order
12114) and chapter 12 (Natural Resources Conservation).

A-33  Marine Mammal Protection Act, 16 U.S.C. §1361, 1362, 1371-1389, 1401-1407, 1411-1418, 1421-1423h

A-33.1. Description

a. The Marine Mammal Protection Act (MMPA) established a federal responsibility to conserve marine mammals. Subject to limited exceptions, MMPA protects marine mammals by prohibiting unauthorized "taking" of marine mammals in the United States or on the high seas unless exempted or authorized by NMFS, the regulating agency. "Taking" is defined by NDAA 2004 as "to harass, hunt, capture, or kill or attempt to harass, hunt capture or kill any marine mammal."

b. Permission may be granted to "take" marine mammal(s) incidental to Navy activities if the regulatory agency secretary determines the Navy action will: (1) have a negligible impact on the species or stock(s) so the taking is not likely to reduce annual rates of adult survival or annual recruitment; and (2) the activity affects "small numbers" of species or stock so the taking will be small relative to the estimated population size and relevant to the behavioral, physiological, and life history characteristics of the species.

A-33.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 12 (Natural Resources Conservation), and chapter 35 (Environmental Compliance Afloat).


A-34.1. Description. The Marine Protection, Research, and Sanctuaries Act (MPRSA), also referred to as the Ocean Dumping Act, regulates the dumping of material from outside the United States into a territorial sea or the contiguous zone of the United States and transportation of material from the United States for dumping into ocean waters; implements for the United States the London Dumping Convention; and requires an EPA permit for transportation from the United States, or from elsewhere in the world, of any "material" for the purpose of disposing of it in the ocean. The U.S. Navy holds two general permits from EPA for use of target vessels and for burial at sea. The Act does not apply to waste generated aboard ships while underway. In
practical terms, it requires trash and garbage generated in port to be off-loaded for shore disposal before getting underway. Also, wastes generated during exercises ashore cannot be loaded aboard ships for subsequent ocean disposal.

A-34.2. Related Chapters. Chapter 20 (Clean Water Ashore) and chapter 36 (Permitted Ocean Disposition).


A-35.1. Description. The Migratory Bird Treaty Act (MBTA) prohibits the taking, possessing, or killing of migratory birds. The statute also grants full protection to any bird parts, including feathers, eggs, and nests. In addition, the Act makes it illegal to disturb the nests of any native birds without a permit from USFWS or to incubate wild bird eggs.

A-35.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-36 Migratory Bird Treaty Reform Act of 2004

A-36.1. Description. The Migratory Bird Treaty Reform Act amends MBTA to exclude non-native migratory bird species from the application of that Act, and for other purposes.

A-36.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-37 Military Construction Codification Act, Section 6, 10 U.S.C. §2577

A-37.1. Description. The Military Construction Codification Act, Section 6 amends Title 10 of the U.S. Code to add a provision that allows net proceeds from the sale of recyclable materials (including used oil) to be used by military activities for certain purposes.

A-37.2. Related Chapters. Chapter 30 (Oil Management Ashore).

A-38 Military Munitions Rule, 40 CFR 260-266, 270

A-38.1. Description. The Military Munitions Rule (MMR) defines special requirements for the management of waste military munitions that differ from how other solid waste (SW) and HW are managed under RCRA. MMR defines when military munitions are
classified as an SW, and therefore, potentially subject to RCRA regulations.


A-39  Montreal Protocol on Substances that Deplete the Ozone Layer

A-39.1. Description. The Montreal Protocol, an international treaty ratified by the United States and 195 other nations, requires the production phase-out of ODSs.

A-39.2. Related Chapters. Chapter 22 (Clean Air Ashore).


A-40.1. Description. This provision restricts the purchase of Class I ODSs. It also requires that no Class I ODS contracts be issued unless an appropriate technical representative determines and provides a written technical certification that no suitable substitute is available for an application and a senior acquisition official approves the procurement.

A-40.2. Related Chapters. Chapter 22 (Clean Air Ashore).

A-41  National Emission Standards for Hazardous Air Pollutants for Shipbuilding and Ship Repair, 40 CFR Part 63, Subpart II

A-41.1. Description. The National Emission Standards for Hazardous Air Pollutants are stationary source standards for hazardous air pollutants. Subpart II imposes limits on the volatile organic hazardous air pollutant (VOHAP) content of 23 types of coatings used at shipyards and establishes requirements for handling and transfer of VOHAP-containing materials.

A-41.2. Related Chapters. Chapter 35 (Environmental Compliance Afloat).


A-42.1. Description. The National Environmental Policy Act (NEPA) mandates Federal agencies incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all Federal agencies are to prepare detailed statements assessing the impact
of major federal actions that may significantly affect the quality of the human environment of the United States, its territories, and possessions. The analyses must consider reasonable alternatives to a proposed action to mitigate potential adverse environmental effects. NEPA requires consideration of cultural resources consistent with the National Historic Preservation Act (NHPA) and other applicable statutes.

A-42.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114), chapter 11 (Environmental Readiness in the Acquisition Process), chapter 13 (Cultural Resources Compliance and Management), and chapter 41 (Natural Resource Damage).


A-43.1. Description

a. NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and to designate a qualified federal preservation officer to coordinate agency activities under this Act. Federal agencies must afford the Advisory Council on Historic Preservation an opportunity to comment whenever agency undertakings may affect historic properties or resources eligible for listing on the National Register (refer to 36 CFR 800), and, to the maximum extent possible, undertake planning and actions necessary to minimize harm to national historic landmarks.

b. With respect to overseas activities, 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.

A-43.2. Related Chapters. Chapter 13 (Cultural Resources Compliance and Management) and chapter 34 (Overseas Environmental Compliance Ashore).

A-44 National Invasive Species Act, 16 U.S.C. §4701

A-44.1. Description. The National Invasive Species Act authorizes the Federal government to produce guidelines for how to guard against the introduction and dispersal of invasive species, regulations for vessel operations and crew safety, and education and training programs to promote compliance.
A-44.2. Related Chapters. Chapter 11 (Environmental Readiness in the Acquisition Process).


A-45.1. Description. MPRSA Title III is known as the National Marine Sanctuaries Act (NMSA). NMSA establishes the National Marine Sanctuary Program, under which the National Oceanic and Atmospheric Administration designates and establishes specific regulations pertaining to activities and uses allowed within each designated national marine sanctuary.

A-45.2. Related Chapters. Chapter 10 (Environmental Planning Under the National Environmental Policy Act and Executive Order 12114).

A-46 National Primary Drinking Water Regulations, 40 CFR 141 et seq

A-46.1. Description. The National Primary Drinking Water Regulations (NPDWR) or primary standards are legally enforceable standards that apply to public water systems (PWS). 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 inorganics, organics, total coliform, disinfectants and disinfection byproducts, and radionuclides. For each contaminant identified, EPA establishes a maximum contaminant level (MCL), treatment technique, or action level which, where feasible, has been used to establish NPDWR for the contaminant. Once issued, NPDWR are mandatory for all PWSs.

A-46.2. Related Chapters. Chapter 21 (Safe Drinking Water Act Compliance Ashore).

A-47 National Secondary Drinking Water Regulations, 40 CFR 143

A-47.1. Description. For contaminants that may cause drinking water to become aesthetically unpleasing, the Safe Drinking Water Act (SDWA) requires EPA to specify the MCL 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 NSDWRs. If the state enforces NSDWRs, then Navy activities shall comply.
A-47.2. **Related Chapters.** Chapter 21 (Safe Drinking Water Act Compliance Ashore).


A-48.1. **Description.** The Native American Graves Protection and Repatriation Act 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.

A-48.2. **Related Chapters.** Chapter 13 (Cultural Resources Compliance and Management).

A-49  **Noise Control Act, 42 U.S.C. §4901-4918**

A-49.1. **Description.** The Noise Control Act provides for federal performance standards, which Navy must incorporate into the design of new ship systems and equipment 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. Workplace noise is not environmental noise.

A-49.2. **Related Chapters.** Chapter 35 (Environmental Compliance Afloat).

A-50  **Occupational Safety and Health Act, 29 U.S.C. §651-678**

A-50.1. **Description**

a. The Occupational Safety and Health Act directs employers to establish and maintain comprehensive and effective occupational safety and health programs. It covers emergency response planning for facilities that handle, store, or transport HS to protect facility employees and emergency responders. It is made applicable to federal employees through E.O. 12196. 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. Sampling and testing are required to evaluate workplace exposure.
to harmful substances and to demonstrate compliance with permissible exposure limits established under the Act.

b. The Act also governs when a material safety data sheet (MSDS) is required. Requirements for MSDSs, product labeling, and workplace training on hazardous materials are established under 29 CFR 1910.1200. In addition, 29 CFR 1910.119 includes provisions to cleanup uncontrolled HW sites, implement corrective action, and establish routine and emergency HW operations.

A-50.2. Related Chapters. Chapter 7 (Sampling and Laboratory Testing), chapter 23 (Hazardous Materials Management Ashore), chapter 26 (Procedures for Implementing the Environmental Planning and Community Right-to-Know Act), chapter 27 (Hazardous Waste Management Ashore), and chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response).

A-51 Ocean Dumping Act

A-51.1. Description. Refer to MPRSA.

A-51.2. Related Chapters. Chapter 35 (Environmental Compliance Afloat) and chapter 36 (Permitted Ocean Disposition).


A-52.1. Description. The Oil Pollution Act of 1990 (OPA 90) amended CWA to expand oil spill prevention activities, improve preparedness and response capabilities, and ensure companies are responsible for damages from spills. It 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 U.S. EEZ. It also provides for the designation of resource trustees, who determine whether injury to, destruction of, or loss of use of natural resources has resulted from such a discharge. OPA 90 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.

A-52.2. Related Chapters. Chapter 20 (Clean Water Ashore), chapter 30 (Oil Management Ashore), chapter 31 (Storage Tanks), chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response), and chapter 41 (Natural Resource Damage).

A-53 Pollution Prevention Act, 42 U.S.C. §13101-13109
A-53.1. Description. The Pollution Prevention Act of 1990 establishes the national policy to prevent or reduce pollution at the source whenever feasible. For pollution that cannot be prevented, the following hierarchy applies: pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be 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 conducted in an environmentally safe manner.

A-53.2. Related Chapters. Chapter 11 (Environmental Readiness in the Acquisition Process), chapter 17 (Environmental Management Systems), and chapter 23 (Hazardous Materials Management Ashore).


A-54.1. Description. RCRA, which amended the Solid Waste Disposal Act of 1965, regulates the management of SW and HW. 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. 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 FFCA. RCRA also requires contingency plans designed to minimize hazards to human health and the environment. The plans require information on facility emergency equipment, evacuation, and coordination.

A-54.2. Related Chapters. Chapter 7 (Sampling and Laboratory Testing), chapter 17 (Environmental Management Systems), chapter 19 (Processing Notices of Violation Under Environmental Laws and Regulations), chapter 24 (Pesticide Compliance Ashore), chapter 27 (Hazardous Waste Management Ashore), chapter 29 (Low-Level Radioactive Waste Disposal Program), chapter 31 (Storage Tanks), chapter 35 (Environmental Compliance Afloat), chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response), and chapter 42 (Environmental Restoration).

A-55.1. **Description.** This law, generally referred to as the Rivers and Harbors Act, regulates the disposal of refuse and debris into U.S. rivers and harbors 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 material disposal. Specifically, EPA establishes criteria and guidelines to protect the nation's waters from contamination by dredged or fill material. USACE and some states administer permit programs for dredge and fill operations in waterways and wetlands and for construction activities in navigable waters.

A-55.2. **Related Chapters.** Chapter 20 (Clean Water Ashore).

A-56. **Safe Drinking Water Act (Title XIV of the Public Health Service Act), 42 U.S.C. §300f - 300j-26**

A-56.1. **Description**

a. SDWA creates a system for the protection of drinking water supplies through establishment of contaminant limitations and enforcement procedures. SDWA requires EPA to issue primary drinking water standards to protect public health. It allows EPA to designate sole source aquifers as the principal source of drinking water for communities. It also requires each state to adopt a wellhead protection program to prevent contamination of surface and subsurface areas that surround wells within their jurisdiction from contamination. States have primary responsibility to enforce compliance with national primary drinking water standards and sampling, monitoring, and notice requirements.

b. SDWA also requires EPA to identify MCL goals (MCLG), 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 SDWA is to move towards implementing these MCLGs when possible. A table listing all contaminants and standards can be found on the EPA Web page (refer to appendix E (Web Sites) for Web site address).

A-56.2. **Related Chapters.** Chapter 21 (Safe Drinking Water Act Compliance Ashore) and chapter 28 (Solid Waste Management and Resource Recovery Ashore).

A-57. **Sikes Act (Conservation Programs on Military Installations), 16 U.S.C. §670a-670o**
A-57.1. Description

a. The Sikes Act requires the Secretary of Defense (through each Military Department) to carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. The Secretary of each Military Department must prepare and implement an INRMP for each installation in the United States, unless the Secretary determines that the absence of significant natural resources on a particular installation makes the preparation of such a plan inappropriate.

b. The INRMP must be prepared in cooperation with USFWS and the appropriate state fish and wildlife agency. The Act requires INRMPs reflect mutual agreement of the parties concerning the conservation, protection, and management of fish and wildlife resources. The plan should also provide for the sustainable multipurpose use of the resources and public access to military installations, subject to safety and security requirements. Furthermore, the Act requires that, to the extent practicable, the INRMP provide for no net loss in the capability of the installation to support the military mission, and the Secretary ensure sufficient numbers of professionally trained natural resources management personnel are available to carry out implementation of the plan. Each INRMP must be reviewed annually as to the plan’s effectiveness.

A-57.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-58 Soil Conservation and Domestic Allotment Act

A-58.1. Description. Also called the Soil Conservation Act, the Act provides for permanent control and prevention of soil erosion, and other purposes.

A-58.2. Related Chapters. Chapter 12 (Natural Resources Conservation).

A-59 Solid Waste Disposal Act

A-59.1. Description. Refer to RCRA.


A-60 Sunken Military Craft Act, 10 U.S.C. §113
A-60.1. Description. The Sunken Military Craft Act (SMCA) establishes the United States right, title, and interest in any U.S. sunken military craft. SMCA also specifies that the right, title, and interest of the United States in and to any U.S. sunken military craft and its associated contents shall not be extinguished except by express divestiture of title, and is not affected by the passage of time. SMCA further provides that no person shall engage in any salvage or other activity directed at sunken military craft that disturbs, removes, or injures any sunken military craft unless authorized by law or regulation or at the direction of the United States. Civil penalties may be assessed for violating the Act and violators may also be held liable for damages to any sunken military aircraft.

A-60.2. Related Chapters. Chapter 13 (Cultural Resources Compliance and Management) and chapter 40 (Sunken Navy Vessels).


A-61.1. Description. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA and requires that federal facilities "shall be subject to, and comply with, this act in the manner and to the same extent, both procedurally and substantively, as any non-government entity." SARA also established the Defense Environmental Restoration Program (DERP). Through DERP, DoD conducts environmental restoration activities at sites on active installations, installations undergoing base realignment and closure, and formerly used defense site.

A-61.2. Related Chapters. Chapter 42 (Environmental Restoration).


A-62.1. Description

a. The Toxic Substance Control Act (TSCA) authorizes EPA to require reporting, recordkeeping, testing, and restrictions related to toxic substances. It specifically addresses the production, importation, use, and disposal of polychlorinated biphenyls, asbestos, and lead-based paint and the assessment and management of naturally-occurring radon inside buildings. Sampling and testing are required to characterize potential releases of toxic substances and to evaluate compliance with limits established by EPA.
b. Overseas installations that export from or import to the United States 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. TSCA Section 12 contains export notification obligations and export exemptions. TSCA Section 13 discusses importer regulations, definitions, and exclusions.

A-62.2. Related Chapters. Chapter 7 (Sampling and Laboratory Testing), chapter 23 (Hazardous Materials Management Ashore), chapter 25 (Toxic Substances Control Act), chapter 27 (Hazardous Waste Management Ashore), chapter 34 (Overseas Environmental Compliance Ashore), and chapter 35 (Environmental Compliance Afloat).


A-63.1. Description. The 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.

A-63.2. Related Chapters. Chapter 35 (Environmental Compliance Afloat).
# APPENDIX B

## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>A2R2</td>
<td>Annual Allowance Requirements Request</td>
</tr>
<tr>
<td>ABS</td>
<td>American Board of Shipping</td>
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<tr>
<td>AC</td>
<td>alternating capacitor</td>
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<tr>
<td>AC&amp;R</td>
<td>air conditioning and refrigeration</td>
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<tr>
<td>ACAT</td>
<td>acquisition category</td>
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<tr>
<td>ACAT I</td>
<td>acquisition category I</td>
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<tr>
<td>ACAT IA</td>
<td>acquisition category I, major automated information systems</td>
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<tr>
<td>ACM</td>
<td>asbestos-containing materials</td>
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<tr>
<td>ACP</td>
<td>area contingency plan</td>
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<tr>
<td>ACQ-ER</td>
<td>acquisition in environmental readiness</td>
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<tr>
<td>A/D</td>
<td>abandonment and destruction</td>
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<tr>
<td>AEPC</td>
<td>afloat environmental protection coordinator</td>
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<tr>
<td>AHC</td>
<td>Afloat Hazardous Material Coordinator</td>
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<tr>
<td>AESO</td>
<td>Aircraft Environmental Support Office</td>
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<tr>
<td>AFFF</td>
<td>aqueous film-forming foam</td>
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<tr>
<td>AFIT</td>
<td>Air Force Institute of Technology</td>
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<tr>
<td>AICUZ</td>
<td>air installations compatible use zones</td>
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<tr>
<td>AIRFA</td>
<td>American Indian Religious Freedom Act</td>
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<tr>
<td>AL</td>
<td>action level</td>
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<tr>
<td>AoA</td>
<td>analysis of alternatives</td>
</tr>
<tr>
<td>AOC</td>
<td>area of concern</td>
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<tr>
<td>AOR</td>
<td>area of responsibility</td>
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<tr>
<td>APM</td>
<td>asbestos program manager</td>
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<tr>
<td>APPS</td>
<td>Act to Prevent Pollution from Ships</td>
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<tr>
<td>AQD</td>
<td>air quality district</td>
</tr>
<tr>
<td>ARAR</td>
<td>applicable or relevant and appropriate requirement</td>
</tr>
<tr>
<td>ARPA</td>
<td>Archeological Resources Protection Act</td>
</tr>
<tr>
<td>ASD(ISA)</td>
<td>Assistant Secretary of Defense (International Security Affairs)</td>
</tr>
<tr>
<td>ASN</td>
<td>Assistant Secretary of the Navy</td>
</tr>
<tr>
<td>ASN(EI&amp;E)</td>
<td>Assistant Secretary of the Navy for Energy, Installations, and Environment</td>
</tr>
<tr>
<td>ASN FMO</td>
<td>Assistant Secretary of the Navy, Financial Management Office</td>
</tr>
<tr>
<td>ASN(RD&amp;A)</td>
<td>Assistant Secretary of the Navy for Research, Development, and Acquisition</td>
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<tr>
<td>ASR</td>
<td>alternative system review</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>--------------</td>
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<tr>
<td>AST</td>
<td>aboveground storage tank</td>
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<tr>
<td>ATR</td>
<td>appropriate technical representative</td>
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<td>ATSDR</td>
<td>Agency for Toxic Substances and Disease Registry</td>
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<td>AUL</td>
<td>authorized use list</td>
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<tr>
<td>BA</td>
<td>biological assessment</td>
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<td>BACM</td>
<td>best available control measures</td>
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<tr>
<td>BACT</td>
<td>best available control technology</td>
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<td>BASH</td>
<td>bird/animal aircraft strike hazard</td>
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<tr>
<td>BE</td>
<td>biological evaluation</td>
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<tr>
<td>BMP</td>
<td>best management practice</td>
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<td>BO</td>
<td>biological opinion</td>
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<tr>
<td>BOA</td>
<td>basic ordering agreement</td>
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<tr>
<td>BRAC</td>
<td>base realignment and closure</td>
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<td>BSO</td>
<td>budget submitting office</td>
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<tr>
<td>BUMED</td>
<td>Chief, Bureau of Medicine and Surgery</td>
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<td>BWPT</td>
<td>bilge water processing tank</td>
</tr>
<tr>
<td>C&amp;D</td>
<td>construction and demolition</td>
</tr>
<tr>
<td>CAA</td>
<td>Clean Air Act</td>
</tr>
<tr>
<td>CAPA</td>
<td>corrective and preventive action</td>
</tr>
<tr>
<td>CASREP</td>
<td>casualty report</td>
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<tr>
<td>CATEX</td>
<td>categorical exclusion</td>
</tr>
<tr>
<td>CBA</td>
<td>capabilities-based assessment</td>
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<tr>
<td>CCA</td>
<td>candidate conservation agreement</td>
</tr>
<tr>
<td>CCR</td>
<td>consumer confidence report</td>
</tr>
<tr>
<td>CDD</td>
<td>capability development document</td>
</tr>
<tr>
<td>CDR</td>
<td>critical design review</td>
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<tr>
<td>CECOS</td>
<td>Naval Civil Engineer Corps Officers School</td>
</tr>
<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
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<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Act</td>
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<tr>
<td>CERFA</td>
<td>Community Environmental Response Facilitation Act</td>
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<tr>
<td>CESQG</td>
<td>conditionally exempt small quantity generator</td>
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<tr>
<td>CFC</td>
<td>chlorofluorocarbon</td>
</tr>
<tr>
<td>CFST</td>
<td>contaminated fuel settling tank</td>
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<tr>
<td>CHINFO</td>
<td>Chief of Naval Information</td>
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<tr>
<td>CHRIMP</td>
<td>Consolidated Hazardous Material Reutilization and Inventory Management Program</td>
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<tr>
<td>CHT</td>
<td>collection, holding, and transfer</td>
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<tr>
<td>CI</td>
<td>compression ignition</td>
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<tr>
<td>CLR 030</td>
<td>Continuous Learning Module, Requirements</td>
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</table>
cm  centimeter
CMP  coastal management program
CNIC  Commander, Navy Installations Command
CNO  Chief of Naval Operations
CNO (N00N)  Director, Naval Nuclear Propulsion Program
CNO (N3/N5)  Chief of Naval Operations, Operations, Plans, and Strategy Division
CNO (N4)  Deputy Chief of Naval Operations for Fleet Readiness and Logistics
CNO (N8)  Deputy Chief of Naval Operations for Integration of Capabilities and Resources
COMNAVREG PEARL HARBOR HI  Commander, Navy Region Hawaii
COMJTRG MARIANAS GU  Commander, Navy Region Marianas
COMNAVREG MIDLAND  Commander, Navy Region Mid-Atlantic
COMNAVREG MIDWEST  Commander, Navy Region Midwest
COMNAVREG NW  Commander, Navy Region Northwest
COMNAVREG SE  Commander, Navy Region Southeast
COMNAVREG SW  Commander, Navy Region Southwest
CO  commanding officer
CO₂  carbon dioxide
CO₂e  CO₂ equivalent
Code 04R  Naval Sea Systems Command, Office of Environmental Protection, Occupational Safety, and Health
COMNAVAIRSYSOCOM  Commander, Naval Air Systems Command
COMNAVFACENGCOM  Commander, Naval Facilities Engineering Command
COMNAVSAFCEN  Naval Safety Center
COMNAVSEASYSCOM  Commander, Naval Sea Systems Command
COMNAVSEASYSCOM PMS-333  Commander, Naval Sea Systems Command, Navy Inactive Ships Program
COMNAVSUPSYSOCOM  Commander, Naval Supply Systems Command
COMUSPACFLT  Commander, U.S. Pacific Fleet
COMSC  Commander, Military Sealift Command
COMUSFLTFORCOM  Commander, U.S. Fleet Forces Command
CONOPS  concept of operations
CONUS  continental United States
CPD  capability production document
CRE  comprehensive range evaluation
CRM  cultural resources manager
CRP  community relations plan
CTC  cost-to-complete
CTO  certificate to operate
CWA  Clean Water Act
CWM  chemical warfare material
CWS  community water system
CZMA  Coastal Zone Management Act
DADMS  Department of the Navy Database Management System
DASN(E)  Deputy Assistant Secretary of the Navy (Environment)
DASN(Energy)  Deputy Assistant Secretary of the Navy (Energy)
DC  direct capacitor
DCR  DOTMLPF change recommendation
DD  decision document
DDESB  Department of Defense Explosive Safety Board
DEIS  draft environmental impact statement
DEP ARC  Defense Environmental Programs Annual Report to Congress
DERA  Defense Environmental Restoration Account
DERP  Defense Environmental Restoration Program
DESC  Defense Energy Support Center
DFPO  deputy federal preservation officer
DFSP  defense fuel support point
DITPR  Department of Defense Information Technology Portfolio Repository
DLA  Defense Logistics Agency
DoD  Department of Defense
DoDEA  Department of Defense LLRW Executive Agency
DOE  Department of Energy
DOI  Department of Interior
DOJ  Department of Justice
DON  Department of the Navy
DOPAA  description of proposed action and alternatives
DOS  Department of State
DOT  Department of Transportation
DOTMLPF  doctrine, organization, training, materiel, leadership and education, personnel and facilities
DR  decision review
DRPM  direct reporting program manager
DSCR  Defense Supply Center Richmond
DUSD(I&E)  Deputy Under Secretary of Defense
            (Installations and Environment)
DUSD(AT&L) Deputy Under Secretary of Defense
            (Acquisition, Technology, and Logistics)
EA  environmental assessment
EC  engineering control
ECAP  Enhanced CHRIMP Afloat Program
ECATTS  Environmental Compliance Assessment Training
        and Tracking System
ECHO  Enforcement and Compliance History Online
ECP  environmental condition of property
EDTA  ethylenediamine-tetraacetic acid
EEZ  exclusive economic zone
EFH  essential fish habitat
EG  emission guidelines
EHS  environmental health and safety
EHS  extremely hazardous substance
EIC  engineer in charge
EIS  environmental impact statement
EISA  Energy Independence and Security Act
ELs  environmental liabilities
eLearning  electronic learning
EM  energy management
EMD  engineering and manufacturing development
EMR  environmental management review
EMS  environmental management system
EMSWeb  Environmental Management System Web Site
E.O.  executive order
EOD  explosive ordnance disposal
EPA  Environmental Protection Agency
EPAAct  Energy Policy Act
EPCRA  Emergency Planning and Community Right-To-Know Act
EPR  environmental program requirement
EPRWeb  Environmental Readiness Program Requirements Web
EQA  environmental quality assessment
ER  environmental restoration
ER  environmental review
ERA  ecological risk assessment
ERC  emission reduction credit
ERL  environmental readiness level
ER,N  Environmental Restoration, Navy
ERP  emergency response plan
ERP SSS  environmental health and safety single supply solution
ES  environmental study
ESA  Endangered Species Act
ESACC  expended small arms cartridge casing
ESM  environmentally sound management
ESOH  environment, safety, and occupational health
ESS  explosive safety submission
ESTCP  Environmental Security Technology Certification Program
e-waste  electronic waste
FAR  Federal Acquisition Regulation
FCA  functional configuration audit
FEC  Facilities Engineering Command
FEEZ  foreign nation exclusive economic zone
FEIS  final environmental impact statement
FFA  federal facility agreement
FFCA  Federal Facilities Compliance Act
FFSRA  federal facility site remediation agreement
FGS  final governing standards
FIC  facility incident commander
FIFRA  Federal Insecticide, Fungicide, and Rodenticide Act
FIP  federal implementation plan
FLC  Fleet Logistics Center
FOIA  Freedom of Information Act
FONSH  finding of no significant harm
FONSI  finding of no significant impact
FOSC  federal on-scene coordinator
FOTW  federally owned treatment works
FPO  federal preservation officer
FRP  facility response plan
FRP DR  full rate production decision review
FRT  facility response team
FS  feasibility study
FUDS  formerly used defense sites
FY  fiscal year
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<tr>
<td>GDS</td>
<td>government designated systems</td>
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<td>GHG</td>
<td>greenhouse gas</td>
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<td>GIS</td>
<td>geographic information system</td>
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<td>g/l</td>
<td>grams per liter</td>
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<td>GOPO</td>
<td>government-owned, contractor-operated</td>
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<td>GOGO</td>
<td>government-owned, government-operated</td>
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<td>GPP</td>
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<td>groundwater under the direct influence</td>
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<td>HAZMINCEN</td>
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<td>Hazardous Waste Operations and Emergency Response</td>
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<td>hydrochlorofluorocarbon</td>
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<td>HFC</td>
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<td>Hazardous Inventory Control System for Windows</td>
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<td>HMCM&amp;M</td>
<td>hazardous material control and management</td>
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<td>Hazardous Material Information Resource System</td>
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<td>heating, ventilation, and air conditioning</td>
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<td>internal audit plan</td>
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<td>integrated baseline review</td>
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<td>IC</td>
<td>institutional control</td>
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<td>ICD</td>
<td>initial capabilities document</td>
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<td>ICP</td>
<td>integrated contingency plan</td>
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<td>ICRMP</td>
<td>integrated cultural resources management plan</td>
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</table>
ICS  incident command system
ID  identification
IDC  independent duty corpsmen
IEPM  installation environmental program manager
IHA  incidental harassment authorization
IL A  independent logistics assessment
I/M  inspection and management
IMO  International Maritime Organization
iN FADS  Internet Naval Facilities Assets Data Store
INRMP  integrated natural resources management plan
INSURV  Board of Inspection and Survey
IOC  initial operating capability
IPM  integrated pest management
IPMC  integrated pest management coordinator
IPSE  integrated product support element
IPT  integrated product team
IR  installation restoration
IRP  Installation Restoration Program
ISEERB  Inter-Service Environmental Education Review Board
ISO  International Organization for Standardization
ISR  in-service review
ISSA  inter-Service support agreement
ISWM  integrated solid waste management
ISWMP  integrated solid waste management plan
IT  information technology
ITR  initial technical review
JAGC  Naval Judge Advocate General's Corps
JCIDS  Joint Capabilities Integration and Development System
kg  kilogram
KHz  kilohertz
LAT  lead administrative trustee
lbs/gal  pounds per gallon
LCAC  landing craft air cushion
LCS  littoral combat ship
LCSP  life-cycle sustainment plan
LDR  land disposal restriction
LEC  lead environmental component
LEPC  local emergency planning committee
LLRW  low-level radioactive waste
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<td>living marine resources</td>
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<td>letter of authorization</td>
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<td>LOGREQ</td>
<td>logistics request</td>
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<td>LQAO</td>
<td>Laboratory Quality and Accreditation Office</td>
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<td>LQG</td>
<td>large quantity generator</td>
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<td>LTMgt</td>
<td>long-term management</td>
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<td>LUC</td>
<td>land use control</td>
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<td>MACT</td>
<td>maximum achievable control technology</td>
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<td>MAIS</td>
<td>Major Automated Information Systems</td>
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<td>MARPOL</td>
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<td>Migratory Bird Treaty Act</td>
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<td>maximum contaminant level</td>
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<td>mine countermeasure</td>
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<td>milestone decision authority</td>
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<td>MDAP</td>
<td>Major Defense Acquisition Program</td>
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<td>monoethanolamine</td>
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<td>MEC</td>
<td>munitions and explosives of concern</td>
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<td>military expended material</td>
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<td>military expended material constituent</td>
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<td>mid-frequency active sonar</td>
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<td>milligrams per liter</td>
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<td>military construction</td>
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<td>morale, welfare, and recreation</td>
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<td>NAAQS</td>
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<td>North American Industry Classification System</td>
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<td>NAVSTA</td>
<td>naval station</td>
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<td>NCP</td>
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<td>Acronym</td>
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<td>nautical mile</td>
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<td>National Marine Sanctuaries Act</td>
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<td>NNPI</td>
<td>naval nuclear propulsion information</td>
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<td>NNPS</td>
<td>naval nuclear propulsion plant spaces</td>
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<td>NOA</td>
<td>notice of availability</td>
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<td>NOAA</td>
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<td>NOI</td>
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<td>NORM</td>
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<td>Navy on-scene coordinator</td>
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<td>NOSC Plan</td>
<td>NOSC oil and hazardous substance regional response plan</td>
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<td>NOSSA</td>
<td>Naval Ordnance Safety and Security Activity</td>
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<td>navy owned treatment works</td>
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<td>notice of violation</td>
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<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<td>NPFC</td>
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<td>NPL</td>
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<td>NRD</td>
<td>natural resource damage</td>
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<td>NRDA</td>
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<td>NRSC</td>
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<td>national response team</td>
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<td>natural resources trustee</td>
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<td>operations and maintenance</td>
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<td>Office of the Assistant General Counsel, Energy, Installations, and Environment</td>
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<td>open burning and open detonation</td>
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<td>OB</td>
<td>odor barrier bags</td>
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<td>OCM</td>
<td>oil content monitor</td>
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<td>OCONUS</td>
<td>outside the continental United States</td>
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<td>ODS</td>
<td>ozone-depleting substance</td>
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<tr>
<td>ODP</td>
<td>ozone-depleting potential</td>
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<td>OEA</td>
<td>overseas environmental assessment</td>
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<td>Overseas Environmental Baseline Guidance Document</td>
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<td>overseas environmental impact statement</td>
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<td>OHSTTX</td>
<td>Oil and Hazardous Substance Spill Response Tabletop Exercise</td>
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<td>officer in charge</td>
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<td>OPA</td>
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<td>OPAREA</td>
<td>operating area</td>
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</table>
OPCON operating condition

OPNAV (09F) The Office of the Chief of Naval Operations Special Assistant for Safety Matters

OPNAV (N42) The Office of the Chief of Naval Operations, Strategic Mobility and Combat Logistics

OPNAV (N43) The Office of the Chief of Naval Operations, Fleet Readiness Division

OPNAV (N45) The Office of the Chief of Naval Operations, Energy and Environmental Readiness Division

OPNAV (N452) The Office of the Chief of Naval Operations, Afloat/Ashore Environmental Systems Integration Branch

OPNAV (N453) The Office of the Chief of Naval Operations, Environmental Restoration and Range Assessment Branch

OPNAV (N456) The Office of the Chief of Naval Operations, Operational Readiness and Planning Branch

OPNAV (N45J) OPNAV N45 Legal Counsel

OPNAV (N46) The Office of the Chief of Naval Operations, Shore Readiness Division

OPNAV (N85) The Office of the Chief of Naval Operations, Expeditionary Warfare Division

OPNAV (N86) The Office of the Chief of Naval Operations, Surface Warfare Division

OPNAV (N87) The Office of the Chief of Naval Operations, Submarine Warfare Division

OPNAV (N88) The Office of the Chief of Naval Operations, Air Warfare Division

OPNAVINST Chief of Naval Operations instruction

OPNAV M Chief of Naval Operations manual

OPR office of primary responsibility

OPREP 3 operations event/incident report

ORAP Operational Range Assessment Program

ORC operational range clearance

OSC on-scene coordinator

OSD Office of the Secretary of Defense

OSHA Occupational Safety and Health Administration

OSLFT Oil Spill Liability Trust Fund

OTIS Online Targeting Information System

OTRR operational test readiness review

OU operable unit

OW/WO oily waste/waste oil

OWHT oily waste holding tank
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<td>Oil water separator</td>
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<td>P2</td>
<td>pollution prevention</td>
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<td>P&amp;D</td>
<td>production and deployment</td>
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<td>PA</td>
<td>preliminary assessment</td>
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<td>PBT</td>
<td>persistent bioaccumulative and toxic</td>
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<td>PC</td>
<td>patrol craft</td>
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<td>PCA</td>
<td>physical configuration audit</td>
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<td>polychlorinated biphenyl</td>
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<td>pCi/L</td>
<td>picocuries per liter</td>
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<td>PCPARs</td>
<td>pest control performance assessment representatives</td>
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<td>preliminary design review</td>
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<td>professional engineer</td>
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<td>PEO</td>
<td>program executive office</td>
</tr>
<tr>
<td>PEO</td>
<td>program executive officer</td>
</tr>
<tr>
<td>PESHE</td>
<td>programmatic environment, safety, and occupational health evaluation</td>
</tr>
<tr>
<td>PFC</td>
<td>perfluorocarbon</td>
</tr>
<tr>
<td>PHD</td>
<td>product hazard data</td>
</tr>
<tr>
<td>PHMSA</td>
<td>Pipeline and Hazardous Materials Safety Administration</td>
</tr>
<tr>
<td>PIER</td>
<td>Preliminary Impact and Exposure Report</td>
</tr>
<tr>
<td>PM</td>
<td>program manager</td>
</tr>
<tr>
<td>PM</td>
<td>particulate matter</td>
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<tr>
<td>PMAP</td>
<td>Protective Measures Assessment Protocol</td>
</tr>
<tr>
<td>PMC</td>
<td>pest management consultant</td>
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<tr>
<td>PMO</td>
<td>Program Management Office</td>
</tr>
<tr>
<td>PMPAR</td>
<td>pest management performance assessment representative</td>
</tr>
<tr>
<td>POA&amp;M</td>
<td>plan of action and milestones</td>
</tr>
<tr>
<td>POL</td>
<td>petroleum, oils, and lubricants</td>
</tr>
<tr>
<td>POM</td>
<td>program objective memorandum</td>
</tr>
<tr>
<td>Portal</td>
<td>U.S. Navy Environmental Portal</td>
</tr>
<tr>
<td>POTW</td>
<td>publicly owned treatment works</td>
</tr>
<tr>
<td>PPA</td>
<td>Pollution Prevention Act</td>
</tr>
<tr>
<td>ppb</td>
<td>parts per billion</td>
</tr>
<tr>
<td>PPE</td>
<td>personal protective equipment</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
</tr>
<tr>
<td>PPV</td>
<td>public private venture</td>
</tr>
<tr>
<td>PQS</td>
<td>personal qualification standard</td>
</tr>
<tr>
<td>PREP</td>
<td>Preparedness for Response Exercise Program</td>
</tr>
<tr>
<td>Acronym</td>
<td>Term</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>PRESINSURV</td>
<td>President, Board of Inspection and Survey</td>
</tr>
<tr>
<td>PRP</td>
<td>potentially responsible party</td>
</tr>
<tr>
<td>PRR</td>
<td>production readiness system</td>
</tr>
<tr>
<td>PSD</td>
<td>prevention of significant deterioration</td>
</tr>
<tr>
<td>PSR</td>
<td>program support review</td>
</tr>
<tr>
<td>PT</td>
<td>proficiency testing</td>
</tr>
<tr>
<td>PTE</td>
<td>potential to emit</td>
</tr>
<tr>
<td>PWS</td>
<td>public water system</td>
</tr>
<tr>
<td>QA</td>
<td>quality assurance</td>
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<tr>
<td>QAM</td>
<td>quality assurance manager</td>
</tr>
<tr>
<td>QAPP</td>
<td>quality assurance project plan</td>
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<tr>
<td>QC</td>
<td>quality control</td>
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<tr>
<td>QI</td>
<td>qualified individual</td>
</tr>
<tr>
<td>QRP</td>
<td>qualified recycling program</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>research and development</td>
</tr>
<tr>
<td>R&amp;I</td>
<td>review and provide input</td>
</tr>
<tr>
<td>R&amp;O</td>
<td>review and oversight</td>
</tr>
<tr>
<td>RA</td>
<td>remedial action</td>
</tr>
<tr>
<td>RA-C</td>
<td>remedial action - construction</td>
</tr>
<tr>
<td>RA-O</td>
<td>remedial action - operation</td>
</tr>
<tr>
<td>RAB</td>
<td>restoration advisory board</td>
</tr>
<tr>
<td>RACR</td>
<td>remedial action completion report</td>
</tr>
<tr>
<td>RACT</td>
<td>reasonably available control technology</td>
</tr>
<tr>
<td>RAICUZ</td>
<td>range air installations compatible use zones</td>
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<tr>
<td>RAM</td>
<td>radioactive materials</td>
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<tr>
<td>RC</td>
<td>response complete</td>
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<tr>
<td>RCA</td>
<td>range condition assessment</td>
</tr>
<tr>
<td>RCP</td>
<td>regional contingency plan</td>
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<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>RCS</td>
<td>recovery credit system</td>
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<tr>
<td>RD</td>
<td>remedial design</td>
</tr>
<tr>
<td>RDF</td>
<td>range data folder</td>
</tr>
<tr>
<td>RDT&amp;E</td>
<td>research, development, test, and evaluation</td>
</tr>
<tr>
<td>REC</td>
<td>regional environmental coordinator</td>
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<tr>
<td>REPI</td>
<td>Readiness and Environmental Protection Initiative</td>
</tr>
<tr>
<td>RFP</td>
<td>request for proposal</td>
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<tr>
<td>RI</td>
<td>remedial investigation</td>
</tr>
<tr>
<td>RIP</td>
<td>remedy in place</td>
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<tr>
<td>RMC</td>
<td>regional maintenance center</td>
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<td>RMP</td>
<td>risk management plan</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>---------</td>
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<tr>
<td>RMW</td>
<td>regulated medical waste</td>
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<td>ROD</td>
<td>record of decision</td>
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<td>RP</td>
<td>responsible party</td>
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<td>RPM</td>
<td>remedial project manager</td>
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<td>RQ</td>
<td>reportable quantity</td>
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<td>RRF</td>
<td>Ready Reserve Force</td>
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<td>RRT</td>
<td>regional response team</td>
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<td>resource sponsorship</td>
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<td>RSEPA</td>
<td>Range Sustainability Environmental Program Assessment</td>
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<td>RTM</td>
<td>remedial technical manager</td>
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<td>SAA</td>
<td>senior acquisition official</td>
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<td>SAO</td>
<td>satellite accumulation area</td>
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<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
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<td>SC</td>
<td>site closeout</td>
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<td>SCP</td>
<td>spill contingency plan</td>
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<td>SDS</td>
<td>system design specification</td>
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<td>SDWA</td>
<td>Safe Drinking Water Act</td>
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<td>SEA 00C</td>
<td>Commander, Naval Sea Systems Command, Supervisor of Salvage</td>
</tr>
<tr>
<td>SEA 04RE</td>
<td>Commander, Naval Sea Systems Command, Logistics, Maintenance, and Operations Division</td>
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<td>SECDEF</td>
<td>Secretary of Defense</td>
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<td>SECNAV</td>
<td>Secretary of the Navy</td>
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<td>SEP</td>
<td>supplemental environmental project</td>
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<td>SEP</td>
<td>systems engineering plan</td>
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<td>SERC</td>
<td>state emergency response commission</td>
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<tr>
<td>SERDP</td>
<td>Strategic Environmental Research and Development Program</td>
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<tr>
<td>SETR</td>
<td>systems engineering technical review</td>
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<tr>
<td>SFR</td>
<td>system functional review</td>
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<tr>
<td>SHIMS</td>
<td>Submarine Hazardous Material Inventory and Management System</td>
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<td>SHML</td>
<td>ships hazardous material list</td>
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<tr>
<td>SHPO</td>
<td>state historic preservation officer</td>
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<tr>
<td>SI</td>
<td>site inspection</td>
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<tr>
<td>SI</td>
<td>spark-ignition</td>
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<td>SIC</td>
<td>Standard Industrial Classification</td>
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<td>SINKEX</td>
<td>sinking exercise</td>
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<tr>
<td>SIP</td>
<td>state implementation plan</td>
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<tr>
<td>SITREP</td>
<td>Situation Report</td>
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</table>
SJA  Staff Judge Advocate
SMART  Ship Material Assessment and Readiness Testing
SMCA  Sunken Military Craft Act
SMCL  submarine material control list
SME  subject matter expert
SMT  spill management team
SNAP  Significant New Alternatives Policy
SNC  significant non-compliance
SOFA  status of forces agreement
SOH  safety and occupational health
SOPA  senior officer present afloat
SOSCP  shipboard oil spill contingency plan
SPAWARSYSCOM  Space and Naval Warfare Systems Command
SPCC  spill prevention, control, and countermeasure
SPCR  spill prevention, control, and reporting
SPORTS  Sonar Positional Reporting System
SQG  small quantity generator
SRO  sustainable range oversight
SRR  system requirements review
SSPP  Strategic Sustainability Performance Plan
SUPERFUND  Hazardous Substance Response Trust Fund
SUPSALV  Supervisor of Salvage and Diving
SUPSHIP  Supervisor of Shipbuilding
SW  solid waste
SWDA  Solid Waste Disposal Act
SWOB  ship waste offload barge
SWPPP  stormwater pollution prevention plan
SVR  system verification review
SYSCOM  systems command
T&E  testing and evaluation
TAPP  Technical Assistance for Public Participation
TC  toxic chemical
TD  technology development
TEMP  task and evaluation master plan
TENORM  technologically enhanced naturally occurring radioactive material
THPO  tribal historic preservation officer
TMDL  total maximum daily load
TNCWS  transient, non-community water system
TPQ  threshold planning quantity
TPY  tons per year
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>TRI-DDS</td>
<td>Toxics Release Inventory – Data Delivery System</td>
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<tr>
<td>TRIFID</td>
<td>TRI Facility Identification</td>
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<tr>
<td>TRI-MEweb</td>
<td>TRI-Made Easy Web</td>
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<tr>
<td>TRR</td>
<td>test readiness review</td>
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<td>TSCA</td>
<td>Toxic Substances Control Act</td>
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<tr>
<td>TSDF</td>
<td>treatment, storage, and disposal facility</td>
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<td>TT</td>
<td>treatment technique</td>
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<td>TTHM</td>
<td>total trihalomethane</td>
</tr>
<tr>
<td>TYCOM</td>
<td>type commander</td>
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<tr>
<td>UIC</td>
<td>underground injection control</td>
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<tr>
<td>UIC</td>
<td>unit identification code</td>
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<tr>
<td>UNDS</td>
<td>Uniform National Discharge Standards</td>
</tr>
<tr>
<td>USACE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>USCG</td>
<td>United States Coast Guard</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>USD(AT&amp;L)</td>
<td>Under Secretary of Defense (Acquisition Technology &amp; Logistics)</td>
</tr>
<tr>
<td>USFS</td>
<td>United States Forest Service</td>
</tr>
<tr>
<td>USFWS</td>
<td>United States Fish and Wildlife Service</td>
</tr>
<tr>
<td>USNS</td>
<td>United States Naval Ship</td>
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<tr>
<td>UST</td>
<td>underground storage tank</td>
</tr>
<tr>
<td>VI</td>
<td>vapor intrusion</td>
</tr>
<tr>
<td>VOC</td>
<td>volatile organic compound</td>
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<tr>
<td>VOHAP</td>
<td>volatile organic hazardous air pollutant</td>
</tr>
<tr>
<td>WCD</td>
<td>worst case discharge</td>
</tr>
<tr>
<td>WCF</td>
<td>working capital fund</td>
</tr>
<tr>
<td>WCRE</td>
<td>water comprehensive range evaluation</td>
</tr>
<tr>
<td>WMM</td>
<td>waste military munitions</td>
</tr>
<tr>
<td>WOT</td>
<td>waste oil tank</td>
</tr>
<tr>
<td>WRCA</td>
<td>water range condition assessment</td>
</tr>
<tr>
<td>WRSEPA</td>
<td>Water Range Sustainability Environmental Program Assessment</td>
</tr>
<tr>
<td>WSVA</td>
<td>water system vulnerability assessment</td>
</tr>
<tr>
<td>XO</td>
<td>executive officer</td>
</tr>
</tbody>
</table>
APPENDIX C

MESSAGE FORMATS

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C-2 Hazardous Substance Release Report ................. C-6
C-3 Oil Spill Report ........................................ C-12

C-1 Notices of Violation

a. One written notice, regardless of the number of individual violations, findings, or citations, counts as one notice of violation (NOV), unless more than one environmental media is cited. Do not include items found to be out of compliance by a regulator but not set forth in writing.

b. If the NOV cites violations in more than one environmental media, it will be counted as multiple NOVs, one under each of the applicable media categories. Only one message is required; however, include specific information in the message separately for each environmental media. As outlined in section C-1.2, make steps 1 through 9 of this message the same for each of the different media violations that result from a multimedia inspection. Repeat steps 10 through 25 with detailed information for each different environmental media cited.

C-1.1. General Guidelines for Preparing the Following Messages

a. If the line item is a question, do not answer just "yes" or "no." Provide a response with the assumption that the reader does not have access to this document. For example, if Item 14 of the close-out message asks, "Was a fine assessed or requested?," the response in line 14 of the message would then read, "No, fine was assessed," instead of "No."

b. If the line item is a phrase, repeat or paraphrase the phrase followed by the response. For example, if Item 12 of the initial information message reads, "Date of inspection (mm/dd/yy)," the response in line 12 of the message would then read, "Date of inspection: 03/05/11," instead of "03/05/11."
C-1.2. Required Initial Information on NOVs/Significant Non-Compliances

FROM: NAVY INSTALLATION//CODE//

TO: CNO WASHINGTON DC//N45//
CHAIN OF COMMAND
NAVY REGIONAL ENVIRONMENTAL
COORDINATOR//JJJ//

INFO: NAVFAC EXWC PORT HUENEME CA//424//
NAVFACENGCOM//ENV//
NAVFACENGCOM FEC//JJJ//
//UNCLAS //N05090//

SUBJ: RECEIPT OF NOTICE OF ENVIRONMENTAL VIOLATION

MSGID/GENADMIN/ORIGINATOR//CODE//
REF/A/DOC/OPNAV M-5090.1//
RMKS/

1. Installation name in violation.

2. Navy unit identification code (UIC) number.


4. Point of contact for additional information.

5. Point of contact telephone number.

6. Point of contact e-mail address.


8. Environmental Protection Agency (EPA) region.

9. Name of issuing agency and violation number(s).

10. Identify the environmental media cited in the violation notice. This refers to the law under which the violation was issued. If a state or local violation is received, report under the applicable Federal statutes from which the state law or local regulation was derived.
11. Date of notification (mm/dd/yy). The date the regulatory agency initiated the NOV (preferably the date on the letterhead).

12. Date of inspection (mm/dd/yy). The date of the inspection during which the violation was detected. If the inspection took place over several days use the date noted on the NOV or the date the inspection started.

13. Was the NOV a result of a self-inspection or reporting? Y or N

14. Description of NOV.

15. Classify the violation cited into one of the following categories. Note: For multiple violations cited under an NOV, use the category that applies to the highest threat. Descriptions and examples are included in section C-1.4.

   a. Class A: Release to the environment
   
   b. Class B: Potential to cause release or damage to the environment
   
   c. Class C: Administrative

16. Root Cause. Choose one of the root causes listed in table C-1 at the end of this appendix. Note: For multiple root causes, select the largest contributor and cite the remainder under Comments.

17. Was a fine assessed or requested? Y or N

18. Dollar amount of fines assessed. Total dollar amount of the fine assessed.

19. Dollar amount of fines paid to regulatory agency.

20. Nature of response required and date due (mm/dd/yy) to the regulatory authority (e.g., regulator requests answer to complaint by 09/25/11).

21. Provide date installation corrected all violations (mm/dd/yy).

22. Is the NOV resolved? Y or N
23. Date of NOV resolution (mm/dd/yy).

24. Has the issuing agency closed the NOV? Y or N

25. Date of concurrence by the regulator (mm/dd/yy).

26. Date of last annual installation inspection and BSO inspection. Was the discrepancy noted during these inspections?

27. Comments (i.e., additional information, unusual circumstances or events leading to NOV).

Note: If the NOV is closed within 3 months of the NOV issue date, then no quarterly status message is required.

C-1.3. Required Follow-Up Information on NOVs/Significant Non-Compliances. A follow-up message is required on a quarterly basis for each open NOV/significant non-compliance for which an initial message was sent under section C-1.2.

FROM: NAVY INSTALLATION//CODE//

TO: CNO WASHINGTON DC//N45//
CHAIN OF COMMAND
NAVY REGIONAL ENVIRONMENTAL COORDINATOR//JJJ//

INFO: NAVFAC EXWC PORT HUENEME CA//424//
NAVFACENGCOM//ENV//
NAVFACENGCOM FEC//JJJ//
//UNCLAS //N05090//

SUBJ: NOTICE OF ENVIRONMENTAL VIOLATION RESPONSE PLAN

MSGID/GENADMIN/ORIGINATOR//CODE//
REF/A/DOC/OPNAV M-5090.1//
RMKS/

1. Installation name in violation.

2. Navy UIC number.


4. Point of contact for additional information.

5. Point of contact telephone number.
6. Point of contact e-mail address.

7. BSO.

8. EPA region.

9. Name of issuing agency and violation number(s).

10. Identify the environmental media cited in the violation notice. This refers to the law under which the violation was issued. If a state or local violation is received, report under the applicable federal statutes from which the state law or local regulation was derived.

11. Date of original notification (mm/dd/yy). The date the regulatory agency initiated the NOV (preferably the date on the letterhead).

12. Root Cause. If additional analysis results in a different root cause, choose one of the root causes listed in table C-1. Note: For multiple root causes, select the largest contributor, and cite the remainder under Comments.

13. Reason for open NOV.

14. Was a fine assessed or requested?

15. Dollar amount of fines assessed. Total dollar amount of the fine assessed.

16. Dollar amount of fines paid to regulatory agency.

17. Provide date installation corrected all violations (mm/dd/yy).

18. Is the NOV resolved? Y or N. For final resolution, an NOV requires the satisfaction of the issuing agency. Note: All individual findings, violations, or citations within the NOV must be resolved for the NOV to be considered resolved.

19. Date of NOV resolution (mm/dd/yy).

20. Date of concurrence by the regulator (mm/dd/yy). The date on which the regulatory agency confirms that all findings are resolved. Notification may be in formal written form or a documented conversation.
21. Estimated completion date for issues not yet corrected (mm/dd/yy).

22. Summary of reasons for not resolving the identified issues.

23. Is a compliance project required to achieve compliance with the NOV?

24. Has an environmental program requirement or military construction project been submitted and in what year?

25. Comments (i.e., additional information, unusual circumstances or events leading to the NOV).

26. Original Naval Message Number (Date and Time Group – day, zulu time, month, and year).

C-1.4. NOV Class Code Descriptions

a. Class A - Release to the Environment. The NOV resulted from spills, overflows, or other unauthorized discharges or releases. This category includes NOVs that resulted from wastewater or stormwater discharges that exceeded effluent limits, air emissions that exceeded emission standards, or potable water samples that exceeded primary drinking water standards.

b. Class B - Potential to Cause Release or Damage to the Environment. This category includes NOVs resulting from inspections that note conditions with potential for release or damage to the environment such as improper storage or handling of waste or regulated substances (e.g., oil, hazardous materials).

c. Class C - Administrative. The NOV resulted from administrative errors such as failure to submit or update, complete in a timely manner, or properly prepare required permit applications, monitoring or compliance reports, and plans. This category also includes improper or incomplete documentation of waste storage and disposal and notifications required in advance of taking action.

C-2 Hazardous Substance Release Report

C-2.1. Precedence (for messages only). Provided that prior voice reports have been made both to the U.S. Coast Guard (USCG)
National Response Center (NRC) and the reporting command's chain of command, use "Routine" precedence for Hazardous Substance (HS) Release Report Messages not classified as an extremely hazardous substance (EHS). If either voice report has not been made, use "Priority" precedence. If EHS, always use "Priority" precedence.

C-2.2. Classification or Special Handling Marks. HS Release Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow HS Release Report Messages to be handled on a solely unclassified basis.

C-2.3. Correcting HS Release Report Messages. HS Release Report Messages should be updated with a follow-up message as soon as the reporting activity becomes aware of new information concerning the origin, amount, nature of substance, type of operation at source or root cause, or lessons learned of release. Similarly, if the final estimate of the amount released differs substantially from the amount initially reported, the reporting activity must send an update message to all action and info addresses on the original message.

C-2.4. Action and Info Addressees

FROM: Navy activity/ship responsible for or discovering spill

TO: Navy On-Scene Coordinator
Chain of Command

INFO: Area Environmental Coordinator
Host Activity
CNO WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NAVJAG WASHINGTON DC//11//
[Add NRC for releases into or upon the navigable waters of the United States, its contiguous zone (generally within 12 nautical miles (NM) of U.S. shores), and adjacent shorelines.]
COAST GUARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//
C-2.5. **Body of Report.** Use the following format for the body of all HS Release Report Messages. It is important for data management purposes that the format be followed.

UNCLAS//NO5090//

SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT (MIN: CONSIDERED)  
MSGID/GENADMIN/ORIGINATOR//  
RMKS/

1. LOCAL TIME AND DATE RELEASE [OCCURRED/DISCOVERED].

2. [FACILITY/VESSEL] ORIGINATING RELEASE:
   a. For Navy ships, list ship name and hull number.
   b. For Navy shore facilities, list facility name.
   c. For release occurring during transportation, list name of activity responsible for shipment.
   d. For non-Navy spills, list name of the responsible party, if known.
   e. For organizations under contract to Navy, list firm name and contracting Navy activity.
   f. If the source is unknown at time of this report, list only "Unknown" until such time as definitively established.

3. RELEASE LOCATION:
   a. For release at sea, list latitude, longitude, and distance to nearest land.
   b. For release in port, list port name, host naval command (NAVSTA, Shipyard), and specific location.
   c. For release ashore, list city, state, facility name, and specific location (building designation).
   d. For release during transportation, give exact location (highway mile marker or street number and city).

4. AMOUNT RELEASED:
   a. Use convenient units of weight or volume (e.g., kg, lb, gal, liters).
b. For continuous release, estimate rate of release and amount left in container.

c. Estimates should be made by examining loss at source (e.g., checking the sounding tank, calculating flow rate of spill).

d. Unreliable estimates of volume using visual observation of HS on water may not be reported here.

e. If amount unknown at time of this report, list only "Unknown" until such time as definitively established.

5. HAZARDOUS SUBSTANCE RELEASED:

a. If EHS, headline this paragraph "EXTREMELY HAZARDOUS SUBSTANCE RELEASED:" Refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) section 39-3.6.a for additional notification requirements.

b. Consult container labels, user directions, reference books, and experts for advice.

c. Provide chemical and product names, formula, synonym, physical and chemical characteristics, and inherent hazards. For example, "Container label identifies substance as acrylonitrile. Synonyms: cyansethylene, vintleyanide. Characteristics and hazards: poisonous liquid and vapor, skin irritant, highly reactive or flammable."

d. Describe appearance, physical and chemical characteristics, and actual or potential hazards observed. For example, "Substance released is colorless to light yellow unidentified liquid; highly irritating to eyes and nose; smells like kernels of peach pits; vaporizing quickly, posing ignition problem."

6. TYPE OF OPERATION AT SOURCE: Plating shop, painting shop, hazardous waste (HW) facility, truck, ship, pipeline, ship rebuilding, entomology shop, etc.

7. CAUSE OF RELEASE:

a. Provide narrative description of specific cause of release.
b. Account for personnel error, equipment failure, etc., directly contributing to release. For example: "Railing supporting 55-gal drums on a flatbed truck gave way because it was not securely fastened, causing seven drums to fall and rupture."

c. If cause unknown at time of this report, list only "Unknown" until such time as definitively established.

8. TYPE OF CONTAINER FROM WHICH SUBSTANCE ESCAPED:
   a. 55-gal drums, 5-lb bags, tank truck, storage tank, can, etc.
   b. Estimate number of containers damaged or dangerously exposed.

9. RELEASE ENVIRONMENT:
   a. Describe scene of release.
   b. Include information on physical characteristics, size and complexity of release, and weather conditions. For example: "Solvent released formed shallow pool covering area about 30 ft by 45 ft of bare concrete. Solvent slowly running into storm drain. Pool emitting highly toxic, flammable vapors. Dark clouds threatening rain. Light wind drifting vapors northbound to residential area about 30 ft above ground."

10. AREAS DAMAGED OR THREATENED:
    a. Describe actual and potential danger or damage to surrounding environment.
    b. Identify body of water, area, or resources threatened or affected.
    c. Describe nature and extent of damage to property, wildlife, or other natural resources (if any).

11. NOTIFICATIONS MADE AND ASSISTANCE REQUESTED:
    a. List all organizations informed of release within and beyond Navy jurisdiction. Include Navy, Federal, State, and local authorities, response teams, fire departments, hospitals, etc.
b. Specify type of assistance requested from these organizations.

c. If telephonic report to NRC made, list: Date, time, group of telephonic report; NRC report and case number; name of NRC official taking report; quantity of HS released; and Navy command making telephonic report.

12. FIELD TESTING: Indicate findings and conclusions as to concentration, pH, etc.

13. CONTROL AND CONTAINMENT ACTIONS [PLANNED/TAKEN]:

a. If none, explain why.

b. Specify method used to control and contain release. For example: "Gas barriers used to control and contain vapor emissions. Runoff contained by excavating ditch circumscribing affected area."

14. CLEAN-UP ACTIONS [PLANNED/TAKEN]:

a. If none, explain why.

b. Identify on-site or off-site treatment, method used, parties involved in clean-up and removal, and disposal area. For example: "No clean-up action taken. Toxic vapors present, potential danger to clean-up crew. Contaminated soil will be excavated and shipped by NAS personnel to Class I HW disposal site in Portstown, CA when conditions allow."

15. AMOUNT OF SUBSTANCE RECOVERED [VOLUME/WEIGHT] (Pure product):

16. PARTIES PERFORMING [CONTAINMENT/CLEAN-UP] ACTIVITIES:

a. Identify lead organization in charge (e.g., Navy command, USCG, EPA).

b. Identify all other parties involved: Commercial firms, supporting Navy activities, and state or local agencies.

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:

a. Identify by name and agency any regulatory official attending on-scene or making telephonic inquiry.
b. Note whether officials boarded vessel and include date, time, and spaces inspected.

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS.

19. LESSONS LEARNED: How could this release have been avoided?

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank and rate, command, code, DSN, e-mail address, and or commercial telephone numbers. //

C-3 Oil Spill Report

C-3.1. Precedence (for messages only). Provided that prior voice reports have been made both to the USCG NRC and the reporting command's chain of command, use "Routine" precedence for Oil Spill Report Messages. If either voice report has not been made, use "Priority" precedence.

C-3.2. Classification or Special Handling Marks. Oil Spill Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow Oil Spill Report Messages to be handled on a solely unclassified basis.

C-3.3. Spill Volume Classification. To better advise the Navy on-scene coordinator and Navy leadership of the magnitude of each oil spill, the subject line of an Oil Spill Report Message should bear a volume estimate of the spill, if known, in the following format:

a. OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED);

b. OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED); or

c. OIL SPILL REPORT, SHEEN SIGHTING (MINIMIZE CONSIDERED).

C-3.4. Updating Oil Spill Report Messages. Oil Spill Report Messages shall be updated with a follow-up 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 spilled differs substantially from the
amount initially reported, the reporting activity must send an update message to all action and information addresses on the original spill message.

C-3.5. Action and Information Addressees

FROM: Navy activity/ship responsible for or discovering spill

TO: Navy On-Scene Coordinator
Chain of Command

INFO: Area Environmental Coordinator
Host Activity
OPNAV WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEAASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//JJJ//
NAVJAG WASHINGTON DC//11//
NAVSURFWARCENCARDIV PHILADELPHIA PA//923//
[Add NRC for spills into or upon the navigable waters of the United States, its contiguous zone (generally within 12 NM of U.S. shores) and adjacent shorelines.]
COAST GUARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//

C-3.6. Body of Report. Use the following format for the body of all Oil Spill Report Messages. It is important for data management purposes that this format be followed.

UNCLAS//NO5090//
SUBJ: OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or OIL SPILL SHEEN SIGHTING, (MINIMIZE CONSIDERED)
MSGID/GENADMIN/ORIGINATOR//
RMKS/

1. LOCAL TIME AND DATE SPILL [OCCURRED/DISCOVERED]

2. [FACILITY/VESSLE] ORIGINATING SPILL:
   a. For Navy ships, list ship name and hull number.
   b. For Navy shore facilities, list facility name.
c. For non-Navy spills, list name of responsible party, if known.

d. For organizations under contract to Navy, list firm name and contracting Navy activity.

e. If the facility or vessel of spill is unknown at time of this report, list only "Unknown" until such time as definitively established.

3. **SPILL LOCATION:**

a. For spills at sea, list latitude, longitude, and distance to nearest land.

b. For spills in port, list port name, host naval command (NAVSTA, Shipyard), and specific location (pier or mooring designation).

c. For spills ashore, list city, state, facility name, and specific location (building designation).

4. **VOLUME SPILLED IN GALLONS:**

a. Estimates must be made by examining loss at source (e.g., checking the sounding tank, calculating flow rate of spill).

b. If amount is unknown at time of this report, list only "Unknown" until such time as definitively established.

c. Estimating volume by visual observation of oil on water can be very unreliable.

d. If volume estimate can only be made by visual observation of oil on water, do not report estimate here.

e. If oil and water mixture, indicate percent oil.

5. **TYPE OF OIL SPILLED:**

a. List whether marine gas oil, naval distillate (F-76), jet fuel (JP-4 or 5), aviation or automotive gasoline, automotive diesel, heating fuels (e.g., grade 1 or 2, kerosene), residual burner fuel (e.g., grade 4, 5, or 6), lubricating oil; hydraulic oil, oil/oil mixture (including slops and waste oil), or oil/water mixture (including bilge waste).
b. If type unknown at time of this report, list only "Unknown" until such time as definitively established.

6. OPERATION UNDER WAY WHEN SPILL [OCCURRED/DISCOVERED]:

   a. If fueling or defueling, list whether underway or in port by pipeline, truck, or barge.

   b. Specify whether conducting internal fuel oil transfer operations (including movement from one storage tank to another), pumping bilges, conducting salvage operations, aircraft operations, or "Other" (specify).

   c. Include any evolution or operation that had been conducted within 4 hours of spill discovery that may have resulted in oil discharge.

   d. If operation unknown or if no evolution can be attributable at time of this report, list only "Operation Not Known" or "To Be Determined" until such time as definitively established.

7. SPILL CAUSE:

   a. Classify the spill cause by citing one or more of the following categories and then provide a narrative description of the specific spill cause: Structural; electrical; hose; valve or fitting; tank level indicator; oil and water and separator and oil content monitor; other equipment (specify component that failed); collision, grounding, or sinking; valve misalignment; monitoring error; procedural and communications error; chronic or recurring; or weather related. This information will be used by Commander, Naval Sea Systems Command for causal analysis and spill prevention.

   b. If the spill resulted from a mechanical or equipment failure, identify failed equipment or suspected failed equipment by system, nomenclature, allowance part list, service, part number, and or location.

   c. If cause unknown or undetermined at time of this report, list only "To Be Determined" or "Under Investigation" until such time as definitively established.

8. SLICK DESCRIPTION AND MOVEMENT:
a. Size: Length and width (yards or NM) and percentage of that area covered.

b. Color: Silver transparent, gray, rainbow, blue, dull brown, dark brown, black, brown-orange mousse.

c. Odor: Noxious, light, undetectable.

d. Slick movement: Set (degrees true toward) and drift (knots).

9. **SPILL ENVIRONMENT**:

a. Weather: Clear, overcast, partly-cloudy, rain, snow, etc.

b. Prevailing wind at scene: Direction (degrees true from), speed (knots), and fetch (yards or NM).

c. Air and water temperature: Indicate ice cover.

d. Sea state: Beaufort Force number.

e. Tide: High, low, ebb, flood, or slack or current: Set (degrees true toward) and drift (knots).

10. **AREAS DAMAGED OR THREATENED**:

a. Body of water, area, or resources threatened or affected.

b. Nature and extent of damage to property, wildlife, or other natural resources (if any).

11. **TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER [WAS/WAS NOT] MADE**:

a. If made, list:

   (1) Time and date of telephonic report.

   (2) NRC report and case number.

   (3) Name of NRC official taking report and quantity of oil reported.
b. If not made, provide reason why: Beyond 12 NM from U.S. shores, no threat to navigable water, etc.

c. Navy command making telephonic report.

12. SAMPLES [WERE/WERE NOT] TAKEN: If taken, identify location(s) from which taken (e.g., tanks, hoses, piping, slip, jetty, etc.) and collecting officer by name, rank, and agency.

13. CONTAINMENT METHOD [PLANNED/USED]:

a. If none, state reason.

b. Otherwise, indicate equipment utilized (e.g., boom, ship's hull, camel, water spray, chemical agent).

14. SPILL REMOVAL METHOD [PLANNED/USED]:

a. If none, state reason.

b. Equipment planned and used (e.g., Rapid Response Skimmer or Dip 3001 skimmer, portable skimmer, absorbent materials (oil absorbent pads, chips, etc.), dispersants, vacuum trucks or pumps, other (specify)).

15. VOLUME OF OIL RECOVERED IN GALLONS (Decanted pure product).

16. PARTIES PERFORMING SPILL REMOVAL:

a. Identify lead organization in charge (e.g., Navy command, USCG, EPA).

b. Identify all other parties involved (e.g., commercial firms, supporting Navy activities, state or local agencies).

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:

a. Identify by name and agency any official attending on-scene or making telephonic inquiry.

b. Note whether officials boarded vessel and include date, time, and spaces inspected.

18. ASSISTANCE REQUIRED OR ADDITIONAL COMMENTS

19. LESSONS LEARNED: How could this spill have been avoided?
20. COST OF RECOVERY: Probably not known for initial report. Include in follow up report to the extent known.

21. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank and rate, command, code, e-mail address, and DSN and or commercial telephone numbers. //

Table C-1. Navy Root Cause Analysis Codes

<table>
<thead>
<tr>
<th>Root Cause Code</th>
<th>International Organization for Standardization 14001:2004(E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLAN</strong> (Environmental Policy/Planning)</td>
<td></td>
</tr>
<tr>
<td>Leadership/Policy/Organizational Management</td>
<td>4.1 - 4.3</td>
</tr>
<tr>
<td>LPM01 Leadership lacks commitment and or sufficient organizational framework, stature, independence, and authority.</td>
<td>4.1/4.2</td>
</tr>
<tr>
<td>LPM02 Formal policies are not appropriate to the nature, scale and environmental impacts of the activities, products, and services.</td>
<td>4.2</td>
</tr>
<tr>
<td>LPM03 Environmental requirements and significant aspects are not adequately considered.</td>
<td>4.3.1</td>
</tr>
<tr>
<td>LPM04 Procedure is not in place for updating applicable legal requirements.</td>
<td>4.3.2</td>
</tr>
<tr>
<td><strong>DO</strong> (Implementation)</td>
<td></td>
</tr>
<tr>
<td>Resources/Roles/Responsibility and Authority</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA01 Programmatic roles, responsibilities, and authorities are not clearly defined, assigned, documented, and or communicated.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA02 Specific management representatives (e.g., line management supervisors, practice owners) do not show commitment and or responsibility for the performance of the environmental management system (EMS).</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA03 Funds for program-related activities are not sufficient.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA04 Staffing levels are not sufficient to</td>
<td>4.4.1</td>
</tr>
<tr>
<td>Root Cause Code</td>
<td>International Organization for Standardization 14001:2004(E)</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>manage all program-related activities or requirements.</td>
<td></td>
</tr>
<tr>
<td>RRA05 Resources for controlling or improving daily operations including the procurement of appropriate materials or equipment, technology, or services are absent or inadequate.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA06 Lack of proper or adequate materials, equipment, and or contract deliverables.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA07 Lack of adequate maintenance caused failure or discrepancy.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>RRA08 Inadequate design of facility or selection of material or equipment caused failure or discrepancy.</td>
<td>4.4.1</td>
</tr>
<tr>
<td>Competence/Training and Awareness</td>
<td>4.4.2</td>
</tr>
<tr>
<td>CTA01 No training is conducted.</td>
<td>4.4.2</td>
</tr>
<tr>
<td>CTA02 Training is inadequate or ineffective.</td>
<td>4.4.2</td>
</tr>
<tr>
<td>CTA03 Personnel do not perform duties as trained.</td>
<td>4.4.2</td>
</tr>
<tr>
<td>Communication</td>
<td>4.4.3</td>
</tr>
<tr>
<td>COM01 Internal communication is missing or ineffective.</td>
<td>4.4.3</td>
</tr>
<tr>
<td>COM02 External communication is missing or ineffective.</td>
<td>4.4.3</td>
</tr>
<tr>
<td>Documentation/Control of Documents</td>
<td>4.4.4/4.4.5</td>
</tr>
<tr>
<td>DOC01 Necessary details within documents and records are absent or are inadequate.</td>
<td>4.4.4</td>
</tr>
<tr>
<td>DOC02 Procedure(s) to approve, review and update, and retain relevant versions of information is not established or is not adequately implemented.</td>
<td>4.4.5</td>
</tr>
<tr>
<td>Operational Control/Emergency Preparedness and Response</td>
<td>4.4.6/4.4.7</td>
</tr>
<tr>
<td>OCP01 Documented plans or procedures are inadequate.</td>
<td>4.4.6</td>
</tr>
<tr>
<td>OCP02 Documented plans or procedures not properly implemented to control activities.</td>
<td>4.4.6</td>
</tr>
<tr>
<td>OCP03 Appropriate contingency planning for</td>
<td>4.4.7</td>
</tr>
<tr>
<td>Root Cause Code</td>
<td>International Organization for Standardization 14001:2004(E)</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>emergency preparedness and response is missing or ineffective.</td>
<td></td>
</tr>
</tbody>
</table>

**CHECK**

(Checking and Corrective Action)

<table>
<thead>
<tr>
<th>Monitoring and Measurement/Evaluation of Compliance</th>
<th>4.5.1/4.5.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMC01 Calibrated and verified monitoring or measurement equipment is not used or maintained.</td>
<td>4.5.1</td>
</tr>
<tr>
<td>MMC02 Internal compliance evaluation is not effective.</td>
<td>4.5.2</td>
</tr>
</tbody>
</table>

**Nonconformity, Corrective Action and Preventive Action/Control of Records/Internal Audit**

<table>
<thead>
<tr>
<th>Nonconformity, Corrective Action and Preventive Action/Control of Records/Internal Audit</th>
<th>4.5.3/4.5.4/4.5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCA01 The corrective action and preventive action process is not effective.</td>
<td>4.5.3</td>
</tr>
<tr>
<td>NCA02 Control and tracking procedure(s) for documents and records is absent or is inadequate.</td>
<td>4.5.4</td>
</tr>
<tr>
<td>NCA03 Internal audit program is not implemented or is ineffective.</td>
<td>4.5.5</td>
</tr>
</tbody>
</table>

**IMPROVE**

(Management Review)

<table>
<thead>
<tr>
<th>Management Review</th>
<th>4.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRV01 Documented procedure describing the management review process is inadequate.</td>
<td>4.6</td>
</tr>
<tr>
<td>MRV02 Roles, responsibilities and authorities are not clearly defined, documented, and or communicated.</td>
<td>4.6</td>
</tr>
<tr>
<td>MRV03 Management review process or procedure is not implemented effectively.</td>
<td>4.6</td>
</tr>
<tr>
<td>MRV04 Management review process is insufficient to create change, provide leadership, or effectively improve the EMS.</td>
<td>4.6</td>
</tr>
</tbody>
</table>
The following checklist is to guide afloat commands in the event they want to evaluate command environmental compliance procedures, practices, and training. The President of the Board of Inspection and Survey (INSURV) shall use this checklist in conducting environmental compliance oversight inspections as part of regular INSURV inspections.

Indicate the answer to each of the questions below with an X. If a question is not applicable to the command, put NA in the YES block. Explain or describe the conditions warranting any NO answer in the space at the end of the checklist or on additional sheets, if necessary. An underlined question does not apply to all ships, but only to the category indicated. The chapter 35 (Environmental Compliance Afloat) reference is in parentheses at the end of the question.

<table>
<thead>
<tr>
<th>TRAINING</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are all hands trained in environmental protection in I Division or School of the Boat? (35-3.3.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Are ship watch officers responsible for authorizing overboard disposal of shipboard wastes trained on discharge restrictions for shipboard wastes as part of their watch qualification procedures? (35-3.3.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is there a designated afloat environmental protection coordinator who is trained and knowledgeable? (35-3.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are personnel who operate or maintain sewage and graywater disposal or transfer equipment trained 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? (35-3.12.d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Have personnel assigned to supervise sewage or graywater disposal operations completed the Shipboard Sewage Collection, Holding, and Transfer (CHT) course (K 652-2141)? (35-3.12.d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Have all personnel who operate or maintain sewage or graywater disposal equipment completed the Shipboard Sewage CHT, and Treatment Personal Qualification Standard (PQS), Naval Education and Training (NAVEDTRA) 43199-C, or equivalent, prior to assignment to those duties? (35-3.12.d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>7.</td>
<td>Are personnel whose watch duties may result in air emissions (e.g., diesel engine operators, boiler men, gas turbine operators) trained on the minimization of air pollution as a part of their watch qualification?</td>
<td>(35-3.13.f)</td>
</tr>
<tr>
<td>8.</td>
<td>Are personnel whose task assignments may result in air emissions (e.g., topside painters, users of volatile solvents) trained on the proper use of the material prior to performing the task to minimize the release of pollutants?</td>
<td>(35-3.13.f)</td>
</tr>
<tr>
<td>9.</td>
<td>Have the air conditioning and refrigeration (AC&amp;R) technicians who perform maintenance on AC&amp;R equipment received Environmental Protection Agency (EPA) technician certification and training on ozone-depleting substance (ODS) regulations and spent or recyclable ODS labeling, prior to assignment?</td>
<td>(35-3.13.f)</td>
</tr>
<tr>
<td>10.</td>
<td>Are personnel who work with other ODSs (e.g., halons, solvents) or perform maintenance on equipment containing such substances trained on methods to prevent release?, prior to assignment?</td>
<td>(35-3.13.f)</td>
</tr>
<tr>
<td>11.</td>
<td>Have personnel assigned to operate the incinerator or other thermal destruction equipment completed all PQS appropriate for the type of equipment, prior to assignment?</td>
<td>(35-3.13.f)</td>
</tr>
<tr>
<td>12.</td>
<td>Are personnel who operate or maintain oil, waste oil, and oily waste holding, processing, disposal, or transfer equipment trained on the proper procedures for oily waste processing and disposal, including hookup and transfer of waste oil and oily waste to shore facilities and on in port and at sea discharge restrictions?</td>
<td>(35-3.14.k)</td>
</tr>
<tr>
<td></td>
<td>a. Have personnel assigned to supervise and perform oily waste processing and disposal operations completed the Oil Pollution Abatement Equipment Operation and Maintenance course, K 652-2196, prior to assignment?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Have all personnel who operate or maintain oil processing, transfer or disposal equipment completed the Oil Spill Control and Removal Equipment PQS, NAVEDTRA 43195-C, before assignment to those duties?</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Has at least one oil and hazardous substance (OHS) spill response drill for each duty section been held annually?</td>
<td>(35-3.15.i)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td><strong>14.</strong></td>
<td>Has the ship trained in port watchstanders and command duty officers on in port OHS spill response procedures, the ship's spill contingency plan (SCP), and local notification requirements prior to assignment? (35-3.15.i)</td>
<td></td>
</tr>
<tr>
<td><strong>15.</strong></td>
<td>Is at least one petty officer in each in port fire party and each repair party qualified in oil spill cleanup supervisor duties within 6 months of assignment? (35-3.15.i)</td>
<td></td>
</tr>
<tr>
<td><strong>16.</strong></td>
<td>For submarines only. Are type commander requirements followed so that appropriately qualified individuals are present at the scene of hazardous material (HM) or oil spill? (35-3.15.i)</td>
<td></td>
</tr>
<tr>
<td><strong>17.</strong></td>
<td>Are personnel who handle, store, or dispose of HM trained per Chief of Naval Operations instruction (OPNAVINST) 5100.19E, Navy Occupational Safety and Occupational Health (SOH) Program Manual for Forces Afloat, chapter B3? (35-3.16.f)</td>
<td></td>
</tr>
<tr>
<td><strong>18.</strong></td>
<td>Are personnel responsible for handling ship's garbage trained on the discharge restrictions applicable to the waste? (35-3.17.j)</td>
<td></td>
</tr>
<tr>
<td><strong>19.</strong></td>
<td>Are personnel responsible for the supervision and approval of overboard disposal of solid waste (SW) trained on the legal requirements for this waste category? (35-3.17.j)</td>
<td></td>
</tr>
<tr>
<td><strong>20.</strong></td>
<td>Have personnel assigned to operate and maintain SW processing equipment (e.g., plastics waste processors, shredders, pulpers, incinerators), completed the computer-based training interactive courseware or appropriate SW processing equipment sections of PQS (NAVEDTRA 43704)? (35-3.17.j)</td>
<td></td>
</tr>
<tr>
<td><strong>21.</strong></td>
<td>Are personnel responsible for processing and disposing of shipboard medical waste trained to ensure such actions comply with the requirements governing this waste? (35-3.18.e)</td>
<td></td>
</tr>
</tbody>
</table>

**EQUIPMENT OPERATION**

**22.** Does the ship have a marine sanitation device (MSD) of the type appropriate to its status and year of construction? Is the MSD certified per Naval Sea System Command (NAVSEA) instruction 9593.1 (series) and is it operable? (35-3.12.a)

**23.** Does the ship observe the following procedures:
- Does the ship operate and maintain the installed MSD to prevent the improper overboard discharge of untreated or inadequately treated sewage,
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>or any waste derived from sewage (e.g., sludge), within 0-3 nautical miles (NM) of the U.S. shore?</td>
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<tr>
<td>b. Does the ship operate the MSD to collect only sewage and not graywater while operating or transiting within 3 NM of shore?</td>
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<tr>
<td>c. In port, does the ship collect graywater in the installed MSDs or graywater collection systems (if so fitted) and pump the waste ashore?</td>
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<tr>
<td>d. If the ship operates in fresh water other than the Great Lakes, does it refrain from discharging treated or untreated sewage into freshwater lakes, freshwater reservoirs, or other freshwater impoundment, or into rivers not capable of interstate navigation?</td>
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<tr>
<td>e. With reference to (d) above, is the ship modified to preclude accidental discharge?</td>
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<tr>
<td>f. Are used solvents or other industrial wastes prohibited from being discharged to MSDs or graywater collection systems for dumped down sinks or deck drains?</td>
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</tbody>
</table>

24. While visiting non-Navy ports, does the ship request sewage reception facilities (barge or installed sewage hookups) in logistics requirements or other pertinent documentation? When in ports and connected to pier sewers, does the ship divert food service garbage grinders to the MSD system for discharge ashore? (35-3.12.a-b)

25. Are solvents, paints, fuels, lubricants, and chemicals prohibited in OPNAVINST 5100.19E, Navy Occupational Safety and Occupational Health (SOH) Program Manual for Forces Afloat, not ordered or used? (35-3.13.a)

26. Are only properly trained personnel equipped with appropriate personal protective equipment permitted to perform shipboard emergency or operational readiness repairs on thermal insulation containing asbestos? (35-3.13.a.4)

27. Is asbestos material removed during shipboard repair actions performed by ship's force properly containerized and disposed of without release of asbestos fibers into the environment? (35-3.13.a.4)

28. For Navy and Commander, Military Sealift Command ships with AC&R systems with an installed refrigerant charge of more than 50 pounds or more that contain ODSs such as chlorofluorocarbon (CFC)-11, CFC-12, or CFC-114 or ODS substitute material such as hydrofluorocarbon (HFC)-134a, HFC-236fa, or R-404A (a blend of HFC-143a,
<table>
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<tr>
<th></th>
<th>YES</th>
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</table>
| HFC-125, and HFC-134a), does the ship meet the following annual performance goals:  
  a. Maintain a maximum annual leakage rate of no more than 15 percent of total installed refrigerant charge of air conditioning equipment?  
  b. Maintain a maximum annual leakage rate of no more than 35 percent of total installed refrigerant charge of ship stores and cargo refrigeration? |   | (35-3.13.a.5) |
| 29. Are ODSs and ODS substitute materials including refrigerants and firefighting agents recovered prior to maintenance on AC&R systems and fire protection systems? |   | (35-3.13.a.6) |
| 30. Do personnel who perform maintenance on AC&R systems keep records of maintenance actions, names of technicians performing work, pounds of refrigerant removed, and pounds of refrigerant added and retain them for 3 years? |   | (35-3.13.a.7) |
| 31. When replacing inoperable galley refrigeration equipment, is new equipment EPA-approved (complying with their Significant New Alternatives Policy Program), using refrigerant with an ozone-depletion potential of zero? |   | (35-3.13.c) |
| 32. If the ship has had an overhaul availability at Navy National Emission Standards for Hazardous Air Pollutants (NESHAP)-affected source sites, were records of ship's force marine coating use maintained for coatings distributed from ships' stores? Note: The Hazardous Material Inventory Control System for Windows or the Submarine Hazardous Material Inventory and Management System may be used to keep these records. |   | (35-3.13.d) |
| 33. If the ship has had an overhaul availability at a commercial NESHAP-affected source site, was the use of paint recorded and reported regardless of availability type or operational status? |   | (35-3.13.d) |
| 34. Are the following paint work practices observed:  
  a. Are marine coatings or paint spills minimized?  
  b. Are only intact and leak-free coating containers stored?  
  c. Are coating containers closed when not in use? |   | (35-3.13.e) |
<p>| 35. Is a monthly report of daily coating use delivered by the seventh day of the month following use or before departure, if departing before the end of the month, or |   |   |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>after a short visit (i.e., several days) to the affected source site (Navy shore activity) or, when located at a commercial affected source site, to the appropriate Supervisor of Shipbuilding office?</td>
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<td>(35-4.12.hh)</td>
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<tr>
<td>36. Are paint lockers labeled with placards stating, &quot;Thinning of marine coatings/paints is prohibited.&quot;?</td>
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<tr>
<td>(35-3.13.e)</td>
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<tr>
<td>37. Is installed oil/water separator (OWS) and oil content monitor (OCM) fully operable and routinely used? Is oil pollution abatement equipment certified by Commander, Naval Sea Systems Command?</td>
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<tr>
<td>(35-3.14)</td>
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<tr>
<td>38. For a ship equipped with OWS and OCM, are oil and oily discharges limited to 15 parts per million (ppm) oil worldwide?</td>
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<tr>
<td>(35-3.14.b)</td>
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<tr>
<td>39. For surface ships equipped with OWS but with inoperable OCM and submarines with a bilge water processing tank (BWPT), is all machinery space bilge water processed through an OWS or BWPT before discharge?</td>
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<tr>
<td>(35-3.14.c)</td>
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<tr>
<td>40. For a ship without an operating OWS but with an oily waste holding tank (OWHT):</td>
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<tr>
<td>a. To the maximum extent possible, without endangering the ship or impairing its operations or operational effectiveness, is all oily bilge water directed to the OWHT for shore disposal?</td>
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</tr>
<tr>
<td>b. Is only the bottom, water phase pumped overboard, ensuring that the upper, oily phase is not pumped, except to a shore collection facility?</td>
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<tr>
<td>c. Are such discharges of oily bilge water made at least 50 NM from the nearest land and only while the ship is making way?</td>
<td></td>
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<tr>
<td>(35-3.14.d)</td>
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<tr>
<td>41. For a ship equipped with neither an operating OWS nor OWHT, is oily bilge water retained for shore disposal to the maximum extent possible, without endangering the ship or impairing its operations or operational effectiveness?</td>
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<tr>
<td>(35-3.14.e)</td>
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<tr>
<td>42. For submarines without BWPTs:</td>
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<td></td>
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<tr>
<td>a. Is bilge water discharged, after allowing for adequate separation time?</td>
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<tr>
<td>b. Is only the bottom, non-oily water phase of bilge water pumped overboard?</td>
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<tr>
<td>(35-3.14.f)</td>
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<tr>
<td>43. Is oil contamination of bilge water minimized?</td>
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<tr>
<td>(35-3.14.i)</td>
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<td></td>
<td>YES</td>
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<tr>
<td>44. Does the ship refrain from use of emulsifying bilge cleaners? (35-3.14.i)</td>
<td></td>
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</tr>
<tr>
<td>45. While in port, does the ship dispose of bilge water only by pumping to a permanent shore reception facility, using its installed OWS, or pumping to a ship waste offload barge, and use eductors only in an emergency? (35-3.14.i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Is waste or used oil disposed of in port and not at sea, and collected and stored separately for eventual shore reclamation? Are hydraulic and synthetic oils kept separate from other lubricants? (35-3.14.i)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|47. Does the ship conduct fuel operations:  
   a. In port or restricted waters during daylight hours only?  
   b. With trained personnel?  
   c. Using topside watches in communication with pumping stations?  
   d. Using check-off lists?  
   e. While continuously monitoring each tank level while filling it?  
   f. Only after informing the commanding officer, command duty officer, or officer of the deck, as appropriate? (35-3.14.i) |   |   |
<p>|48. Does the ship refrain from use of eductors to strip fuel or cargo tanks? Does the ship avoid stripping tanks overboard, but instead strip to contaminated fuel settling tanks? (35-3.14.i) |   |   |
|49. Does the ship properly dispose of oil-contaminated SW? (35-3.14.i) |   |   |
|50. Are the commanding officer and command duty officers familiar with OHS spill cleanup and reporting requirements? (35-3.14.i) |   |   |
|51. Do command duty officers know how to contact the Navy on-scene coordinator (NOSC)? (35-3.14.i) |   |   |
|52. Does the ship have pre-formatted, correctly addressed message, modeled on appendix C (Message Formats), prepared and available for OHS spills? (35-3.14.i) |   |   |
|53. Does the ship maintain a minimum of one oil spill response kit - Allowance Equipage List serial number 2-550024006 for overboard OHS spill response? (35-3.14.i) |   |   |
|54. Does the ship manage HM following table 35-4? (Table 35-4) |   |   |</p>
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>55.</td>
<td>Is section 35-3.16 pertaining to ship-to-shore transfers and ship-to-ship transfers of excess HM or used HM followed? (35-3.16.b and 35-3.16.c)</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>Are the ships plastics processor, pulper, and metal/glass shredder properly maintained and functioning as designed? (35-3.17)</td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>Are the ships plastics processor, pulper, and metal/glass shredder operated and is processed material handled per section 35-3.17? (35-3.17)</td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>If inoperable SW processing equipment either threatens or results in the discharge of plastics, or the discharge of unprocessed garbage in an International Convention for the Prevention of Pollution from Ships Annex V special area, has a casualty report been submitted? (35-3.17)</td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>For submarines, is the compactor properly maintained and functioning as designed? (35-3.17.c)</td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Are responsible personnel aware of the requirement to report discharges of unprocessed non-food SW into &quot;in effect&quot; special areas? (35-3.17.f.4)</td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>For ships equipped with Commander, Naval Sea Systems Command-approved thermal destruction equipment, are rags burned only if lightly petroleum-soiled and when beyond 12 NM from shore? (35-3.17.i)</td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Is the autoclave functional so that medical personnel may sterilize and disinfect medical waste? (35-3.18)</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Does the medical department representative understand medical waste management requirements? (35-3.18)</td>
<td></td>
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</tbody>
</table>

**PROGRAM COMPLIANCE AND EFFECTIVENESS**

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>64.</td>
<td>Is the ship aware of the requirement to report by message to the Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45)), with information copies to the chain of command, any interest expressed by regulators in discharges from U.S. Navy ships? Do responsible officers understand they should not make agreements with environmental agencies regarding ship discharges without OPNAV (N45) approval? (35-3.10.b and 35-4.12.y)</td>
</tr>
<tr>
<td>65.</td>
<td>Is the ship operated and maintained to conform with applicable Federal, State, and local air pollution emission regulations? (35-3.13)</td>
</tr>
<tr>
<td>66.</td>
<td>Have the commanders ensured compliance with the environmental requirements of Naval Warfare Publication</td>
</tr>
<tr>
<td></td>
<td>YES</td>
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<tr>
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</tr>
<tr>
<td>4-11, Environmental Protection, March 1999 and OPNAVINST 3120.32D, Standard Organization and Regulation of the U.S. Navy?</td>
<td>(35-3.20.c.1)</td>
</tr>
<tr>
<td>67. On floating dry docks, are industrial wastes periodically removed from the floor of the dry dock and sent to shore facilities for disposal? Are there processes in place to ensure that all discharges from industrial waste collection systems to shore treatment facilities, sewer systems, or surface waters are in compliance with applicable Federal, State and local regulations? Is an officer or petty officer appointed to ensure dry dock personnel properly operate and maintain oil and oily waste collection and treatment systems and they safely and effectively handle ship-to-shore transfers of the waste?</td>
<td>(35-3.22 and 35-4.13)</td>
</tr>
<tr>
<td>68. Are periodic inspections (at least quarterly) by senior medical department personnel conducted to maintain sanitary and hygienic conditions of MSD systems and operational practices? Are periodic sanitation and hygiene inspections of SW processing equipment conducted?</td>
<td>(35-4.12.g)</td>
</tr>
<tr>
<td>70. Are sewage discharges within 0-3 NM from U.S. shores permitted under 35-3.12.c reported as required and established by the chain of command?</td>
<td>(35-4.12.i)</td>
</tr>
<tr>
<td>71. If there are any conditions or equipment malfunctions that could necessitate oily waste, HM, or SW discharge into waters in which discharge is restricted, are they reported to the chain of command?</td>
<td>(35-4.12.j)</td>
</tr>
<tr>
<td>72. Are 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 for any oily waste discharge that causes a sheen recorded in the engineering log or equivalent oil record book?</td>
<td>(35-4.12.k)</td>
</tr>
<tr>
<td>73. Do personnel comply with OPNAVINST 5100.19E, Navy Occupational Safety and Occupational Health (SOH) Program Manual for Forces Afloat requirements for HM</td>
<td></td>
</tr>
<tr>
<td><strong>74.</strong> Is one or more shipboard action officer designated to be responsible for shipboard spill contingencies planning and response?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.m)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>75.</strong> Does the ship have an OHS SCP that is coordinated with the cognizant NOSC plan?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.n)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>76.</strong> Are personnel aware of and do they understand the oil or OHS SCPs?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.o)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>77.</strong> Are all OHS spills reported as prescribed in section 35-3.15.d through g?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.p)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>78.</strong> Is immediate action taken to contain, control, and mitigate any spills caused by the ship?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.q)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>79.</strong> Is used and excess HM off-loaded, to the maximum extent feasible, to a Navy or other public facility prior to entering a private shipyard for an availability? Does the ship also off-load HM not anticipated for use by ship's force during the availability before entering the private shipyard?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.t)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>80.</strong> Does the ship collect the debris, dust, and residual materials from the paint removal, to the maximum extent feasible, and properly package these materials for dispose ashore?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.x)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>81.</strong> Is 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 recorded in the engineering log?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.aa)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>82.</strong> If plastic discharges have occurred, are they properly recorded in the ship's deck log? Are plastic discharges personally approved by the commanding officer?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.bb)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>83.</strong> Does the ship use Protective Measures Assessment Protocol in planning for all routine training and minor exercises that include any of the 21 listed events?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.dd)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>84.</strong> Does the ship avoid deliberately harassing marine mammals and consider marine mammal protection during ship operations and planning?</td>
<td></td>
</tr>
<tr>
<td>(35-4.12.ee)</td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>85.</strong> Are the requirements of OPNAVINST 5100.19E, Navy Occupational Safety and Occupational Health (SOH) Program Manual for Forces Afloat and NAVSEA PCB Advisories followed for all activities associated with handling, packaging, storage, labeling, treatment, and disposal? Is an HM coordinator appointed by the commanding officer?</td>
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<tr>
<td>(35-4.12.l)</td>
<td><strong>YES</strong></td>
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<tr>
<td>Question</td>
<td>YES</td>
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<tr>
<td>polychlorinated biphenyls (PCBs), PCB-containing materials, or systems potentially contaminated with PCBs (e.g., ventilation systems that employ PCB-containing felt gaskets)?</td>
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<tr>
<td>86. Are only marine coatings that meet volatile organic compound content standards of the Naval Ships' Technical Manual (NSTM), chapter 631, table 3-7 used?</td>
<td></td>
</tr>
<tr>
<td>87. Are non-compliant coatings removed from shipboard stores and returned to the supply system as excess HM as soon as possible?</td>
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</tr>
<tr>
<td>88. If so equipped, does the ship report the use of mid-frequency active sonar for training, testing, and or maintenance via the Sonar Positional Reporting System?</td>
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</tbody>
</table>
# APPENDIX E

## WEB SITES

<table>
<thead>
<tr>
<th>Web Site</th>
<th>Web Site Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force Institute of Technology (AFIT) Courses</td>
<td><a href="http://www.afit.edu/cess">http://www.afit.edu/cess</a></td>
</tr>
</tbody>
</table>
| Board of Inspection and Survey                                          | [http://www.public.navy.mil/fltfo
r/insurv/Pages/default.aspx](http://www.public.navy.mil/fltfo
r/insurv/Pages/default.aspx) |
| Commander, Naval Sea System Command (COMNAVSEASYSCOM) Oil and Hazardous
  Substance (OHS) Spill Database (CAC enabled)                            | [https://www.noscnet.org/](https://www.noscnet.org/) |
| DLA Courses                                                             | [http://www.hr.dla.mil/dtc/course
s.asp](http://www.hr.dla.mil/dtc/course
s.asp) |
| Defense Supply Center Richmond (DSCR)                                    | [http://www.aviation.dla.mil/](http://www.aviation.dla.mil/) |
| Department of the Navy Applications and Database Management System (DADMS)
  (CAC enabled)                                                           | [https://www.dadms.navy.mil/](https://www.dadms.navy.mil/) |
asp](http://www.doncio.navy.mil/Main.
asp) |
| Environmental Compliance Assessment Training and Tracking System (ECATTS)| [https://environmentaltraining.ec
atts.com](https://environmentaltraining.ec
atts.com) |
Environmental Management System Web Site (EMSWeb)  
https://eprportal.cnic.navy.mil/

Environmental Readiness Program Requirements Web (EPRWeb) (requires CAC and login)  
https://eprportal.cnic.navy.mil/

Incentivized Shipboard Energy Conservation  
http://www.i-encon.com

Incidental Take Authorizations, Office of Protected Resource, National Oceanic and Atmospheric Administration (NOAA) Fisheries  
http://www.nmfs.noaa.gov/pr/perm its/incidental.htm

Indian Entities Recognized and Eligible to Receive Services from the U.S. Bureau of Indian Affairs  
http://www.loc.gov/catdir/cpso/b laind.html

International Maritime Organization (IMO)  
http://www.imo.org

National Park Service  
http://www.nps.gov/history/laws.htm

Naval Civil Engineer Corps Officers School (CECOS)  
https://www.netc.navy.mil/centers/csfe/cecos/

Naval Forms OnLine (NFOL)  
https://navalforms.documentser vicess.dla.mil/web/public/home

Naval Postgraduate School (NPS) Collaborative Learning & Research Portal  
https://cle.nps.edu/xsl-portal

Naval Safety and Environmental Training Center (NAVSafeNvTRACEN)  
http://www.public.navy.mil/navsa fecen/navsafenvtracen/Pages/defa ult.aspx

Naval Safety Center (COMNAVSafeFECEN)  
http://safetycenter.navy.mil
Navy Community Service Program

http://www.cnic.navy.mil/

Navy Conservation Web Site
(CAC and login)

https://eprportal.cnic.navy.mil/

Navy Office of Community Outreach (NAVCO)

http://www.navy.mil/navco

Navy's Energy, Environment, and Climate Change Web Site

http://greenfleet.dodlive.mil/currents-magazine/

Office of the Chief of Naval Operations, Energy and Environmental Readiness Division (OPNAV (N45))
Environmental Planning Library

http://www.envlibrary.ene.com

OPNAV N45 Functional E-mail Account

N456EnvPlanning.opnav@navy.mil

Protective Measures Assessment Protocol (PMAP) (CAC enabled)

https://eims3.sscno.nmci.navy.mil/pmap/

Sonar Positional Reporting System (SPORTS) (NOTAL)

http://sports.navy.smil.mil

Training Exchange Web Site

http://www.trainex.org

U.S. Code

http://www.gpoaccess.gov/uscode/

U.S. Environmental Protection Agency (EPA)

http://www.epa.gov/

U.S. EPA's Enforcement and Compliance History Online (ECHO)

http://www.epa-echo.gov/

U.S. EPA's Online Targeting Information System (OTIS)

http://www.epa-otis.gov/


U.S. Navy Environmental Portal (CAC-enabled)  https://eprportal.cnic.navy.mil

U.S. Navy List Builder  http://listbuilder.erdc.dren.mil/listbuilder
APPENDIX F

FORMS AND REPORTING

PART 1. FORMS

DD Form 448 Military Interdepartmental Purchase Request

DD Form 1348-1A Issue Release/Receipt Document

DD Form 2521 Hazardous Chemical Warning Label (8x11)

DD Form 2522 Hazardous Chemical Warning Label (4x6)

EPA Form 8700-29, Tier I EPA Emergency and Hazardous Chemical Inventory Form

EPA Form 8700-30, Tier II EPA Emergency and Hazardous Chemical Inventory Form

EPA Form 8700-22 EPA Uniform Hazardous Waste Manifest Form

EPA Form 9350-1 EPA Toxics Release Inventory (TRI) Form R


(http://www.epa.gov/osweroe1/docs/chem/t1-instr2012.pdf)


(http://www.epa.gov/osweroe1/docs/chem/t2-instr2012.pdf)


http://www.epa.gov/tri/reporting_materials/forms/formR/ry2012FormR.pdf
(Instructions can be found at: http://www.epa.gov/tri/reporting_materials/rfi/ry2012rfi.pdf)

EPA Form 9350-2 EPA TRI Form A
http://www.epa.gov/tri/reporting_materials/forms/formA/ry2012FormA.pdf

Form 9350-3 EPA TRI Form R, Schedule 1
http://www.epa.gov/tri/reporting_materials/forms/formR/ry2012FormRSchedule1.pdf

EPA State Tier II Reporting Requirements
http://www.epa.gov/osweroe1/content/epcra/tier2.htm#state

OSHA Form 174 OSHA Material Safety Data Sheet
http://www.osha.gov/dsg/hazcom/msds-oshal74/msdsform.html

OPNAV 1650/18 CNO Afloat Environmental Award
http://cnoenviroawards.com

OPNAV Form 5090/3 Statement of Technical Review for NEPA/E.O. 12114 Documents
https://navalforms.documentservices.dla.mil/formsDir/_OPNAV_5090_3_6448.pdf

OPNAV Form 5090/4 Preliminary Impact and Exposure Report (PIER)
https://navalforms.documentservices.dla.mil/formsDir/_OPNAV_5090_4_10838.pdf
PART 2. REPORT CONTROL SYMBOLS

SECNAV RCS 5090-1, NEPA Action Proponent Periodic Status Report, assigned to data collection in Chapter 10, Paragraph 10-3.4.c(3).

OPNAV RCS 5090-2, NOSC Annual Report and Navy Spill Response Program and Report Database (formerly known as Oil Spill Report), assigned to data collection in Chapter 39, Paragraphs 39-3.4.c.(1); 39-3.4.c.(2); 39-4.4.h; 39-4.4.s; 39-4.7.i; 39-4.8.o; 39-4.8.w; and 39-4.9.n.

OPNAV RCS 5090-3, Annual Hazardous Waste Management Reports, assigned to data collection in Chapter 35: Para 35-4.2.x.

OPNAV RCS 5090-4, Reporting Requirement for Environmental Notices of Violation (NOV) and Significant Non-Compliance (SNC), assigned to data collection in Chapter 19: Para 19-3.2.c.

OPNAV RCS 5090-5, Environmental Compliance Audit Reports, Schedules and Documentation of Corrective Action and Report of Compliance Deficiencies, assigned to data collection in Chapter 18: Para 18-3.1.c; 18-3.1.d; 18-3.1.f; 18-3.1.i; 18-4.1.a; and 18-4.1.e.

OPNAV RCS 5090-8, Ozone-Depleting Substance (ODS) Reserve Requirements, assigned to data collection in Chapter 22, Para 22-4.4.d.

OPNAV RCS 5090-9, Burial at Sea Report, assigned to data collection in Chapter 36, Para 36-4.4.

OPNAV RCS 5090-12, Target Vessel Sinking Report, assigned to data collection in Chapter 36, Para 36-3.2.f.

OPNAV RCS 5090-15, Preliminary Impact and Exposure Report (PIER), assigned to data collection in Chapter 41, Para 41-3.2.b.(1).

OPNAV RCS 5090-16, Cooperating Agency Status Reporting Requirements, assigned to data collection in Chapter 10: Para 10-3.5.a.(3) and 10-3.5.a.(5).

OPNAV RCS 5090-17, Independent Logistics Assessment (ILA) Status Report, assigned to data collection in Chapter 11: Para 11-4.3.d.
OPNAV RCS 5090-18, Environmental Readiness in Acquisition Program Support Summary, assigned to data collection in Chapter 11: Para 11-4.3.f.

OPNAV RCS 5090-19, CNIC Cultural Resources Metrics, assigned to data collection in Chapter 13: Para 13-4.4.f.


OPNAV RCS 5090-22, Board of Inspection and Survey (INSURV) Environmental Compliance Oversight Inspections for Naval Forces Afloat, assigned to data collection in Chapter 35: Para 35-3.7.a. and 35-4.9.c.


OPNAV RCS 5090-25, Annual Solid Waste Data Call, assigned to data collection in Chapter 28: Para 28-4.2.d.

OPNAV RCS 5090-26, Award Nomination Submissions, assigned to data collection in Chapter 6: Para 6-3.4.