

**Headquarters, U.S.
Marine Corps**

**MCO P5090.2A
PCN 10207187100**



ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

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DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
2 NAVY ANNEX
WASHINGTON, DC 20380-1775

MCO P5090.2A
LFL
10 JUL 98

MARINE CORPS ORDER P5090.2A W/CH 1-2

From: Commandant of the Marine Corps
To: Distribution List

Subj: ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

Encl: (1) LOCATOR SHEET

Reports Required: List, page v

1. Purpose. American society has shown a determined concern for the protection and enhancement of the environment. As a result, the Secretary of Defense has made the commitment that the Department of Defense (DoD) will take the lead in Federal agency environmental compliance and protection. Military leaders are expected to conform to a new national ethic and to consider a new set of priorities which have been superimposed on our traditional defense mission. Consistent with this objective, this Manual has been revised to provide guidance and instruction to installations enabling them to meet stringent environmental legislation and increasing pressure by regulatory agencies at the Federal, state, and local level.

2. Cancellation. MCO P5090.2

3. Effective Date. 1 July 1998

4. Summary of Revision. Revisions are considerable, and this Manual should be reviewed in its entirety.

5. Scope. This Manual accomplishes the following:

- a. Implements the substantive requirements of DoD environmental policy;
- b. Outlines the requirements for compliance with Federal environmental regulations;
- c. Establishes Marine Corps policy for funding, evaluating, and continually improving environmental compliance and protection programs, with emphasis on pollution prevention and training and education.

MCO P5090.2A
10 JUL 98

6. Recommendations for Modification. Recommendations concerning the contents of this Manual are invited. Such recommendations will be forwarded to the Commandant of the Marine Corps (CMC) (LFL) via the appropriate chain of command.

7. Action. All Commanding Officers and Marines whose actions have the potential to adversely affect the environment should ensure that they are familiar with the applicable chapters of this Manual.

8. Reserve Applicability. This Manual is applicable to the Marine Corps Reserve.

9. Certification. Reviewed and approved this date.


J. M. HAYES
Acting Deputy Chief of Staff
for Installations and Logistics

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LFL-6
22 JAN 2008

MARINE CORPS ORDER P5090.2A CH 1

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Subj: ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL
CHANGE 1

Encl: (1) Revised chapters and appendices, a new chapter,
and a new appendix to MCO P5090.2A

1. Situation. To transmit revised chapters and appendices, one new chapter and one new appendix to the basic Order.

2. Mission. This change updates Marine Corps policy on environmental compliance and protection. This change also adds policy and responsibilities for managing military waste munitions.

3. Execution

a. Remove the overall table of contents, page iii. Replace it with the corresponding page ii in enclosure (1).

b. Remove the Reports Required, page vii. Replace it with the corresponding Reports Required, page 6, in enclosure (1).

c. Remove chapters 1-5. Replace with corresponding chapters 1-5 in enclosure (1).

d. Remove chapters 11-12. Replace with corresponding chapters 11-12 in enclosure (1).

e. Add chapter 21.

f. Remove appendices A-D. Replace with corresponding appendices A-D in enclosure (1).

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g. Add appendix R.

4. Filing Instructions. File this change transmittal page in front of the original Order.



E. G. USHER III
Deputy Commandant for
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LFL-6
21 May 2009

MARINE CORPS ORDER P5090.2A Ch 2

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Encl: (1) Revised chapters and appendices and a
new appendix to MCO P5090.2A

1. Situation. To transmit revised chapters and appendices and add one new appendix to the basic Order.

2. Execution

a. Remove the overall table of contents, page ii. Replace it with the corresponding page ii in enclosure (1).

b. Remove chapters 3, 6 through 9, 12, 14 through 17, and 19. Replace with corresponding chapters 3, 6 through 9, 12, 14 through 17, and 19 in enclosure (1).

c. Remove appendices E and F. Replace with corresponding appendices E and F in enclosure (1).

d. Add appendix S.

3. Summary of Changes. This change updates Marine Corps policy on environmental compliance and protection. This change also adds a procedure for implementing a waiver for the use of Defense Reutilization and Marketing Services.

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MAY 21 2009

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E. G. USHER, III
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ENCLOSURE (1)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change
1	01/22/08		
2	05/21/09		

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CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

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CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

SECTION 1: INTRODUCTION

1100. PURPOSE. This Manual sets forth Marine Corps policies and responsibilities for compliance with environmental statutes and regulations, as well as the management of Marine Corps environmental programs.

1101. APPLICABILITY

1. This Manual applies to all Marine Corps active and reserve installations, commands, detachments, components, and where applicable, Marine Corps activities in foreign countries.

2. Activities in Foreign Countries

a. Marine Corps activities in foreign countries are generally not subject to United States domestic environmental statutes and regulations. However, Marine Corps facilities and activities in foreign countries may, as applicable, be subject to reference (a) or country-specific Final Governing Standards (FGSS). The country-specific FGSS are prepared by the applicable Department of Defense (DOD) Environmental Executive Agent and are based on host nation environmental requirements and reference (a), whichever is more stringent.

b. If FGSS are established for the host nation, Marine Corps activities must comply with them.

c. If no FGSS are established for the host nation, Marine Corps activities must be in compliance with applicable international agreements, applicable host nation environmental requirements, and reference (a).

d. In addition, unless otherwise indicated, the policies contained in this manual apply to Marine Corps activities overseas.

1102. BACKGROUND

1. This Manual was originally published in 1991 and was based on various statutes, regulations, Executive Orders (E.O.s), directives, and policy. This remains the case, and references contained within this Manual are listed in the appendices with a brief discussion of each reference source. Technical discussions of various reference sources are presented in each chapter. Training requirements drawn from many of the reference sources are also presented in the appendices.

2. Many E.O.s and Federal laws direct Federal agencies to provide leadership in the protection of our Nation's environment. This is one of the principle directives supporting the creation and revision of this Manual.

1103. ENVIRONMENTAL REQUIREMENTS

1. Background

a. Federal environmental law extends as far back as 1899 with the passage of the Rivers and Harbors Act. For many years, the DOD maintained that national security concerns and sovereign immunity exempted it from compliance with environmental laws. However, certain Federal statutes and Federal court decisions have determined that Federal agencies, including the DOD, must comply with most environmental laws. Further, Congress continues to include new waivers from sovereign immunity when reauthorizing or amending environmental laws.

b. Marine Corps implementation of environmental requirements, as set forth in this Manual, is directed toward environmental compliance and natural resources protection. Accordingly, the environmental policies consolidated in this Manual include the policies, legislative mandates, and implementing Federal regulations for air, water, land, and solid and hazardous waste media, as well as the management of forestry, fish, wildlife, and other environmental, natural, and cultural resources. Each chapter in this Manual refers to certain environmental statutes and regulations pertaining to environmental compliance, pollution prevention, and natural/cultural resources protection.

2. Federal Requirements

a. Statutory Requirements. Federal environmental statutes generally require compliance by Federal installations. (See appendix A for a summary of applicable Federal statutes.) State and local governments often implement programs based on Federal environmental law, and these programs often apply to Federal installations by virtue of Federal waivers from sovereign immunity.

b. Regulatory Requirements. Federal environmental regulations expand upon Federal environmental statutes. These requirements often establish minimum requirements for State and local governments' implementing programs. (See appendix A for a summary of Codes of Federal Regulations.)

c. Executive Order Requirements

(1) Reference (b) requires all facilities owned by, leased to, or leased from the military, to be designed, operated, and maintained per all applicable environmental compliance standards. This E.O. also requires each agency to submit to the Office of Management and Budget an annual plan for environmental pollution control with cost estimates for the design, construction, management, operation, and maintenance of Federal facilities. Military and civilian personnel must cooperate with Federal, State, and local environmental protection agencies and comply with applicable standards and criteria issued by these agencies to the extent permitted by law. Revoked in part by reference (c) (sections 1-4 revoked).

(2) Reference (d) required "Federal agencies to conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner."

(3) In addition, other E.O.s require Federal agencies to assume leadership roles in environmental compliance and protection. (See appendix A for a summary of applicable E.O.s.)

d. DOD Requirements. DOD Instructions and Directives referenced in this Manual are found in the appendices.

e. Department of the Navy (DON) Requirements. Certain DON requirements, such as those published by the Office of the Assistant Secretary of the Navy, Installations and Environment; apply to both Navy and Marine Corps activities and installations. DON requirements referenced in this Manual are found in the appendices.

f. Marine Corps Requirements. The Commandant of the Marine Corps (CMC) establishes Marine Corps environmental compliance and protection requirements through this Manual. In addition, the CMC may periodically provide other policies and guidance through letters, memoranda, and messages.

1104. TERMS AND DEFINITIONS. Each chapter contains specific terms and definitions applicable to its respective topic.

CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

SECTION 2: MARINE CORPS POLICY

1200. MISSION. The Marine Corps makes America's Marines, wins our Nation's battles, and creates quality citizens. Training is integral to these missions. By respecting and maintaining the natural resources entrusted to the Marine Corps, the training opportunities enjoyed by today's Marines will be available to future Marines. Complete and successful implementation of the policies herein will maximize the Marine Corps' ability to provide and sustain the natural resources, facilities, and training areas necessary to ensure the success of every Marine.

1201. MANUAL FORMAT. This Manual presents overall policy and program management in the opening five chapters, followed by 16 chapters dealing with specific environmental topics and related technical issues. Each chapter is broadly divided into three parts: Section 1: Introduction, Section 2: Marine Corps Policy, and Section 3: Responsibilities.

1. Section 1: Introduction. Section 1 consists of one or more of the following components:

- a. Purpose. The purpose explains why the chapter exists.
- b. Applicability. The applicability identifies to whom the chapter applies.
- c. Background. The background addresses why the Marine Corps is implementing these policies and discusses historic items in relation to the chapter's subject.
- d. Federal Statutes. This component describes Federal legislation applicable to the chapter's subject.
- e. Requirements. This component explains how legislative and other requirements apply to the chapter's subject.
- f. Terms and Definitions. This component describes terms and definitions designed to meet each chapter's subject matter.

2. Section 2: Policy. Section 2 provides Marine Corps policies for each chapter's subject.

3. Section 3: Responsibilities. Section 3 identifies the responsibilities for any environmental requirements identified within each chapter.

4. Appendices. Appendices A through R and an index are provided at the end of the Manual.

CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

SECTION 3: RESPONSIBILITIES

1300. COMMANDING GENERAL/COMMANDING OFFICER (CG/CO)

1. The CGs of each respective Marine Corps Installation region shall be the Federal officer charged with ultimate responsibility for the compliance with applicable environmental requirements of all installations in their respective region. The CGs of Marine Forces Reserve, Marine Forces Pacific, and Marine Forces Command shall be the Federal officers charged with ultimate responsibility for their respective command's compliance with applicable environmental requirements. The CG/CO of each installation shall be the Federal officer charged with day-to-day responsibility for the compliance with applicable environmental requirements of their installation.

2. Commanders of units deployed to installations overseas must follow reference (a) and comply with the FGS established for each respective host country. Commanders should also consult with their counsel to identify any unique environmental requirements of the host country.

1301. ALL MARINE CORPS PERSONNEL. All Marine Corps personnel must:

1. Know and comply with the environmental rules and regulations that apply to their duties.

2. Maintain a general awareness of all applicable Marine Corps environmental policies and goals.

3. Employ the Marine Corps Environmental Management System to incorporate environmentally safe and compliant practices and procedures into daily operations.

4. Take advantage of pollution prevention opportunities in all activities.

5. Emphasize environmental awareness and continually improve on incorporating environmental compliance into every aspect of operational practices.
6. Promote pollution prevention as the primary means of achieving and maintaining compliance with environmental requirements.
7. Address or elevate environmental issues and concerns.

REFERENCES

- (a) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (b) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (c) Executive Order 13148, "Greening the Government Through Leadership in Environmental Management," April 21, 2000
- (d) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007

CHAPTER 2

ENVIRONMENTAL PROGRAM MANAGEMENT

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CHAPTER 2

ENVIRONMENTAL PROGRAM MANAGEMENT

SECTION 1: INTRODUCTION

2100. PURPOSE. This chapter establishes Marine Corps policies and responsibilities for effective environmental program management through conformance with the Marine Corps Environmental Management System (EMS). The Marine Corps EMS provides a systematic approach for integrating environmental considerations and accountability into day-to-day decision making and long-term planning processes across Marine Corps missions, activities, and functions. The goal of the Marine Corps EMS is to sustain and ultimately enhance mission readiness and access to training areas. Effective environmental program management enables Marine Corps units, tenants, commands, and installations to achieve and maintain environmental compliance and protection while maintaining combat training and readiness.

2101. APPLICABILITY. See paragraph 1101.

2102. BACKGROUND

1. The Marine Corps holds military lands in the public trust, and Marine Corps commands must maintain land, air, and water resources to sustain realistic military training and testing. Failure to achieve compliance and protect the country's natural resources may lead to legislative, executive, or judicial directives and/or regulatory agency actions limiting Marine Corps access to areas necessary to sustain military readiness.

2. Marines train as intensely as they fight; therefore, they need a variety of landscapes to conduct training. Over time, however, training can degrade a landscape so that it no longer sustains necessary training levels. Marine Corps environmental programs preserve training, enhance military readiness, protect public health, and preserve the environmental quality of the installation and adjacent communities. Environmental programs also strengthen Marine Corps relationships with the public and the regulatory agencies that implement the major Federal environmental laws, and they reduce the long-term costs of maintaining and operating installations.

3. Federal agencies must comply with many Federal, State, and local environmental compliance requirements because many Federal environmental laws contain waivers of sovereign immunity requiring Federal agencies to comply like any other agency, organization or individual. An environmental "requirement" is an objective, defined standard that is subject to uniform application.

4. Federal agency compliance with environmental requirements varies between states and localities because State and local governments often implement differing environmental programs that are more stringent than Federal environmental requirements. Since these programs are dynamic and frequently change and the regulatory enforcement priorities of Federal, State, and local agencies can vary, personnel should seek the advice of legal counsel on specific issues that may result in a dispute with State or local regulatory agencies. If, upon the advice of legal counsel, it appears that such a dispute will remain unresolved at the installation level, promptly notify the Headquarters Marine Corps, Facilities and Services Division (CMC (LF)). In this regard, Chapter 3 of this Manual discusses Marine Corps policy regarding the payment of fees, fines, or taxes and other environmental compliance funding matters.

2103. FEDERAL STATUTES. See appendix A for a summary of applicable Federal statutes.

2104. REQUIREMENTS. See appendix A for a summary of other applicable requirements.

2105. TERMS AND DEFINITIONS

1. Environment. The navigable waters, the waters of the contiguous zone, and ocean waters of which the natural resources are under the exclusive management authority of the United States, and any other surface water, groundwater, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States including man-made structures, indoor air environments, and archeological and cultural resources.

2. Environmental Enhancement. All actions taken to improve the environment beyond, but not limited to, those actions that maintain environmental compliance and meet environmental quality standards.

3. EMS. A management tool that provides and documents systematic approaches for integrating environmental considerations and accountability into day-to-day decision-making and long-term planning processes across all missions, activities, and functions. An EMS institutionalizes processes for continual environmental improvement and reducing risks to mission through effective and continual planning, review, and preventive or corrective action.

4. Environmental Pollution. The conditions resulting from the presence of chemical, physical, or biological agents or causes which alter the natural environment, adversely affecting human health or the quality of life, biosystems, structures and equipment, recreational opportunities, or natural beauty.

5. Environmental and Natural Resources Conservation Awards. Awards given annually by the Secretary of Defense and the Secretary of the Navy to installations that have demonstrated outstanding achievements in environmental protection or natural resources conservation in the preceding two years.

6. Environmental Standard of General Applicability in the Host Nation or Jurisdiction. Substantive environmental standards that are applicable, in effect, and uniformly enforced pursuant to the national pollution control laws of the host country or regulations issued by host government agencies to implement national laws. The term does not include pollution control standards enacted or adopted by local governmental units, nor does it include political subdivisions that do not implement national pollution control laws of the host nation. Specific provisions of Status of Forces Agreements (SOFA) that permit or require applicability of standards other than those of the host country will be considered part of the environmental pollution control standards of general applicability in the host country or jurisdiction.

7. Executive Orders (E.O.s). A direct order signed by the President under his constitutional authority as Chief Executive, specifying responsibilities and actions required by Executive Branch agencies.

8. Facilities. Land resources, buildings, installations, structures, public works, equipment, aircraft, vessels, and other vehicles and property owned by, constructed for or by, or

manufactured for the purpose of leasing to the Marine Corps.

9. Federal Action. An action that is implemented, funded, or authorized by the United States Government. It does not include actions in which the United States participates only in an advisory, information gathering, representational, or diplomatic capacity, nor does it implement or initiate the action or provide funding for the action. Actions in which a foreign government uses funds derived indirectly from the United States are considered Federal actions. Federal actions do not include actions taken by a foreign government or those occurring in a foreign country that benefit the United States but are not initiated, implemented, or funded by the United States.

10. Foreign Nation. Any geographic area (e.g., land, water, and airspace) that is under the jurisdiction of one or more foreign government(s), any area that is under military occupation by the United States alone or jointly with any other foreign government, and any area that is the responsibility of an international organization of governments. The term, "Foreign Nation," includes contiguous zones and fisheries zones of foreign nations. The term, "Foreign Government," includes governments (regardless of whether they are recognized by the United States), political factions, and organizations that exercise governmental power outside the United States.

11. Government-Owned, Contractor-Operated (GOCO) Plants/Facilities. A separate category of government-owned real property not residing on, or under the jurisdiction of, government-owned and controlled real property, such as military installations and bases. GOCO facilities consist of government-owned and controlled real property that are jurisdictionally separated from and dedicated to a contractor operation under contract.

12. Lead Agency. The agency having the primary responsibility for preparing required environmental analyses.

13. SOFAs. Agreements concerning the stationing or operation of forces in a host country. These actions include multilateral or bilateral stationing for operating and base rights agreements.

14. United States. All states, the District of Columbia, territories and possessions of the United States, and all waters

and airspace subject to the territorial jurisdiction of the United States. The territories and possessions of the United States include the Virgin Islands, American Samoa, Wake Island, Midway Islands, Guam, Palmyra Island, Johnston Atoll, Navassa Island, and Kingman Reef. For the purpose of this Manual, the United States also includes the Commonwealth of Puerto Rico and the Commonwealth of the Northern Marianas.

15. United States (or Host Country) Provided Facilities.
Facilities contracted at the expense of the United States (or host country).

CHAPTER 2

ENVIRONMENTAL PROGRAM MANAGEMENT

SECTION 2: GENERAL MARINE CORPS POLICIES

2200. ENVIRONMENTAL MANAGEMENT. This section provides general policy for environmental compliance and protection programs, along with technical, legal, and data management support. The Marine Corps employs a proactive environmental management system to protect and enhance the quality of the environment through strict compliance with all applicable environmental requirements. The Marine Corps protects and preserves its watersheds, wetlands, natural landscapes, soils, forests, fish and wildlife, and other natural resources as vital Marine Corps assets.

2201. MARINE CORPS EMS

1. The Marine Corps EMS is a framework of five interrelated components consisting of 18 elements. This framework is consistent with those used by other military services and Federal agencies, and with International Organization for Standardization's ISO 14001, an international standard for EMS. The Marine Corps EMS emphasizes continual improvement through effective policy, planning, implementation, checking and preventive or corrective action, and management review. These five components are explained below; the 18 elements of the Marine Corps EMS appear in table 2-1 of this Manual.

a. Policy. The policy component is a public commitment by senior leadership that, at a minimum, expresses commitment to environmental compliance, pollution prevention, and continual improvement of the installation's environmental performance.

b. Planning. The planning component is an integration of environmental considerations into mission operations through identification of mission-supporting practices and the aspects of those practices that have the potential to impact the environment, analysis and prioritization of risks to mission posed by those practices, development of objectives and targets (goals and metrics) for minimizing the risks to mission posed by those practices, and identification of resources and timelines for achieving those objectives and targets.

c. Implementation. The EMS implementation component is the development and documentation of roles and responsibilities for controlling mission-supporting practices and managing environmental resources to sustain and enhance the installation's mission and mission-supporting practices.

d. Checking and Preventive or Corrective Action. This component includes the establishment and implementation of procedures for self-evaluation and preventive or corrective action of EMS implementation.

e. Management Review. This component is a senior leadership review of EMS implementation, followed by changes, as appropriate.

2. Each Marine Corps installation shall conform with the requirements of the Marine Corps EMS.

2202. CONSISTENCY. Because the number of environmental statutes, regulations, and related environmental requirements continues to increase, the Marine Corps must be prepared to continually and consistently respond. To ensure consistent environmental compliance and avoid adverse precedents, particularly those with funding implications, responsible commands must coordinate with CMC (LF) regarding permit requirements; payments of fines/fees/penalties/supplemental environmental projects from Marine Corps funds; compliance agreements; settlements; and responses to Notices of Violation (NOVs). Legal and technical assistance is available from the installation and regional legal counsel and environmental offices. Naval Facilities Engineering Command (NAVFACENGCOM) and supporting activities and commands are also available to respond to requests for technical assistance.

2203. COMPLIANCE. It is Marine Corps policy that all Marine Corps installations and activities comply with all applicable environmental requirements.

2204. POLLUTION PREVENTION. The preferred methods of sustaining environmental compliance and protection are minimizing resource consumption and eliminating waste generation. Marine Corps activities must incorporate these methods, where practicable, when planning, designing, manufacturing or constructing, maintaining, sustaining, and

disposing of facilities, weapon systems, and equipment. Marine Corps activities shall also eliminate or minimize the use of hazardous materials (HM) and the generation of hazardous waste (HW), where practicable. When assessing environmental compliance alternatives, installations and commands shall employ the environmental management hierarchy (EMH), established by reference (a) to have the following order of preference:

1. Source reduction.
2. Reuse.
3. Recycling.
4. Treatment.
5. Disposal.

2205. RESEARCH, DEVELOPMENT, TESTING, AND EVALUATION (RDT&E). Environmental RDT&E may be initiated, where applicable and necessary, to meet existing and anticipated environmental requirements provided that such RDT&E has not been undertaken by other Department of Defense (DOD) Components or private industry. Since environmental requirements are not usually narrowly focused, every effort should be taken to leverage existing RDT&E to avoid unnecessarily depleting scarce resources. Environmental RDT&E planned to be undertaken shall be reported to the CMC (LF); Marine Corps Systems Command; and the Office of the Director of Defense Research and Engineering, Washington, DC 20301-3010.

2206. PERSONAL LIABILITY FOR VIOLATION OF ENVIRONMENTAL LAWS. In most civil lawsuits, Federal civilian employees and service members are named as defendants in their official capacities because the actions giving rise to the lawsuits are undertaken in the line of duty or within the scope of their employment. These cases generally proceed without risk of personal liability for the employees involved. In some cases, however, civilian employees or service members may be sued in their individual capacities for injury or damage to persons or property. In these cases, where individuals violate environmental laws and subsequently injure or damage persons or property as a result of actions taken out of the line of duty or beyond the scope of their employment (e.g., reckless, knowing, or purposeful violation) they may be personally liable and may be responsible

for paying any damages awarded. This civil liability is in addition to potential criminal prosecution.

1. Personal Liability for Injuries or Damages to Persons or Property

a. Where a Federal civilian employee's or service member's actions injure or damage another's person or property, the injured party may file a civil lawsuit to recover the cost of the damage. In such cases, the Department of Justice (DOJ) may substitute the United States for the civilian employee or service member if it determines that the individual was acting within the line of duty or within the scope of their employment and such action is in the interest of the United States. An individual properly exercising official authority to carry out command business per applicable Marine Corps regulations is acting in the line of duty or within the scope of their employment.

b. Any Federal civilian employee or service member who is served with a complaint, subpoena, or other legal paper relating to activities undertaken pursuant to official duties must immediately report this information to their staff judge advocate, command counsel, legal officer, and Commanding Officer (CO) for guidance on how to proceed. Additional guidance is available in reference (b) and from the Counsel for the Commandant of the Marine Corps (CMC (CL)) and its regional offices.

2. Civil Liability for Fines. Many environmental laws provide for civil penalties (e.g., fines) for violations of environmental requirements. Many statutes, such as references (c), (d), and (e) provide varying degrees of immunity from civil penalties to individual Federal civilian employees and service members acting in the line of duty or within the scope of their employment.

3. Criminal Liability

a. Some environmental laws provide for criminal prosecution for knowing or purposeful violations. However, some environmental laws also provide for criminal prosecution for negligent violations. Federal civilian employees and military personnel may be subject to criminal prosecution if their actions or inactions violate environmental laws subject to

criminal enforcement.

b. Federal civilian employees and service members must seek out and remedy environmental violations under their cognizance and implement measures to ensure that future violations do not occur. For supervisors, criminal liability may not necessarily depend on personal participation in the crime.

c. As a general rule, violations of criminal law require a criminal "state of mind" (i.e., a knowing or purposeful act). However, the Supreme Court has held that "where dangerous or noxious waste materials are involved, the probability of regulation is so great that anyone who is aware that he is in possession of them must be presumed to be aware of the regulations." In other words, "ignorance of the law is no excuse."

4. Legal Representation in Criminal Cases

a. The DOJ may represent a Federal civilian employee or service member prosecuted in State or Federal court for criminal violations of environmental law. However, such representation is contingent upon DOJ finding that the individual acted in the line of duty or within the scope of their employment regarding the alleged misconduct and representation is in the interest of the United States.

b. If a Federal civilian employee or service member is convicted of a crime, the civilian employee or service member is personally responsible for paying any fine adjudged, regardless of whether the DOJ provided representation.

2207. REPORTING ENFORCEMENT ACTIONS (EAS). Immediately after receiving an EA or other notice of noncompliance from a regulatory authority regarding a failure or potential failure to comply with an environmental requirement, the cognizant installation shall:

1. Report it via the chain of command to the Environmental Compliance Officer, CMC (LF), by submitting a Report of Notice of Violation/Notice of Noncompliance Report per the procedures in appendix B-1. Report Control Symbol, MC-5090-01, is assigned to this reporting requirement.

2. Coordinate with the responsible unit to correct the alleged violation or, after consulting with counsel, prepare a plan to achieve and maintain compliance. Compliance stops the assessment of any penalties that may be assessed for the period of noncompliance. The responsible unit and/or cognizant installation should also consult with counsel to determine whether an administrative and/or criminal investigation or a litigation report is appropriate.

2208. SITE INSPECTIONS. Upon the presentation of proper credentials, authorized Environmental Protection Agency (EPA), State, or local regulators or representatives must be allowed to enter a Marine Corps installation at reasonable times to examine or copy records, inspect monitoring equipment, or sample any effluents or emissions that the officials have the authority to regulate. Such inspections, however, are subject to the information and installation security requirements set forth below.

2209. INFORMATION SECURITY. Federal, State, and local environmental regulators periodically inspect Marine Corps installations. During these inspections, Federal civilian employees and service members must ensure compliance with applicable orders governing the control and protection of classified and sensitive information. Before permitting environmental regulators with appropriate security clearances or access authorizations requested classified or sensitive information, the information holder shall ensure that each recipient understands and complies with the applicable security requirements governing the information requested.

1. Only personnel with appropriate security clearances or access authorizations will be permitted access to classified areas or information, and then only upon a determination by the cognizant Marine Corps official that a "need-to-know" exists to fulfill a legitimate regulatory purpose. In keeping with the need-to-know principle, such access shall be limited to information relevant to the purpose of the inspection.

2. Marine Corps installations handle a considerable amount of sensitive unclassified information controlled under Marine Corps security regulations, Federal export control regulations, and other government-wide requirements. While security clearances or access authorizations are not required for access to this information, a "need-to-know" determination still must be made.

2210. GOCO FACILITIES. Marine Corps installations and/or commands sponsoring GOCO facilities must oversee their GOCO facility use or management contracts to ensure their contractors comply with applicable environmental requirements. To ensure environmental compliance, GOCO facility use and management contracts shall ensure each contractor participates in the Marine Corps Environmental Compliance Evaluation (ECE) Program and the installation's EMS. Marine Corps installations and/or commands sponsoring GOCO facilities should also encourage GOCO facilities to incorporate the EMH into project planning and design.

2211. OUTLEASE RELATIONSHIPS

1. Federal law under reference (f) authorizes the Secretary of a Military Department to lease to non-Federal entities non-excess Federal land that is not currently needed for public use. This practice establishes a traditional landlord-tenant relationship between the Government and the grantee.

2. Installation lease relationships may include dozens of non-Federal entities, including state parks and recreation departments, power companies, Marine Corps Community Services support contractors, credit unions, aid associations, and agricultural lessees. These relationships are established and structured by lease terms. In negotiating these terms, each installation should formulate its own systematic approach to ensure that grantees comply with environmental and land-use laws. Specific issues of concern include:

a. How Federal environmental and land-use laws apply to the grantee;

b. Whether the installation may be liable for grantee violations of environmental and land-use laws; and

c. If the installation may be liable, whether it may limit its liability.

3. Persons, corporations, and other non-Federal entities conducting activities on Marine Corps installations must comply with any applicable Federal, State, and local environmental laws. In many cases, the legal obligations of these entities mirror the legal responsibilities of the Marine Corps. However,

there are many statutory environmental and land use requirements which are only applicable to Federal agencies and do not apply to non-Federal grantees. These requirements must be incorporated into the lease between the Department of the Navy (DON) (for the Marine Corps) and the grantee. Such requirements include:

- a. Complying with reference (g).
 - b. Avoiding actions that would jeopardize the survival of Federally-listed endangered or threatened species, and consulting with the United States Fish and Wildlife Service concerning actions that may affect endangered or threatened species.
 - c. Complying with E.O.s.
 - d. Consulting with the appropriate state historic preservation officer concerning actions that may affect resources listed or determined eligible for listing on the National Register of Historic Places.
4. Grantees may be required to share the installation's Federal agency requirements when compliance with these requirements is in the lease. Leases, like other property interest conveyance instruments, are contracts negotiated between the DON and the grantees, and each grantee is obligated to comply with lease terms. Many leases, especially older ones, do not transfer Federal environmental and land-use responsibilities onto the grantees. Some of these leases simply recognize the installation commander's authority to publish reasonable rules and regulations applicable to grantees.
5. The installation commander is the primary steward of all installation natural resources. This stewardship role includes the oversight of activities, whether Federal or non-Federal, that may degrade the environment and the installation's natural resources.
6. Reference (h) regulates DON real estate transactions, including leases. That manual generally requires regular and periodic inspections of leased property to ensure that grantees comply with the terms of the lease. A Naval Facilities Engineering Command real estate specialist should conduct these inspections. However, if one is unavailable, the installation

commander is responsible for ensuring the inspections are conducted. The manual also requires DON natural resource professionals to inspect agricultural and grazing leases to determine whether the leases are complying with the soil and water conservation requirements of the lease. Here again, however, the installation commander is ultimately responsible for ensuring the inspections are conducted.

7. Marine Corps installations may be held responsible for a grantee's environmental noncompliance. Therefore, installations should:

a. Ensure lease terms require grantees to comply with any applicable Federal, State, and local environmental laws and the environmental and land use requirements specifically applicable to Federal agencies with respect to the leased property.

b. Work with the local NAVFACENCOM Engineering Field Division/Engineering Field Activity and CMC (LF) to ensure that all leases on the installation are periodically inspected and lease terms are enforced.

c. Ensure the installation's ECE program (see Chapter 4 of this Manual) audits grantees.

d. Ensure current and future installation orders regulate grantee environmental and land use activities.

e. Designate installation staff responsible for overseeing grantee environmental and land-use compliance.

f. Document grantee environmental compliance inspections.

g. Ensure the installation considers the grantee's operations when implementing the EMS.

2212. GRANTEE AND CONTRACTOR OPERATIONS AND FACILITY USE. By virtue of lease or contract terms, grantees and independent contractors shall ensure their operations and facilities comply with, and conform to, all applicable environmental requirements. By virtue of lease or contract terms, grantees and independent contractors shall advise the cognizant installation or unit of their environmental compliance permits (e.g., the National Pollutant Discharge Elimination System) and their conditions, provide the cognizant installation or unit periodic

environmental compliance reports (i.e., audit findings), and participate in the Marine Corps ECE Program.

2213. REGIONAL AND COMMUNITY PROGRAMS. Marine Corps representatives may participate in regional or community planning programs. This participation is generally limited to matters of Marine Corps interest and only acting in an advisory (i.e., non-voting) role. The Marine Corps may also partially fund regional and community pollution control and solid waste management solutions where there is sufficient benefit to the Marine Corps. All such funding requests shall be coordinated with CMC (LF) and CMC (CL) to ensure the availability and proper expenditure of appropriations.

2214. COORDINATION BETWEEN ENVIRONMENTAL MANAGERS AND MARINE CORPS COMMANDS/UNITS AND TENANTS. To promote Marine Corps environmental compliance and a greater understanding of host-tenant EMS responsibilities, Marine Corps installations and DOD tenant commands should develop Intra(or Inter)-Service Support Agreements or similar instruments to define inter-organizational environmental compliance and protection responsibilities. Each Marine Corps installation shall audit DOD tenant organization environmental compliance activities on the installation. Each DOD tenant organization shall participate in the Marine Corps ECE Program.

2215. COORDINATION BETWEEN ENVIRONMENTAL MANAGERS AND COUNSEL. Environmental program managers and staff must work closely with their legal counsel. Many environmental compliance issues could directly and indirectly impact the legal rights and responsibilities of both the Marine Corps and individuals working aboard the installation. Accordingly, environmental program managers and staff must consider legal matters when considering the practical and policy consequences of their actions. Legal counsel is uniquely qualified to advise environmental program managers and staff in this regard. Providing counsel with timely information and following their advice can avoid or mitigate the impact of potentially serious legal matters.

2216. RELEASE OF INFORMATION

1. The installation commander or his/her designee has the authority to release installation-specific information to Federal agencies to the extent permitted by policy and the laws applicable to the release of agency records.
2. Reference (i) as amended or superseded, establishes Marine Corps policy for the release of information to the news media. The command public affairs office coordinates the release of information to the news media.
3. Chapter 4 of this Manual discusses the release of ECE results.
4. Reference (j) requests for agency records should be coordinated with the cognizant Freedom of Information Act office and public affairs office and counsel (if applicable) to ensure that these requests are handled in accordance with Federal law. A brief discussion of reference (j) is provided in Chapter 4 of this Manual. Environmental laws (e.g., references (g), (k), and other environmental requirements (e.g., permits) may also mandate the release of information to governmental agencies and the public.
5. Through regulatory agency websites, such as EPA's online Federal Facility Environmental Compliance Status Report, the general public can retrieve enforcement and compliance information about DOD facilities possessing environmental permits. It is important that the information contained in EPA's database is accurate and reflects the Marine Corps' enforcement and compliance status. Therefore, commanders must ensure this information is reviewed at least quarterly and work with EPA and the State, local, and tribal governments to correct any inaccuracies. Installations shall monitor the EPA's Online Targeting Information System (www.epa.gov/idea/otis/index.html) and Enforcement and Compliance History Online (www.epa.gov/echo) databases and tracking systems at least quarterly to ensure Marine Corps compliance data is current and accurate.

Installations shall pay particular attention to the categorization of Significant Non-Compliance (SNC):

- a. Identify if the installation is listed as a "major" Federal facility.
- b. Verify installation address and permits associated with the installation.
- c. Verify all reported data associated with the permits.
- d. Report any errors and follow up with EPA data stewards until errors are resolved.

The SNC List can be accessed at <http://www.epa.gov/echo>. SNC guidance is available at the Defense Environmental Network and Information Exchange (<https://www.denix.osd.mil/denix.html>). Additional DON Clean Water Act SNC guidance, including SNC criteria and User's Guides to the EPA databases can be found at <https://www.denix.osd.mil/denix/DOD/Policy/component.html#navy-memos> (NOTAL).

2217. RETENTION AND DISPOSITION OF RECORDS AND DOCUMENTATION

1. Installations and units shall retain or dispose of their agency records related to environmental compliance and management in accordance with reference (1)(all references as amended or superseded), unless noted below.
2. Installations and units shall maintain and retain agency records relating to hazardous substance (HS) releases in accordance with references (k), (m), and (n). This requirement generally applies to the installation restoration (IR) program records consisting of the IR administrative record for the installation. Other agency records related to the IR program shall, pending promulgation of EPA regulations for their disposition, be retained in accordance with the most stringent requirements of reference (1) and DON IR program policy.

2218. COMMANDER'S ENVIRONMENTAL STATEMENT. The CMC periodically publishes White Letters expressing his direction on environmental compliance matters. Each White Letter addressee should (if applicable), publish a policy for implementing each of these White Letters.

2219. DESKTOP PROCEDURES AND TURNOVER FOLDERS. All COs will ensure desktop procedures and turnover folders are developed and maintained for environmental billets. See appendix B-2 for desktop procedure guidance and turnover folder requirements.

2220. ENVIRONMENTAL DEPARTMENT ADMINISTRATION AUDITS. Installation commanders will ensure their environmental management department's administration is audited at least every two years. This audit should emphasize proper agency records maintenance, retention, and disposal.

2221. ENVIRONMENTAL LIBRARY. Each installation and unit should establish or participate in an electronic environmental library. These libraries may become a repository for files, reports, studies, plans, permits, evaluations, inspections, and references. The Headquarters Marine Corps (HQMC) Environmental Applications Portal (HEAP) is a potential secure, electronic environmental library site available for installations and units.

2222. REGIONAL ENVIRONMENTAL COORDINATORS (RECS). DOD has established a DOD-wide system for coordinating regional environmental policy. This system consists of DOD environmental Executive Agents, DOD RECs, and Component RECs. The Departments of the Army, Navy, and Air Force serve as DOD environmental Executive Agents for each Federal EPA Region. The Army is the Executive Agent for Regions IV, V, VII, and VIII. The Navy is the Executive Agent for Regions I, III, and IX. The Air Force is the Executive Agent for Regions II, VI, and X. The Secretaries of the Military Departments assign RECs to their respective regions. Figure 2-1 at the end of this chapter illustrates the Federal EPA Region boundaries.

1. The REC system's primary purpose is to coordinate the consistent interpretation and application of DOD environmental policies within each region in consultation with the Executive Agents and affected Component RECs.

2. Component RECs help the DOD focus on the growing number of regional, State, and local environmental requirements affecting installations. Marine Corps Component RECs are General Officers within EPA Regions in which the Marine Corps has a significant presence (Regions III, IV, and IX).

Marine Corps Component RECs primarily monitor State and regional proposed environmental legislation and regulations for their potential impact on the Marine Corps. They coordinate with potentially affected installations and units to assess potential impacts, and with the DOD REC, present Marine Corps positions regarding proposed requirements.

2223. ENVIRONMENTAL ENGINEERING MANAGEMENT OFFICER. Each major installation and unit should add a Marine Officer Military Occupational Specialty (MOS) 8831, Environmental Engineering Management Officer, to its Table of Organization. An MOS 8831 officer is a graduate of the Special Education Program or Advanced Degree Program possessing a master's degree in environmental engineering, management, or science or has otherwise met the requirements delineated in reference (o).

2224. OFFICER OF THE DAY/COMMAND DUTY OFFICER (OOD/CDO). The OOD/CDO is the commander's representative during non-duty hours. The OOD/CDO's primary responsibility is to receive emergency calls during non-duty hours and inform the commander and staff of significant incidents. Each OOD/CDO turnover folder shall contain an environmental staff recall roster and coordinating instructions for emergency reporting (e.g., HS spills). All installation and unit HS response plans and other contingency plans or procedures will require the OOD/CDO to be contacted immediately after contacting emergency response personnel.

2225. ENVIRONMENTAL INFORMATION TECHNOLOGY AND SERVICES (EIT&S)

1. EIT&S is the data, people, hardware, software, procedures, and policies required to perform environmental management support functions.

a. Policy. All Marine Corps Forces, Regions, and Installations will ensure that EIT&S is managed in accordance with references (p), (q), (r), and other applicable Marine Corps Information Technology policies.

b. MARINE CORPS ENVIRONMENTAL APPLICATIONS AND SYSTEMS ENTERPRISE (MCEASE). MCEASE is an information technology framework in support of EIT&S. This framework is a combination of computerized tools used to input, edit, store, retrieve, manage, analyze, and present environmental information. An example of computerized tools in this framework is the HEAP, Environmental Management Portal, and Learning Management Portal.

c. Services. The services component of EIT&S is the work performed in policy and procedure development, planning and execution, and management of Environmental Information Technology.

2. Each Marine Corps Force, Region, and installation shall participate in the working group chartered by CMC (LF) to establish broad program goals, objectives and priorities, and coordinate, review, approve/disapprove configuration enhancements/changes to MCEASE.

2226. GEOSPATIAL INFORMATION SYSTEM (GIS). A GIS is a computerized tool used to input, edit, store, retrieve, manage, analyze, and present geographic or geospatial information. Data that identifies the geographic location and characteristics of natural or constructed features and boundaries is known as geospatial information. Marine Corps Installation Geospatial Information and Services (IGI&S), also known as GEOFidelis, is the data, people, hardware, software, procedures, and policies required to perform installation management GIS support functions. It includes information produced by multiple sources to common interoperable data standards. It may be presented in the form of printed maps, charts and publications; in digital simulations and modeling databases; in photographic form; or in digitized maps and charts or attributed centerline data. Geospatial services include tools that enable users to access and manipulate data, and also include instruction, training, laboratory support, and guidance for the use of geospatial data. The vision of the GEOFidelis program is to ensure Marine Corps installations have a GIS that provides precise and reliable information at the installation and enterprise level that is based on a common infrastructure foundation to support interoperability across the Marine Corps.

1. The Marine Corps mission requires efficient operations of our installations and mandates that the Marine Corps has access to the best possible information about our installations and their surroundings. Geospatial information is critical to provide effective installation management, improve our stewardship of natural resources, and protect the environment. Geospatial Information and Services are a core capability to support the mission requirements for installation management. All activities with installation management responsibilities shall include IGI&S in their management, review, analysis, and

decision-making process in order to effectively and efficiently meet their installation management mission. Reference (s) provides specific policy, guidance, and standards for acquiring, utilizing and implementing Marine Corps IGI&S in support of Marine Corps installation management.

2. Each functional dataset lead is responsible for creating, purchasing, and providing individual datasets to the enterprise within the established process for geospatial assets, systems, applications, and technology and other DOD, DON, and Marine Corps policy. This includes funding the portion of the data, applications, hardware, software and services required to support their specific operational needs. Table 2-2 details the dataset themes and datasets leads within the Environmental Branch of the Marine Corps.

2227. STANDARD OPERATING PROCEDURES (SOPS) AND POLICIES

1. Installation commanders shall publish an environmental compliance and protection standard operating procedures (ECPSOP) document that includes all applicable organizational and environmental compliance policies and procedures. The instructions contained in an ECPSOP need not contain all subordinate and Marine Corps command/unit and tenant functions, but it must be sufficiently clear, completely accessible at the command/unit and tenant level, and sufficiently detailed to ensure that each subordinate and Marine Corps command/unit and tenant can perform its mission in an environmentally sensitive manner. The ECPSOP should be a guide to the method of response and management plans which may apply to the reader, along with specific installation- or command-unique requirements not covered by these plans. While the environmental management departments, offices, divisions, etc., are aware of these plans, often the installation tenant or subordinate commanders are not.

2. Installation commanders are encouraged to publish a single ECPSOP vice multiple ECPSOPs. A single ECPSOP ensures continuity of effort and prevents conflicts in policies between various environmental media programs. It also facilitates communication with subordinate and Marine Corps command/unit and tenant commanders by providing a single source for them to use. Installation, Fleet Marine Force (FMF), and major Marine Corps command/unit and tenant commanders are encouraged to work together to publish a single ECPSOP.

3. Major FMF, detached, and separate commands will publish an ECPSOP if they are not co-signatories on an installation ECPSOP. The FMF, detached, and separate command ECPSOP will contain, at a minimum, policies on complying with reference (g) (normally limited to training-related activities), HM, HW, and emergency response plans.

4. ECPSOPs will be prepared in a manner complementary to, but not repetitive of, this Manual, and reviewed annually and updated as necessary.

CHAPTER 2

ENVIRONMENTAL PROGRAM MANAGEMENT

SECTION 3: RESPONSIBILITIES

2300. CMC (LF)

1. Develop and periodically update this Manual.
2. Develop and manage the Marine Corps EMS.
3. Support Marine Corps installations and units in applying the policies within this Manual.
4. Conduct EMS and ECE audits.
5. Coordinate environmental compliance and protection issues with DOD environmental Executive Agents, DOD RECs, Component RECs, Marine Corps installations and units, and counsel.
6. Appoint Marine Corps RECs.

2301. COMMANDING GENERAL (CG) OF MARINE CORPS REGIONAL COMMANDS

1. Facilitate efficient and consistent environmental program management and implementation of the Marine Corps EMS with Marine Corps installations and units in their respective region.
2. Coordinate environmental compliance and protection issues with Marine Corps installations and units, Marine Corps RECs, and counsel in their respective region.

2302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE CORPS FORCES RESERVE (COMMARFORRES)

1. Implement an EMS that conforms with the Marine Corps EMS, and for COMMARFORRES, employs a programmatic, organizational EMS that covers all Marine Corps Reserve Centers.
2. Report Notices of Violation (NOVs) or similar assertions of noncompliance to higher headquarters and respond to them appropriately.

3. Coordinate environmental compliance and protection issues with DOD environmental Executive Agents, DOD RECs, Component RECs, Marine Corps installations and units, and counsel.

2303. MARINE CORPS TENANT COMMANDERS

1. Ensure all tenant Marine Corps commands, both active and reserve, participate in their host installation's EMS.

2304. CMC (CL). With regional and installation counsel, advise Marine Corps clients, including CMC (LF), USMC RECs, and Marine Corps installations and units regarding environmental compliance and protection issues.

2305. MARINE CORPS RECS

1. Monitor proposed State/regional environmental legislation and regulations for their potential impact on the Marine Corps.

2. Coordinate with installations and units potentially affected by proposed State/regional environmental legislation and regulations to assess potential impacts.

3. Coordinate with the DOD REC, CMC (LF), and counsel on Marine Corps positions regarding proposed state/regional environmental legislation and regulations.

4. Provide CMC (LF) and the DOD REC semi-annual executive summaries of Marine Corps REC activities, success stories, and issues.

REFERENCES

- (a) 42 U.S.C 13101-13109
- (b) JAGINST 5800.7E, "Manual of the Judge Advocate General,"
June 20, 2007
- (c) 42 U.S.C 7401-7671
- (d) 33 U.S.C 1251-1387
- (e) 42 U.S.C 300f-300j-26
- (f) 10 U.S.C 2667
- (g) 42 U.S.C 4321-4347
- (h) NAVFAC P-73, Chapter 19, "Real Estate Procedural Manual"
- (i) SECNAVINST 5720.44B
- (j) 5 U.S.C 552
- (k) 42 U.S.C 9601-9675
- (l) SECNAVINST M-5210.1
- (m) Title 40, Code of Federal Regulations, Part 300, "National
Oil and Hazardous Substances Pollution Contingency Plan," 2006
edition
- (n) DON Environmental Restoration Program (DERP) Manual, Chapter
14
- (o) MCBUL 1200 (canc: Apr 08)

(p) DOD Directive 8000.01, "Management of DOD Information Resources and Information Technology," February 27, 2002

(q) MARADMIN 226/04

(r) MARADMIN 486/06

(s) MCO 11000.25, Enclosures 1-4

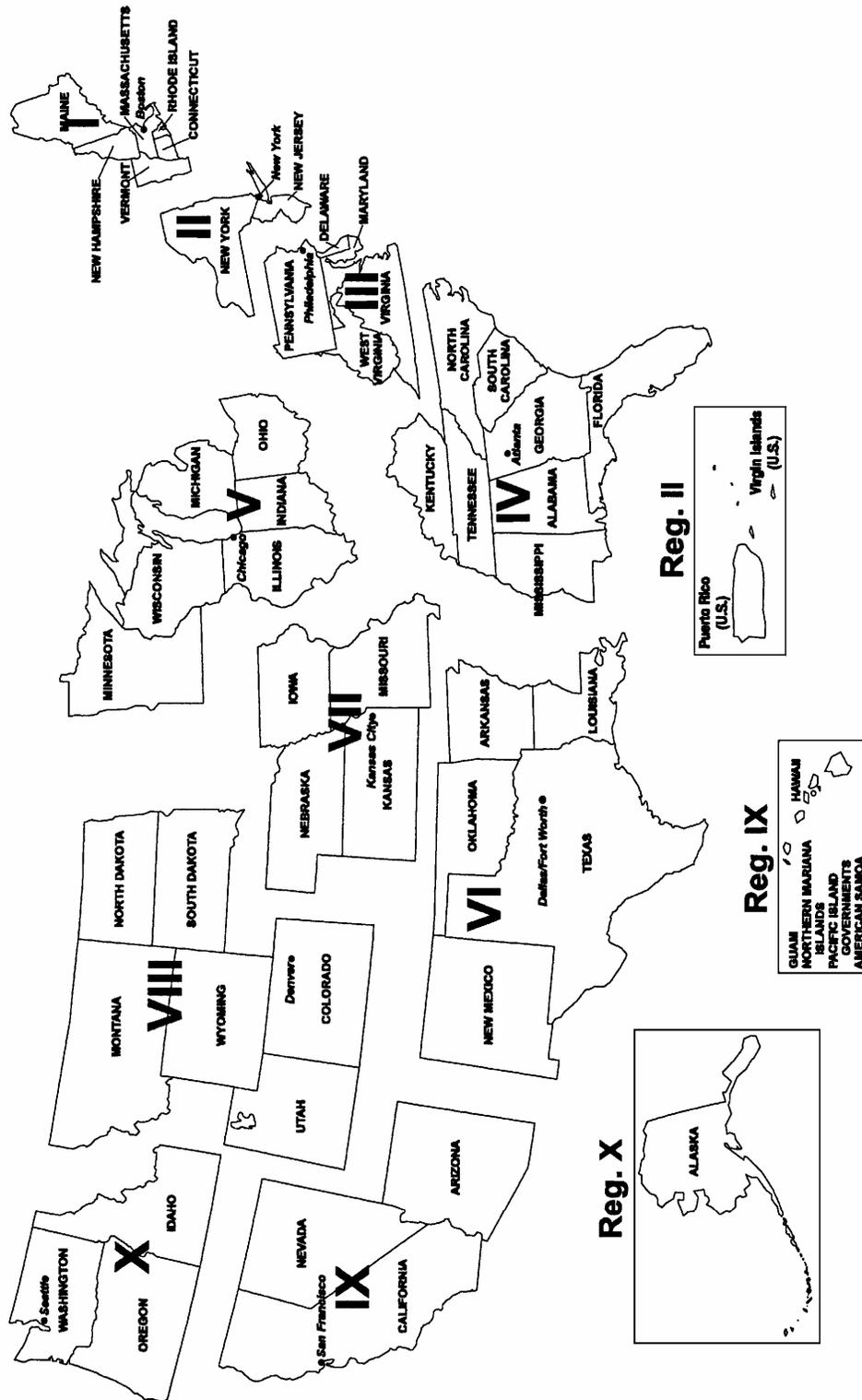


Figure 2-1.--Federal EPA Regional Boundaries

Table 2-1.--EMS Elements and Criteria for Evaluating Conformity with the Marine Corps EMS	
COMPONENT	
Element	Criteria
POLICY	
1. Environmental Policy Statement	<ul style="list-style-type: none"> • The installation has an environmental policy statement that: <ul style="list-style-type: none"> - Is documented and signed by the installation CO; - Reflects the vision of the Marine Corps EMS to sustain and enhance mission readiness and provide access to training environments through effective and efficient environmental management. - Commits to: <ul style="list-style-type: none"> • Compliance with relevant environmental legislation, regulations, and policy; • Pollution prevention; • Conservation of natural and cultural resources; • Clean up of contaminated sites, • Minimizing risks to mission, • Continual improvement in performance of the EMS. • Is communicated to installation personnel and made available to the public. • The environmental policy is implemented and maintained.
PLANNING	
2. Requirements	<ul style="list-style-type: none"> • The installation implements documented procedures to identify Federal, State, local, DOD, DON, Marine Corps, and installation-level environmental requirements applicable to its practices and environmental programs. • The installation disseminates specific and pertinent information regarding requirements to appropriate personnel (e.g., environmental media managers and practice owners) in procedures and checklists as appropriate to all levels and functions operating aboard the installation.

Table 2-1.--EMS Elements and Criteria for Evaluating Conformity with the Marine Corps EMS-- Continued	
Element	Criteria
3. Practices, Aspects, and Impacts	<ul style="list-style-type: none"> • The installation implements a documented procedure for inventorying practices and updates the inventory as practices are altered, discontinued or added. • The installation identifies aspects and impacts associated with each practice on the inventory. • The installation inventories its environmental resources and assesses each resource's vulnerability to the aspects of existing and planned practices.
4. Risk Prioritization	<ul style="list-style-type: none"> • The installation implements a documented procedure to prioritize practices based on risk to mission. The procedures are repeatable and defensible and include a schedule for periodic review and update of the prioritization results.
5. Environmental Objectives and Targets	<ul style="list-style-type: none"> • The installation establishes and documents environmental objectives and targets and communicates them to installation employees at all appropriate levels and functions. • The installation's objectives and targets: <ul style="list-style-type: none"> - Reflect risks to mission determined through prioritization of aspects and practices; - Are consistent with and supportive of the installation's environmental policy statement and environmental requirements; - Are achievable within economic and technological restraints; and - Are reviewed and revised according to a schedule established by the installation. • The installation institutes documented methods for tracking progress toward meeting objectives and targets.
6. Actions to Improve Performance	<ul style="list-style-type: none"> • The installation identifies actions to achieve objectives and targets. • The installation implements identified behavioral and administrative actions. • The installation programs for and executes actions (projects) requiring external funding and/or expertise.

Table 2-1.--EMS Elements and Criteria for Evaluating
Conformity with the Marine Corps EMS--
Continued

IMPLEMENTATION	
Element	Criteria
7. Structure, Responsibilities, and Programs	<ul style="list-style-type: none"> • The installation documents and communicates EMS roles, responsibilities, and authorities for: <ul style="list-style-type: none"> - the EMS Team; - environmental program managers and staff; and - practice owners including tenants and on-site contractors. • The installation reviews and modifies media programs to ensure that they contribute to achieving the installation's Policy, Objectives, and Targets.
8. Funding and Manpower	<ul style="list-style-type: none"> • The installation identifies projects for external funding either as actions to achieve objectives and targets or as preventive or corrective measures identified through problem solving. • The installation tracks expenditures and executes funds through existing budget mechanisms. • The installation periodically evaluates manpower dedicated to environmental management and realigns roles and responsibilities as indicated by the installations objectives and targets and improvements planned for the EMS elements.
9. Training	<ul style="list-style-type: none"> • The installation identifies, provides, and documents training and instruction needed to: <ul style="list-style-type: none"> - Comply with regulations; - Ensure that appropriate personnel understand their responsibilities for implementing the EMS; and - Ensure practice owners understand procedures for controlling their practices.

Table 2-1.--EMS Elements and Criteria for Evaluating Conformity with the Marine Corps EMS-- Continued	
Element	Criteria
10. Communication	<ul style="list-style-type: none"> • The installation implements documented procedures for internal communication among the Installation commander, the EMS Team, the environmental office, all units and offices which own practices, and others within the Marine Corps interested in the installation's environmental affairs. • The installation implements documented procedures for receiving, recording, and responding to communications from regulatory agencies, the public, and others outside the Marine Corps who are interested in the installation's environmental affairs.
11. Emergency Preparedness and Response	<ul style="list-style-type: none"> • The installation documents its procedures for identifying and responding to accidents and emergencies and for mitigating the environmental impacts that might result. • The installation reviews and revises its emergency preparedness and response procedures when new practices are initiated and after the occurrence of accidents or emergencies. • Procedures to be followed in the event of an accident or emergency are communicated to building managers and practice owners in scope and detail appropriate to their responsibilities.
12. Document and Record Control	<ul style="list-style-type: none"> • The installation inventories all document and record requirements appropriate to its environmental programs and practices, and identifies other documents and records essential to the efficient operation of its EMS. • The installation implements a system to maintain documents and records, so that they <ul style="list-style-type: none"> - Can be located; - Are reviewed and updated as necessary (documents); - Are protected from alterations or damage (records); - Are available when and where needed; and - Are removed or archived, as appropriate, when obsolete.

Table 2-1.--EMS Elements and Criteria for Evaluating Conformity with the Marine Corps EMS-- Continued	
Element	Criteria
13. Environmental SOPs	<ul style="list-style-type: none"> • The installation prepares and distributes to each practice owner an Environmental SOP for each practice under the practice owner's control. • Environmental SOPs include instructions for operational control, internal communication, emergency preparedness and response, inspection and corrective action, and training and awareness applicable to the practice. • Environmental SOPs identify who is responsible for implementing each instruction and how often the instruction is to be carried out. • Practice owners and operators maintain current Environmental SOPs in the workplace and ensure that they are addressed in employee training.
14. EMS Document	<ul style="list-style-type: none"> • The installation maintains, and the Installation Commander has approved, an EMS document that includes the installation's Environmental Policy Statement and describes <ul style="list-style-type: none"> - EMS elements including Environmental Management Procedures to implement them; - How elements relate to each other; and - Where other documents and records relevant to the EMS are maintained.
CHECKING AND PREVENTIVE OR CORRECTIVE ACTION	
15. Monitoring and Measurement	<ul style="list-style-type: none"> • The installation implements a compliance self-audit plan. • The installation implements methods for tracking progress toward meeting objectives and targets. • The installation monitors practices that may have a significant impact on the environment and, where appropriate, the resources that may be impacted.
16. Problem Solving	<ul style="list-style-type: none"> • The installation follows a structured problem solving process that identifies and defines problems with compliance or the EMS, analyzes causes and alternative solutions, selects and implements actions, and follows up to ensure problems are solved. • The installation documents its problem solving efforts.

Table 2-1.--EMS Elements and Criteria for Evaluating Conformity with the Marine Corps EMS-- Continued	
Element	Criteria
17. EMS Review	<ul style="list-style-type: none"> • The installation evaluates its EMS against the criteria listed here at intervals appropriate to the size of the installation. • The installation supports the HQMC EMS Review conducted as part of the HQMC ECE every three years.
MANAGEMENT REVIEW	
18. Management Review	<ul style="list-style-type: none"> • The Installation commander designates and authorizes an EMS Team to analyze EMS implementation efforts and the results of EMS reviews. • The EMS Team takes actions that ensure the EMS is suitable to the current mission and is effective in achieving the installation's policy, objectives, and targets. • The EMS Team implements improvements to the EMS including but not limited to revising the installation's EMS policy; changing procedures, projects or actions to ensure current objectives and targets are met; establishing new objectives and/or targets; or clarifying/assigning roles and responsibilities.

Table 2-2.--Dataset Themes and Dataset Leads

Dataset Themes	Dataset Leads	Data Type	Examples
Natural & Cultural Resources	CMC (LFL) - 1	Cultural, Ecology, Fauna, Flora, Soils	Archeological Artifacts, Historic Districts, Endangered Species, Forest Stands
Environmental	CMC LFL - 6	Air, Surface Water, Groundwater & Soil Pollution, Hazardous Materials & Waste, Pollution Remediation	Air Pollution Sources, Sampling Points, Hazardous Material Sites, Restoration Sites

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

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CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 1: INTRODUCTION

3100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for funding environmental compliance and protection.

3101. APPLICABILITY. See paragraph 1101.

3102. BACKGROUND. This chapter describes funding sources and mechanisms for planning, programming, budgeting, and executing environmental requirements. It also outlines the means for securing the funds needed to manage an effective environmental program. Funding of Marine Corps environmental requirements is provided primarily from the Operation and Maintenance, Marine Corps (O&M, MC) account for Active installations and from the O&M, MCR account for Reserve Centers. Other environmental funding may be provided from the Naval Working Capital Fund (NWCF); Military Construction (MILCON); reimbursable Agricultural Outlease, Forestry, and Fish and Wildlife Access Fees; Qualified Recycling Program (QRP) revenues; and the Defense Logistics Agency, Defense Energy Support Center (DLA, DESC - hereafter known as DESC) funds (see paragraph 3105, Terms and Definitions). For information on funding the Environmental Restoration Program, see chapter 10 of this Manual.

3103. FEDERAL STATUTES. Congressional waivers from Federal sovereign immunity in most environmental laws require Federal agencies to pay reasonable service charges to reimburse states for their environmental regulatory oversight. Reasonable service charges related to State implementation of the Clean Water Act, the Clean Air Act, and the Resource Conservation and Recovery Act requirements are among the types of fees that may be billed to an installation.

3104. REQUIREMENTS

1. Executive Order 12088, October 13, 1978. This reference requires Federal agencies to comply with applicable Federal, State, local, and host nation environmental laws and regulations. Accordingly, reference (a) requires the head of each Executive Agency to ensure that: (1) "sufficient funds for compliance with applicable pollution control standards are requested in the agency budget"; and (2) "funds appropriated and apportioned for the prevention, control, and abatement of

environmental pollution are not used for any other purpose unless permitted by law and specifically approved by the Office of Management and Budget."

2. Department of Defense Policy. The Office of the Secretary of Defense has established environmental funding policies. These policies require that all requirements in Class 0, I, and II be funded consistent with timely execution to meet future deadlines. The definitions for these classes can be found in the Environmental Conservation, Pollution Prevention, and Environmental Compliance DOD Instructions (references (b), (c), and (d), respectively).

3105. TERMS AND DEFINITIONS

1. Centrally-Managed Environmental Program (CMEP). The CMEP is the CMC (LFL), O&M,MC program for resourcing Marine Corps-wide environmental initiatives and non-recurring and emergent installation environmental requirements, to include both Environmental Management and Environmental Projects Programs.

2. Headquarters Authority for Environmentally-Driven Facilities Sustainment, Repair, and Modernization (FSRM). The HQMC Environmental Projects Program is that part of the CMEP for developing, prioritizing and funding environmentally-driven FSRM (formerly: Maintenance of Real Property) projects at Marine Corps installations. This program is for those environmental FSRM projects that exceed an installation's local funding authority as identified in table 3-1. More information can also be found in reference (e).

3. Local Authority for FSRM (M1/R1). Any FSRM project that is within an installation's local funding authority as identified in figure 3-1.

4. MILCON. A single undertaking with a funding cost in excess of \$750,000 that includes all construction necessary to produce a complete and usable facility, or a complete and usable improvement to an existing facility. MILCON projects must receive Congressional approval in both authorization and appropriations laws before construction can begin.

5. Contract Advertisement Forecasts (CAF). A forecast of when environmentally-driven FSRM projects will be ready for contract advertisement and award. The CAF shall be provided by each activity semi-annually by 15 March and 15 September of each year. The 15 March submission will be used by HQMC to plan the

straddle program and the 15 September submission will be used to develop the next fiscal year program.

6. Authority to Advertise. Authority given to an installation to advertise a project. This is the formal commitment of funds by CMC (LFL).

7. Marine Corps Compliance Tracking System (CompTRAK). CompTRAK is a web-enabled application for tracking Marine Corps environmental compliance status, requirements, and associated costs.

8. NWCF. The NWCF is a revolving account which does not expire. If these funds are not used during the fiscal year, they revert back to the central NWCF account at the end of the fiscal year and are charged back in the rates to their customers.

9. Operational Plan Submission (OPS). The OPS is the procedure each installation follows to request CMEP O&M, MC funding from Commandant of the Marine Corps, Facilities and Services Division (CMC (LF)). The installation OPS is annually made via CompTRAK and includes the installation's plan for executing CMEP O&M, MC funds.

10. O&M, MC Funds. The O&M, MC account is the Marine Corps operation and maintenance appropriation. This appropriation provides the primary source of environmental project funding for active-duty installations and units. (See paragraph 3201.3b and 3c of this Manual for further details.)

11. O&M, MCR Funds. O&M, MCR is the Marine Corps operation and maintenance appropriation for reserve installations and activities.

12. Programming, Planning, Budgeting, and Execution (PPBE) System. The PPBE System is the process through which all Marine Corps resource requirements, including the environmental program, are identified, justified, planned, programmed, budgeted, and funded.

13. Program Objective Memorandum (POM). The POM biennially identifies United States Marine Corps total program requirements for six years beyond the next fiscal year. Each installation and unit's biennial POM proposal, in part, identifies future environmental program objectives. The Marine Corps environmental POM is submitted and validated via CompTRAK.

14. POM Preparation Instruction (PPI). The PPI is the guidance HQMC provides installations and units to prepare their biennial POM submissions.

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 2: MARINE CORPS POLICY

3200. FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION.

Reference (a) requires that the Marine Corps adequately plan, program, and budget compliance with applicable pollution control standards. Once funds are appropriated and apportioned for the prevention, control, and abatement of environmental pollution, they may not be used for any other purpose unless permitted by law or specifically approved by the Office of Management and Budget.

3201. ENVIRONMENTAL FUNDS

1. NWCF. The NWCF is a revolving account that does not expire. If funds are not used during the fiscal year, they revert back to the central NWCF account at the end of the fiscal year and are charged back in the rates to their customers. Marine Corps Logistic Bases (MCLBs) are encouraged to charge their NWCF tenant commands for MCLB services that ensure their compliance with environmental requirements. MCLBs must track these costs and report them to CMC (LF) for subsequent reporting to the Department of the Navy (DON) Secretariat, DOD, and Congress.

2. MILCON. Each Marine Corps installation forwards its requests for MILCON projects requiring Congressional approval to CMC (LF). Installations must include MILCON projects required for environmental compliance within these requests. CMC (LF) validates all MILCON projects requiring Congressional approval. CMC (LF) tracks and reports the costs of Congressionally authorized MILCON projects required for environmental compliance.

3. O&M,MC

a. CMC (LF) primarily distributes O&M,MC funds via base operating support funds and CMEP. To obtain base operating support and CMEP funds, installations identify funding requirements through the PPBE System via CompTRAK. CMC (LF) tracks and reports these requirements to the DON Secretariat, DOD, and Congress. Both base operating support and CMEP funds are apportioned from the O&M, MC appropriation and must be obligated within the fiscal year in which they are available.

b. Base Operating Support Funds. Certain funding requirements are foreseeable, routine, recurring, and easily estimated and are, therefore, easily budgeted into each installation's base operating support account. Installations must include these requirements in their operating budget and document them in CompTRAK. These requirements include, but are not limited to, salaries, permits, fees, hazardous waste (HW) disposal, sampling, monitoring, analyses, training, travel, maintenance, supplies, materials, and local authority FSRM projects. Costs for operating QRP's should be budgeted as Real Property Services vice environmental costs. Installations must obligate base operating support funds using the Standard Accounting, Budgeting and Reporting System (SABRS) environmental accounting codes.

c. CMC (LF) CMEP. The CMEP funds installation-level environmental management and environmentally-driven FSRM projects. CMEP is also used to support Marine Corps-wide environmental initiatives such as the Environmental Compliance Evaluation Program (see chapter 4). Installations must obligate CMEP funds using the SABRS environmental accounting codes.

(1) The Environmental Management Program. This program provides supplemental funding of non-recurring requirements or recurring requirements that develop or emerge too late to be considered in a PPBE System cycle. Installations must use CompTRAK to request these funds.

(2) The Environmental Projects Program. This program provides funding for environmentally-driven, Headquarters authority FSRM projects. These FSRM funds are separate from the facilities FSRM account. Each installation shall provide a CAF semi-annually by 15 March and 15 September of each year. The 15 March submission will be used by HQMC to plan funding for the straddle program and the 15 September submission will be used to develop the funding plan for the next fiscal year. CompTRAK will be used to develop the CAF and the submission will be via the CAF module of the Facilities Integration (FI) website at <https://www.hqmc-facilities.org>. In submitting the forecast, installations shall provide the current working estimate (CWE), when the project is available for advertisement, the relative priority of each project, and any associated unfunded costs (refer to reference (e) for more information on unfunded costs). Each program (M2, R2, and individual special programs) shall be prioritized and listed separately. If the project's CWE is

greater than 20 percent of the approved CWE in the FI website, a new DD Form 1391 will be required before the project can be listed on the CAF. CMC (LFL) will use the CAF submission to determine which projects will receive authority to advertise and will commit funds in the amount of the government estimate. The committed amount may not exceed 20 percent of the original government estimate without additional approval from CMC (LFL). Requests for approval of increased amounts will be submitted via the Project Update Module of the FI website at <https://hqmc-facilities.org> and include a revised DD Form 1391 detailing the new government estimate and addressing any change in scope. Additionally, a justification for the cost increase and a detailed cost estimate or an economic analysis may be required on a project-by-project basis. A formal net present value life-cycle economic analysis is required for:

(a) All repair projects with an estimated cost which is greater than \$750,000 and more than 50 percent of the facility's plant replacement value; and

(b) All repair projects with an estimated per facility cost greater than \$2 million.

(c) Guidelines and formats for preparing economic analyses are contained in reference (f). Discount factors are updated annually and published in reference (g). Results of analysis are to be submitted with other required documentation.

4. O&M,MCR. Marine Corps Forces Reserve (MARFORRES) identifies and manages environmental O&M, MCR funds through the PPBE System via CompTRAK. MARFORRES must track these costs and report them to CMC (LF) in CompTRAK for subsequent reporting to the DON Secretariat, DOD, and Congress.

5. Reimbursable Accounts. CMC (LF) manages several reimbursable accounts. These accounts include:

a. Lease Proceeds. Leasing Marine Corps land for agriculture or other purposes generates rental proceeds. The Naval Facilities Engineering Command (NAVFACENGCOM) field activity servicing the lease agreement must deposit these proceeds into a special account. For general lease proceeds, CMC (LF) makes portions of the proceeds available to installations where the proceeds were derived to cover expenses associated with maintaining the leases (e.g., personnel costs for managing real estate or for natural resources monitoring actions) and for other purposes authorized by law. Portions of these proceeds are also available for other installations'

maintenance and protection of property or facilities and for other purposes authorized by law. Agricultural or grazing lease proceeds are managed apart from general lease proceeds, and CMC (LF) may make them available to installations to cover the administrative expenses of agricultural or grazing leasing, and cover the financing of land management programs. Agricultural or grazing lease proceeds, which expire at the end of the fiscal year, are non-appropriated, reimbursable funds. Requests for lease proceeds must be submitted through CompTRAK (see paragraph 3202).

b. Forestry. The sale of forest products (e.g., timber) from Marine Corps-owned or -leased land generates forestry proceeds. Installation or the NAVFACENCOM field activity personnel servicing timber sales contracts must deposit these proceeds into the Marine Corps forestry account (part of a DOD-administered reserve account established in the Department of the Treasury). CMC (LF) makes these proceeds available to installations with forestry programs to fund direct expenses associated with forest management (i.e., forestry personnel salaries, forestry equipment, reforestation, timber management, fire and forest pest control, and forest access road maintenance). DOD Forestry Reserve Account funds may be available to improve forest lands, pay for unanticipated contingencies in the administration of forest lands, and natural resources management that implements approved plans and agreements. Installation requests for these funds to support direct forestry expenses and for DOD Forestry Reserve Account funds must be submitted via CompTRAK with subsequent requests forwarded to CMC (LF) via E-mail each quarter. Direct Forestry and DOD Forest Reserve Account funds, which expire at the end of the fiscal year, are non-appropriated, reimbursable funds.

c. Hunting, Fishing, and Trapping Access Fees. Installations shall establish fees for issuing hunting, fishing, and trapping licenses. Each installation must deposit license proceeds into an installation Hunting, Fishing, and Trapping Access Fee account (see chapter 11 of this Manual). CMC (LF) authorizes obligations from installation Hunting, Fishing, and Trapping Access Fee accounts, and funds within these accounts shall only be obligated for the protection, conservation, and management of installation hunting, fishing, and trapping programs. Installation requests for obligation approval are submitted to CMC (LF) via CompTRAK. License proceeds within Hunting, Fishing, and Trapping Access Fee accounts are non-appropriated, reimbursable funds that do not expire but must be reauthorized each fiscal year by CMC (LFL).

d. QRP Revenues. The distribution of installation QRP proceeds shall comply with the requirements of references (h) and (i). These requirements mandate that proceeds from the sale of recyclable materials be credited to funds available for operations and maintenance at the installation and be used to cover the installation's costs of operations, maintenance, and overhead for processing recyclable materials at the installation. After reimbursement of these costs, installations may use up to 50 percent of the remaining proceeds on projects for environmental compliance, energy conservation, and occupational safety and health activities. However, no project shall cost more than 50 percent of the amount established by law for a minor construction project. Any remaining proceeds may be transferred to the non-appropriated morale and welfare account of the installation to be used for any installation morale or welfare activities.

6. DESC Funds

a. DOD bulk petroleum management policy authorizes the DESC, to fund certain recurring environmental compliance costs involving DESC-owned product. Reference (j) broadens this policy to fund non-recurring environmental compliance projects, including maintenance and repair and minor construction for facilities storing DESC-owned product.

b. Environmental Compliance. The cognizant installation commander is ultimately responsible for compliant DESC-owned product storage on the installation. DESC, however, shall fund the following recurring environmental compliance costs:

(1) Environmental Compliance Document Revisions. DESC will fund the cost of legally-required revisions of environmental compliance documents (Spill Prevention, Control, and Countermeasures Plans) directly related to the storage of DESC-owned product.

(2) Sampling and Testing. DESC will fund sampling and testing of emissions and discharges if the cost of both sampling and testing involves DESC-owned product.

(3) Waste Removal and Disposal. DESC will fund removal and disposal of HW as an environmental compliance cost if the cost is directly linked to facilities containing DESC-owned product. However, DESC will not fund disposal costs for absorbent pads, contaminated rags, and other consumable items commonly used for small spill cleanups.

(4) The Design and Construction of Environmental Compliance Projects. The DESC will fund projects that upgrade petroleum, oil, and lubricant (POL) facilities in order to control emissions and discharges, enabling installations to meet environmental regulatory standards. Also funded are projects needed for POL facilities to achieve regulatory compliance in order to continue operations.

(5) Operational Permit Fees. Accepted annual recurring costs for permits are those involving DESC-owned product that may affect the environmental quality of air and/or water. Examples include permits for the following: fill stands, fuel storage tanks, oil-water separators, pipelines, and hydrant systems.

(6) Fines and Penalties. DESC will review fines and penalties incurred on a "case-by-case basis" for reimbursement. The DESC will not reimburse fines and penalties incurred due to the negligence of the operating activity.

c. Installations with eligible requirements are encouraged to submit their funding requests to DESC by completing applicable DESC forms and worksheets. Installations shall give CMC (LF) a copy of all documents submitted to DESC.

d. Installations may submit requests for reimbursement for DESC-owned product spills. For more information, contact CMC (LF) or DESC at: (703) 767-8318/8309 or DSN 427-8318/8309.

3202. COMPTRAK

1. Background. Reporting to Congress through the Office of the Secretary of the Navy and the Office of the Secretary of Defense requires that all environmental compliance requirements and costs be tracked. The Marine Corps uses CompTRAK to meet this requirement. All Marine Corps environmental requirements must be entered into CompTRAK as those requirements are identified, and must be maintained with the most current information available to assist CMC (LF) validation of the requirements in the POM and OPS submittals and appropriate CMEP funding prioritization. As previously identified through the processes described in paragraphs 3201.1 through 3201.6, this information tracking requirement includes all environmental fund sources and appropriations.

2. Identifying Requirements for Environmentally-driven FSRM Projects through CompTRAK. As an environmentally-driven FSRM project requirement is identified, enter the project into

CompTRAK. Ensure that the same project number and title is used in all related documents and databases. Place the project number on DD Form 1391 using the naming procedure for the Environmental Maintenance and Repair Program, which is the two letter installation identifier (e.g., CP or PE), the last two digits of the fiscal year (FY) in which funds are required (e.g., 08 for FY 2008), up to the last five digits of the CompTRAK number (e.g., 58331), and the repair or construction designator (e.g., M or R). For example, a FY 2007 major repair project at Marine Corps Air Station Cherry Point would be numbered "CP0748190M." All environmentally-driven FSRM M2/R2 projects must be entered into CompTRAK with a completed DD Form 1391 attached before they will be reviewed by CMC (LFL).

3. Requesting Funds for Environmental FSRM Projects (M2/R2). Requests for the funding of environmental FSRM projects previously identified through the process in paragraph 3202.2 are to be submitted to CMC (LFF-2) and CMC (LFL-6) per reference (e), as amended or superseded. The CAF, provided by each installation by 15 March and 15 September of each year, will be used to plan the straddle program and develop the next fiscal year program. Projects must be listed on the CAF as well as in CompTRAK for funding consideration. Once a confirmed low bid has been determined, an installation may request funds for contract award using the Request for Funds Module of the FI Website at <http://www.hqmc-facilities.org>.

3203. BUDGET, EXECUTION, SABRS ACCOUNTING CODES, AND COMPTRAK. Marine Corps environmental funding generates a high level of interest within the Marine Corps, as well as with the Comptroller of the Navy, Office of the Secretary of Defense (OSD), and Congress. Due to unique fund flow structures at each installation and unit, environmental funds provided as part of each installation or unit's base operating support funds risk losing their identity once released from HQMC. This risk requires each installation or unit executing environmental funds to use SABRS environmental accounting codes to accurately track these funds in CompTRAK and SABRS. These accounting codes are available in CompTRAK and must be used to support POM proposals and requests for CMEP funding for emergent requirements.

3204. REPORTING REQUIREMENTS. Installations and units must comply with the following reporting requirements using CompTRAK.

1. Program Objective Memorandum (POM). Using CompTRAK every two years, and via their chain of command, each installation, unit, and MARFORRES shall submit to CMC (LF) their POM requests showing their environmental compliance program requirements for

six years beyond the next fiscal year. To facilitate this process, CMC (LF) environmental program sponsors will distribute a PPI to installation and unit environmental managers and comptrollers. CMC (LF) environmental program sponsors will use CompTRAK to validate installation and unit POM proposals for inclusion in the Marine Corps POM submittal.

2. Operational Plan Submission (OPS). Every fiscal year, each installation and unit shall submit to CMC (LF), via CompTRAK, their OPS requirements for the fiscal year. Each installation and unit OPS will show the environmental compliance and protection requirements the installation or unit plans on funding that fiscal year. The OPS is also a mechanism for installations to request CMEP funds for environmental management and environmental projects. To facilitate this process, CMC (LF) environmental program sponsors will distribute OPS preparation guidance to installation and unit environmental managers and comptrollers. CMC (LF) environmental program sponsors will use CompTRAK to validate installation and unit OPS submittals.

3. Environmental Liabilities. DOD is required to report environmental liabilities in annual financial statements under Note 14, Environmental Liabilities and Disposal Liabilities. Several laws require that financial statements are complete, accurate, and auditable, including references (k), (l), (m), and (n). As part of this requirement, Marine Corps installations must accurately identify, estimate, and report all environmental liabilities, ensuring that all cost estimates are auditable. Reference (o) defines an environmental liability as "a probable and measurable future outflow or expenditure of resources that exist as of the financial reporting date for environmental cleanup costs resulting from past transactions or events." Environmental cleanup includes activities related to environmental restoration of environmental sites, corrective actions, future disposal of facilities, equipment, munitions, or closure of facilities. Cleanup costs may include, but are not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, as well as post closure costs related to DOD operations that result in the generation of hazardous waste. Additionally, cleanup costs must be tied to an environmental or legal requirement. Developing complete, accurate, and auditable estimates for environmental liabilities requires the participation of the environmental, financial, and audit communities. The environmental community assigns responsibility and authority for developing, viewing, and changing estimates and retains all supporting documentation. The financial community identifies the need for an environmental

liability estimate and the factors that may affect the estimate. The financial community also determines whether the estimate is prepared and presented in accordance with applicable accounting principles and sufficient disclosure is provided. Finally, the audit community reviews the life-cycle of the processes and procedures used by the environmental and financial communities to identify, capture, track, classify, estimate, and report environmental liabilities on financial statements. The audit community also ensures that the proper recognition, measurement, presentation, and disclosure of a liability are performed.

3205. FUNDING NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS. Estimated costs associated with compliance documents as per reference (p) must be identified early in planning the proposed action. The proposed action sponsor is responsible for the budgeting and funding requirements of NEPA compliance. Preparing a NEPA decision document is not considered an environmental compliance requirement; therefore, the costs of NEPA decision document preparation must be borne by the proposed action sponsor. For example, installations or units with training operations triggering NEPA decision document preparation pay the costs of preparing the documents. However, environmental compliance funds may fund NEPA decision document preparation when the proposed action triggering NEPA analysis is an environmental compliance project. Similarly, costs associated with required environmental compliance permits and selected action environmental impacts mitigation may be considered environmental compliance costs.

3206. FEES AND TAXES

1. The Constitution generally prohibits the states from directly taxing agencies of the Federal government. Marine Corps installations and units, therefore, are not authorized, absent specific Congressional authority, to pay direct taxes to State or local agencies. Marine Corps installations and units do pay reasonable permit fees and other reasonable service charges to the extent permitted by law. Before an unprecedented fee payment is made, therefore, it is necessary to evaluate, in part, whether the fee is a reasonable service charge or a non-payable tax. All installation and unit environmental compliance fee-tax questions shall be referred to CMC (CL) or its area or installation offices for analysis and the REC for inter-service coordination. The disposition of an unprecedented fee payment shall also be made in coordination with CMC (LF).

2. One Federal law (reference (q)), permits states to directly tax Federal installations and units. It empowers states to tax

Federal agency low-level radioactive waste disposal in the same manner and to the same extent as any low-level radioactive waste not generated by the Federal government.

3207. ECONOMIC ANALYSES. Installations and units shall conduct economic alternatives analyses before making final decisions on environmental compliance project alternatives. Each environmental compliance project funding request shall certify that an economic analysis of environmental compliance alternatives was conducted and include the economic analysis results. When assessing economic alternatives to environmental compliance requirements, installations and units shall consider the Environmental Management Hierarchy, discussed in chapter 2.

3208. ENFORCEMENT ACTIONS AND FINES. Immediately report to the CMC (LF) any enforcement action by a regulatory agency for an alleged violation of any substantive or administrative requirement or of any attempt to levy a fine against a Marine Corps facility. Process the citation according to the processing procedures in appendix B.

3209. THE COSTS OF HAZARDOUS MATERIALS (HM) AND HW. The costs associated with the management of HMs and HWs will be paid in accordance with the following:

1. Installation Commanders. Installation commanders must pay the disposal costs of installation-generated HWs. Containers, labels, personal protective equipment, spill contingency supplies, etc., are routine operating expenses that should be borne by the original generator.

2. Garrison Marine Corps and Non-Marine Corps Units and Commands. Garrison Marine Corps and non-Marine Corps units and commands must pay the costs associated with the generation (drums, labels, protective equipment for personnel, etc.), containment (absorbent materials, overpack drums, etc.), preparation for transportation, and transportation of tenant-generated HMs and HWs associated with garrison-related, day-to-day activities and training not incident to exercises with specific funding responsibilities identified in an Inter-Service Support Agreement or other appropriate agreement with the host installation. The host installation will pay the disposal costs associated with Marine Corps installation organizations. Non-Marine Corps tenant activities will abide by their current inter- and intra- service/agency support agreements. If an agreement is not currently in place, then one shall be developed stating that each non-Marine Corps tenant is responsible for

reimbursing the host Marine Corps installation for any costs associated with HM or HW disposal.

3. Exercises with Unique Funding/Budgeting. Units and commands must fund the costs associated with the containment, preparation for transportation, transportation, and disposal of HWs that are generated coincident to an exercise that has unique funding. The cost of HW disposal should be managed the same as the cost for disposal of solid wastes, portable toilets, fuels, food, and other consumable supplies resulting from an exercise. The host installation commander must not add any overhead or handling costs.

4. Disposal of HMs as HWs. Over one-third of the HW disposal costs for the Marine Corps have historically come from the disposal of HMs with an expired shelf life or from HMs contaminated by poor supply- and maintenance-handling procedures. The commander causing the disposal of HMs as HWs must bear the costs of containment, preparation for transportation, transportation, and disposal of the HWs. The host installation commander must not add any overhead or handling costs to these costs.

5. HM and HW Spills. The command or unit responsible for the spill must pay the costs associated with the cleanup of spills and disposal of spill debris.

6. Procurement of Recycled HMs. At times, the cost of recycling HMs is less than the procurement cost of new material through local purchase or the national stock/supply system. When viable and cost-effective recycled HMs are available, installation commanders must give priority to procurement of these less expensive recycled HMs over the procurement of new materials.

7. DESC Oil Spill Cost Reimbursement. Installations may submit oil spill remediation costs of spills from DESC-owned fuel stocks to DESC for reimbursement. Contact DESC-WE at (703) 767-8312 or DSN 427-8312.

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 3: RESPONSIBILITIES

3300. CMC (LF)

1. Advise the CMC in preparing environmental compliance and protection program goals and associated funding requirements.
2. Advise OSD in preparing environmental funding policy.
3. Serve as the Environmental Services program sponsor. Oversee Marine Corps environmental compliance and protection program requirements within the PPBE System to include reviewing and validating Marine Corps environmental compliance deficiencies.
4. Coordinate, consolidate, and, via HQMC Programs and Resources, Fiscal Division, submit Marine Corps environmental compliance and protection financial metrics to the DON Secretariat, DOD, and Congress.
5. Using information from CompTRAK, review installation and unit environmental compliance funding requests and distribute O&M,MC funds.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3301. COMMANDER, MARINE FORCES RESERVE (COMMARFORRES)

1. Coordinate and validate Marine Forces reserve installation and activity environmental compliance requirements.
2. As applicable, ensure that adequate funding is planned, programmed, budgeted, and executed to meet force, installation, and unit environmental compliance requirements.
3. Ensure that force, installation, and unit environmental compliance requirements are entered into CompTRAK and kept current.

4. Coordinate POM proposals through CMC (LF).
5. Ensure that force, installation and units use SABRS environmental accounting codes.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3302. COMMANDER, U.S. MARINE CORPS FORCES COMMAND
(COMMARFORCOM)

1. As applicable, review and validate environmental compliance requirements within installation and unit POM proposals and OPS submittals.
2. As applicable, ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet installation and unit environmental compliance requirements.
3. Ensure that all installation and unit environmental compliance requirements are entered into CompTRAK and kept current.
4. Coordinate POM proposals through CMC (LF).
5. Ensure that installation and unit use SABRS environmental accounting codes.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3303. COMMANDING GENERALS/COMMANDING OFFICERS OF MARINE CORPS
INSTALLATIONS

1. Provide CMC (LF) installation POM proposals and OPS submittals via chain of command.

2. Ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet installation environmental compliance requirements.
3. Ensure that all installation environmental compliance requirements and funding data are entered into CompTRAK and are kept current.
4. Ensure proper use of SABRS environmental accounting codes.
5. Request permission from the CMC (LF), via appropriate chain of command, to reprogram CMEP, noting that reprogramming of CMEP is only from one environmental requirement to another environmental requirement. Requests for realignment of CMEP must contain the following for each project involved in the requested reprogramming: project title, CompTRAK project number, facilities project number (for FSRM only), dollar amount, and the Environmental Protection Agency class. The request also must contain a brief justification/impact statement that necessitates this action.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3304. UNIT COMMANDERS

1. Ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet unit environmental compliance requirements.
2. As applicable, enter or forward unit environmental compliance requirements to COMMARFORCOM for entry into CompTRAK.
3. Ensure proper use of SABRS environmental accounting codes.
4. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

REFERENCES

- (a) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (b) DOD Instruction 4715.3, "Environmental Conservation Program," May 3, 1996
- (c) DOD Instruction 4715.4, "Pollution Prevention," June 18, 1996
- (d) DOD Instruction 4715.5, "Management of Environmental Compliance at Overseas Installations," April 22, 1996
- (e) MCO P11000.5G
- (f) NAVFAC P-422, "Economic Analysis Handbook," June 1997
- (g) OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, Appendix C," October 29, 1992
- (h) 10 U.S.C. 2577
- (i) 32 CFR 172
- (j) DOD 4140.25-M, "DOD Management of Bulk Petroleum Products, Natural Gas, and Coal," Volumes I-III, dates vary
- (k) Section 101-307 of Public Law 101-576, "Chief Financial Officers Act of 1990," November 15, 1990
- (l) Section 1-11 of Public Law 103-62, "Government Performance and Results Act of 1993," August 3, 1993
- (m) Section 403-405 of Public Law 103-356, "Government Management Reform Act of 1994," October 13, 1994
- (n) Section 801-808 of Public Law 104-208, "Federal Financial Management Improvement Act of 1996," September 30, 1996
- (o) DOD 7000.14-R, "Department of Defense Financial Management Regulations (FMRS)," Volumes 1-15, dates vary
- (p) 42 U.S.C. 4321-4347
- (q) 42 U.S.C. 2021b-2021j

Table 3-1.--FSRM Funding Thresholds

Category of Work	Cost Limits	Approval Request To	Approval Authority
Repair (M1/M2)			
	\$0 - \$300,000 (M1)	None	CG/CO
	\$300,001 - \$5M (M2)	CMC (LFL)	CMC (LFL)
	Over \$5 Million	CMC (LFL)	ASN (I&E)
	Over \$7.5 Million	CMC (LFL)	Congress
Construction (R1/R2/MILCON)			
(a) General	\$0 - \$100K (R1)	None	CG/CO
	\$100,001 - \$750,000 (R2)	CMC (LFL)	CMC (LFL)
	Over \$750,000 (MILCON)	CMC (LFL)	Congress
(b) Solely to correct a life, health, or safety threatening deficiency	\$750K to \$1.5M	CMC (LFF)	Congress

CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

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CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATIONS

SECTION 1: INTRODUCTION

4100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for Environmental Compliance Evaluation (ECE) Program implementation. The ECE program is the checking and preventive or corrective action component of the Marine Corps Environmental Management System (EMS).

4101. APPLICABILITY. See paragraph 1101.

4102. BACKGROUND

1. Federal regulations and the Environmental Protection Agency's (EPA) Federal facility compliance policy encourage environmental "auditing" (i.e., self evaluations) to ensure environmental compliance.
2. The Marine Corps ECE Program evaluates Marine Corps installation and unit environmental compliance. The ECE Program assesses each command's compliance level, identifies actions necessary to correct compliance deficiencies, monitors corrective measures, and facilitates continual improvement of environmental compliance and performance.
3. On July 9, 1986, the EPA issued a final agency-wide statement as per reference (a). The statement encourages Federal facilities to adopt sound environmental management practices, particularly environmental auditing, to help achieve and maintain environmental compliance. The statement defines environmental auditing as "a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements." Environmental auditing includes a variety of compliance assessment techniques and may be used to verify environmental compliance, evaluate EMS effectiveness, or assess risks from regulated and unregulated materials and practices.

4. On July 1, 1991, the Department of Justice issued a policy memorandum as per reference (b) that made the existence of a regular, intensive, self-audit program an important factor mitigating against criminal prosecution when environmental violations occur.

5. In 1995, the EPA issued a policy statement as per reference (c). The statement reemphasized the importance of environmental auditing. It also provided limited incentives (though few are of much benefit to Federal agencies) to encourage environmental auditing. The EPA clarified its environmental auditing policy in 2000 as per reference (d). The revision also extends beneficial self-reporting timelines.

4103. FEDERAL STATUTES. No Federal statutes are specifically discussed in this chapter. Reference (e) requires "Federal agencies to conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner."

4104. REQUIREMENTS

1. All Marine Corps installations shall participate in the ECE Program. Headquarters Marine Corps (HQMC) will conduct "Benchmark ECEs" every three years to periodically assess installation environmental compliance. Installations are also required to implement an annual Self-Audit Program.

2. Each installation shall prepare and make available for Headquarters Marine Corps, Facilities and Services Division (CMC (LF)) review, within 60 days after the ECE out-brief, a Plan of Action and Milestones (POA&M) to correct findings, discrepancies, and issues. Each installation shall update the POA&M semiannually, and make available for CMC (LF) review beginning no later than 30 days after the one-year anniversary date of the most recent Benchmark ECE.

3. The Automated Compliance Evaluation (ACE) Online software is the only software authorized to track Marine Corps environmental compliance. All Marine Corps installations will use ACE Online to track both HQMC-sponsored ECE's and the installation Self-Audit Program.

4105. TERMS AND DEFINITIONS

1. Definitions

a. Finding. A violation of applicable Federal, State, and local requirements that could result in a Notice of Violation (NOV), a fine, or other civil or criminal enforcement action. Findings are caused by noncompliance with applicable Federal, State, and local requirements. Findings are also caused by actions or situations that, while unregulated, may present an imminent and substantial danger to the public health or welfare, prejudice good order and discipline in the armed services, or bring discredit upon the armed services. For overseas installations, a Finding is defined as a violation of the country-specific Final Governing Standards (FGSs), reference (f), or Status of Forces Agreement.

b. Discrepancy. A deficiency that would not result in an NOV, a fine, or other civil or criminal enforcement action. Discrepancies may be caused by poor management practices and/or failure to follow non-punitive provisions of applicable standard operating procedures, Marine Corps Orders, and Department of the Navy and Department of Defense (DOD) directives.

c. Issues. A finding or discrepancy beyond the capability of the installation or unit to correct on its own. Issues may include a finding or discrepancy common to several installations or units requiring HQMC funding and/or policy guidance to correct. Issues may also include a finding or discrepancy caused by an independent action or inaction of a non-Marine Corps individual or organization requiring HQMC action or inter-service coordination to correct.

d. General Recommendations. Comments provided by the ECE Team to promote more effective, efficient, and safe ways to maintain environmental compliance. These may include "best management practices" identified at other Marine Corps or Federal installations.

2. ECE Program. The ECE Program consists of triennial Benchmark ECEs and a continuous installation Self-Audit Program. It provides the commander an assessment of the command's environmental compliance and, when necessary, mandatory or recommended corrective compliance actions. The ECE Program

provides the Commandant with a broad view of Marine Corps environmental compliance trends.

a. Benchmark ECE. A triennial, systematic, documented, and objective CMC (LF) environmental compliance review of an installation.

b. Annual Validation of the Benchmark POA&M. Installations are required to provide an annual validation of the POA&M of the most recent Benchmark ECE. This validation provides a formal follow-up to previously identified deficiencies and is not to be confused with the Self-Audit Program.

c. Self-Audit Program. An installation's annual, systematic, documented, and objective environmental compliance assessment. Each installation and unit shall implement, or be included within, a Self-Audit Program. The Self-Audit Program will use the ACE Online software as a tool to track compliance. POA&Ms generated from self-audits are for installation/tenant use.

3. Environmental Compliance Inspection. A critical evaluation apart from the ECE Program of an installation or unit's environmental compliance. An environmental compliance inspection may include a regulatory agency inspection, an Inspector General inspection, or non-DOD technical assistance site visit.

CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATIONS

SECTION 2: MARINE CORPS POLICY

4200. ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

1. Introduction. The Marine Corps conducts Benchmark ECEs and Self-Audits through its ECE Program. The ECE Program provides each installation a management tool to achieve, maintain, monitor, and continually improve environmental compliance and performance. CMC (LF) uses Benchmark ECE reports and installation POA&Ms to plan, program, budget, and execute projects to correct Benchmark ECE findings, discrepancies, and issues.

2. Background. Benchmark ECEs are conducted using Inspector General of the Marine Corps (IGMC) inspection principles. A discussion of the inspection principles is found within reference (g).

3. Goals. The ECE Program shall:

a. Provide installations an environmental compliance management tool;

b. Assess installation environmental compliance and management system and identify corrective actions;

c. Provide installations and units a forum for exchanging environmental compliance strategies;

d. Provide CMC (LF) an accurate assessment of Marine Corps environmental compliance; and

e. Continuously improve Marine Corps environmental compliance and performance.

4. ACE Online Software

a. Background. ACE Online is a Windows-based automated database containing checklist questions related to numerous

environmental programs. Environmental managers will use ACE to assess installation and unit environmental compliance. CMC (LF) ECE teams will use a stand-alone version of ACE Online during Benchmark ECEs and upload the data to ACE Online at the conclusion of installation Benchmark ECEs.

b. Purpose. ACE Online identifies installation environmental requirements. Each installation using ACE Online will use checklist questions based upon Federal requirements applicable to all Marine Corps installations, State and local requirements unique to each installation, and the requirements of this Manual. To the user, ACE Online presents these requirements as questions derived from the applicable sources. The Federal checklist contains Federal environmental requirements known to apply to at least one Marine Corps installation. The State checklist contains environmental requirements known to apply to the installation(s) and units within the State. The local checklist contains the environmental requirements unique to a specific installation or unit, and where an installation crosses local government jurisdictions, the local checklist contains the environmental requirements of the local government with jurisdiction over most of the installation's regulated activities. Overseas Marine Corps installations will use a checklist of environmental requirements from the country-specific FGS or reference (f). If necessary, environmental professionals and legal counsel should be consulted to interpret these requirements.

c. ACE Online Updates. CMC (LF) will annually update installation ACE Online software. The CMC (LF) Baseline ECE schedule contains the ACE Online update schedule.

d. Modification For Local Use. The user may modify ACE Online checklists to meet specific installation and unit requirements. Reference (h) contains the modification procedures.

e. POA&M. An integral part of all evaluations is appropriate follow-up to ensure that corrective actions are completed. Following a Baseline ECE, ACE Online will be used to create a POA&M to comment on findings, discrepancies, and issues identified in the Benchmark ECE Draft Report. POA&Ms shall be updated using ACE Online at least on a semiannual basis and available for CMC (LF) review on an annual basis. This POA&M is the primary requirement and document supporting the "Annual

Validation of the ECE POA&M."

5. Baseline ECE Scheduling. CMC (LF) publishes a Baseline ECE schedule annually. The schedule establishes a three-year Baseline ECE cycle with a Benchmark ECE conducted at each installation every third year.

6. Benchmark ECE Length. Benchmark ECEs are generally scheduled for a two-week period. Marine Corps Forces Reserve (MARFORRES) Benchmark ECEs generally last one week.

7. Conduct of Benchmark ECE

a. Notification. CMC (LF) shall provide each installation a two-month advance written notice of the Benchmark ECE. In this notice, the installation shall be tasked with providing pre-ECE questionnaire and point-of-contact (POC) information. The installation must provide the requested information to CMC (LF) at least 30 days before the Benchmark ECE begins.

b. Media Evaluation Scheduling. CMC (LF) shall use the POC list and Benchmark ECE Questionnaire to develop the Benchmark ECE's media evaluation schedule. The media evaluation schedule informs the installation when specific environmental media shall be evaluated. CMC (LF) shall give this schedule to the installation no later than two weeks before the Benchmark ECE. After receiving the media evaluation schedule, the installation POCs should contact the Benchmark ECE media evaluators to schedule site visits. The site visit schedule must give Benchmark ECE media evaluators flexibility to evaluate sites of particular interest and permit them the opportunity to evaluate each of the major units on the installation.

c. In-Brief. The CMC (LF) and contractor Benchmark ECE team leaders will conduct an in-brief with the installation commander. They shall explain the Benchmark ECE's goals and give the commander an opportunity to express any areas of concern for the evaluation.

d. Daily Updates. The CMC (LF) and contractor Benchmark ECE team will normally meet each afternoon to discuss evaluation progress, problem areas, and coordinate the next day's schedule. An installation representative is encouraged to attend these meetings.

e. Out-Brief. The CMC (LF) and contractor Benchmark ECE team leaders will conduct an out-brief with the installation commander and provide a copy of the Benchmark ECE draft report. The out-brief will summarize findings, discrepancies, and issues requiring the specific attention of the commander to correct.

f. Document Review. If the Benchmark ECE schedule permits, the CMC (LF) ECE team leader may allow installation or unit staff to read media-specific portions of the Benchmark ECE draft report for their information before the out-brief with the installation commander.

8. Reports

a. Benchmark ECE Draft Report. This report is a preliminary summary of the installation's environmental compliance assessment. The Benchmark ECE Draft Report contains a critique form. The installation commander is requested to complete the critique of the ECE team and forward to CMC (LF) within two weeks of the out-brief.

b. Benchmark ECE Final Report. This report is a final summary of the installation's environmental compliance assessment. After reviewing the POA&M, CMC (LF) shall prepare a Benchmark ECE Final Report cover letter addressed to the installation commander. The letter shall instruct the installation commander to strike the word, "DRAFT", from the Benchmark ECE Draft Report (and make other appropriate administrative marks), print the POA&M with installation commander and higher headquarters' comments, and place the documents in a binder with the Benchmark ECE Final Report on top. CMC (LF) will give the IGMC a copy of the Benchmark ECE Final Report.

c. Appendix C contains the Benchmark ECE report formats.

d. Trend Analysis Reports. CMC (LF) will publish annual and triennial Benchmark ECE trend analysis reports. These reports shall not be attributed to any installation or unit.

9. Self-Audit Program. See reference (i) and paragraph 4202 of this Manual.

10. Releasability

a. References (j) and (k) generally govern public disclosure of ECE Program records. Installations and units receiving Freedom of Information Act (FOIA) requests for ECE Program records shall always consult counsel and CMC (LF) before releasing them.

b. When a Benchmark ECE Final Report is requested under reference (j), the "FOIA Report" function in ACE may produce a document responsive to the request. Within the Benchmark ECE Final Report itself, the Preliminary Executive Overview, Media Overview, recommended corrective action, and installation commander and higher headquarters' comments may be subject to discretionary disclosure. Benchmark ECE Draft Reports are generally not final documents and are not normally subject to FOIA release.

c. As a matter of policy, the EPA and many states should not routinely request ECE Program records in anticipation of, or as part of, an environmental compliance inspection. If an EPA or state inspector requests these records, the installation or unit receiving the request should immediately consult with counsel and CMC (LF) for recommendations on how to proceed.

d. Installations and units receiving requests for ECE Program records in contemplation of, or during, litigation shall always consult counsel and CMC (LF) on how to proceed.

11. Base Realignment and Closure Installations. Marine Corps installations shall participate in the ECE program until closed. Marine Corps units on closed installations shall participate in the ECE program with and under the cognizance of their higher headquarters.

12. Benchmark ECE Waivers. CMC (LF) will evaluate all installation requests for waivers.

13. Marine Forces Reserve (MARFORRES) ECE Program. MARFORRES will establish an ECE Program for Marine Corps-owned/leased reserve sites and facilities that is similar to the CMC (LF)-sponsored ECE Program. Benchmark ECEs will be provided by and coordinated with CMC (LF). Due to the geographic spread of MARFORRES sites and the small I&I staffs at each MARFORRES site, the Environmental staff at MARFORRES Headquarters will be

responsible for all pre-ECE coordination, POA&M development, and execution. MARFORRES facility ECE checklists will be maintained by CMC (LF). In accordance with DOD policy, each MARFORRES tenant must adhere to the host installation's environmental instruction including the conduct of ECEs. Reserve units on non-Marine Corps sites will participate in their hosts' ECE (or equivalent) programs and establish self-audit programs tied to the MARFORRES Commanding General's Inspection Program (CGIP).

4201. SITE INSPECTIONS. Personnel authorized by the Marine Corps and possessing appropriate security clearances shall be allowed to enter Marine Corps commands and units on Marine Corps installations to conduct ECEs.

4202. SELF-AUDIT PROGRAM. The Self-Audit Program gives commanders a tool to assess their commands' environmental compliance. This program will be incorporated into the CGIP as described in reference (g). See also reference (i).

1. Installation Commanders. The installation commander's Self-Audit Program should annually assess installation environmental compliance by visiting every permitted site and source, every process which generates a waste or may be considered a potential source, and every command/unit and tenant.

2. Other Commands

a. Non-installation commanders with MCO 5040.6H inspection authority, shall conduct annual Self-Audits within the CGIP. These commanders will use the environmental functional area checklist from the IGMC Automated Inspection Reporting System (AIRS). While the installation commander's Self-Audit Program focuses on infrastructure and processes, the non-installation commander's Self-Audit Program shall focus on subordinate commanders' readiness, support of the commander's environmental policies, and support of the host installation's EMS.

b. Commanders with subordinate units geographically-separated that are not tenants on other DOD installations shall annually audit these units using a modified ACE checklist. These commanders may also request Naval Facilities Engineering Command or HQMC assistance to conduct Benchmark ECEs at these

locations. Commanders with geographically-separated administrative units may request an ECE Program waiver from CMC (LF).

3. Self-Audit Program Development. Each Self-Audit Program should, where applicable, be incorporated into the installation EMS and consider existing environmental inspection checklists. Reports, inspections, and evaluations currently being conducted in support of command environmental management programs include:

- a. Weekly hazardous waste satellite accumulation area inspections;
- b. Drinking water backflow prevention annual inspections; and
- c. National Pollutant Discharge Elimination System dry weather inspections.

Installations should identify all of these environmental requirements and reports and incorporate them into the Self-Audit Program.

4. Implementation of the Self-Audit Program. Installation Self-Audit Programs shall include:

a. Annual Self-Audit Schedule. A detailed POA&M must be published each fiscal year. A critical path method format is recommended. This annual environmental Self-Audit Plan helps determine which tenant units; subordinate units; and installation organizations, buildings, locations, and/or media areas are to be evaluated during each month.

b. IGMC/CGIP Annual Inspection Report. The record of completion for all annual environmental Self-Audits that is incorporated into AIRS.

c. Self-Audit Approaches. The processes for conducting annual Self-Audits. There are three general approaches:

(1) Organizational Approach. Each installation activity and tenant unit receives a Self-Audit similar to a Benchmark ECE;

(2) Media Area Approach. The Self-Audit evaluates compliance individually by media (e.g., air and hazardous waste); and

(3) Combined Organizational and Media Area Approach.

5. Self-Audit Records. Self-Audit records shall be maintained by the installation or command conducting the Self-Audit. Commands should review these records during the EMS review or as part of CGIP.

4203. IGMC REVIEW. To assess installation and unit environmental compliance, the IGMC tasks CMC (LF) to augment IGMC inspections. To avoid duplicative environmental inspections, the IGMC only inspects environmental compliance when the IGMC inspection falls outside a 120-day period before or after a completed Benchmark ECE Draft Report for the installation or unit.

CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATION

SECTION 3: RESPONSIBILITIES

4300. CMC (LF)

- a. Schedule and implement Benchmark ECEs;
- b. Augment IGMC inspections as requested;
- c. Review installations' Annual Validation of POA&M; and
- d. Monitor installation Benchmark ECE findings, discrepancies, and issues to ensure corrective actions are taken and establish environmental compliance trends.

4301. IGMC. Assess installation and unit environmental compliance as needed during IGMC inspections.

4302. COMMANDING GENERAL (CG)/COMMANDING OFFICER OF MARINE CORPS INSTALLATIONS AND COMMANDER, MARINE FORCES RESERVE

- a. Participate in the Marine Corps Benchmark ECE Program.
- b. Establish and implement a command Self-Audit Program.

4303. CG OF MARINE CORPS REGIONS. Participate in the Marine Corps Benchmark ECE Program.

REFERENCES

- (a) Federal Register, Volume 51, page 25004, July 9, 1986
- (b) Department of Justice, "Factors in Decisions on Criminal Prosecutions for Environmental Violations in the Context of Significant Voluntary Compliance or Disclosure Efforts by the Violator," July 1, 1991
- (c) Federal Register, Volume 60, page 66705, December 22, 1995
- (d) Federal Register, Volume 65, page 19617, April 11, 2000
- (e) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (f) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (g) MCO 5040.6H
- (h) "ACE Online QuickStart Guide: Creating User-defined Checklists and Evaluations
- (i) United States Marine Corps, "United States Marine Corps Guide to Environmental Self-Audit Programs"
- (j) 5 U.S.C. 552
- (k) SECNAVINST 5720.42F

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

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CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 1: INTRODUCTION

5100. PURPOSE

1. This chapter establishes Marine Corps policy and responsibilities to ensure compliance with mandatory environmental training and education requirements and standards for developing and managing environmental training instruction.

2. Responsibilities for environmental training and education cross many functional and operational areas. This chapter establishes:

a. Responsibilities for ensuring that relevant, high quality environmental training is provided at all levels of the Marine Corps;

b. Policies and procedures that apply the Marine Corps Systems Approach to Training (SAT) to the environmental training process as developed and advanced through the Comprehensive Environmental Training and Education Program (CETEP);

c. Documentation and reporting requirements integrating Marine Corps environmental training into the Environmental Management System (EMS); and

d. Professional development guidance and opportunities for Marine Corps personnel who are assigned environmental compliance responsibilities.

5101. APPLICABILITY. See paragraph 1101.

5102. BACKGROUND

1. The Environmental Training Challenge. Environmental compliance requirements impact nearly every Marine Corps occupational field, military occupational specialty, and operation. Environmental training requirements are explicitly stated or strongly implied in many environmental statutes and

regulations. Many training requirements are directly and indirectly related to environmental compliance due to job actions, knowledge, or skills they require. As a result, the scope of environmental training requirements and the number of Marine Corps personnel subject to them create significant challenges.

a. These challenges are compounded by professional development needs, public information requirements, and Federal environmental and health and safety requirements for providing training tailored to local (i.e., job site) conditions.

b. In addition, Marine Corps personnel are frequently subject to multiple environmental training requirements due to the nature of their billet responsibilities and/or conditions existing in their work site(s).

2. CETEP. In recognition of the magnitude and importance of environmental training challenges, and with the support and approval of the Marine Corps Training and Education Command (TECOM) and the Deputy Commandant for Installations and Logistics, the CETEP, the environmental training component of the Marine Corps EMS, was established. CETEP's purpose is to support full compliance with applicable environmental requirements, pollution prevention goals, and EMS objectives by analyzing environmental training needs and integrating professional development initiatives, public outreach, and compliance training.

3. Meeting Environmental Training Challenges. The CETEP's ultimate goal is to ensure that environmental training is available, efficient, and effective at all levels of the Marine Corps. Environmental training shall:

a. Use the Marine Corps Systems Approach to Training (SAT) to analyze, design, develop, implement, and evaluate performance and mission-oriented environmental training;

b. Be integrated into the Commandant of the Marine Corps (CMC), Commander Marine Forces Reserve, and each installation's EMS;

c. Be based upon and justified by a documented assessment of the installation environmental training needs;

- d. Use existing Marine Corps and Department of Defense (DOD) training systems and organizations;
- e. To the maximum extent practicable, use existing environmental training materials, courses, and resources rather than developing new initiatives;
- f. When necessary, use non-DOD environmental training providers;
- g. To the maximum extent practicable, apply modern instructional technologies for the distribution of environmental instruction and information;
- h. Provide for the professional development of Marine Corps personnel with environmental training management and/or instruction responsibilities;
- i. Eliminate inappropriate and redundant training; and
- j. "Translate" complex environmental requirements into pragmatic instruction to guide Marine Corps military training and operations.

4. The SAT and CETEP

- a. Formal SAT processes and their associated management documents (including Individual Training Standards (ITSs) and Programs of Instruction (POIs)) are applied at Marine Corps formal schools, training centers, and formal courses at other service schools.
- b. All CETEP training shall incorporate and appropriately apply the SAT. Locally-developed courses and training materials are more relevant and effective when developed with the SAT and its analysis of training requirements to job performance outcomes. For example, a locally-developed course that may result in the award of the 8056 Military Occupational Specialty (MOS) should be developed with applicable ITS and MOS Manual requirements. The course should also be developed to explain local procedures for compliance with applicable regulatory requirements and policies.

5. Environmental Training Expertise. Among the initial findings of a Headquarters Marine Corps, Facilities and Services Division (CMC (LF))-sponsored environmental training needs assessment was a finding of a critical need for uniformed environmental specialists to address environmental issues at the unit and installation levels. Further, for CETEP to succeed, environmental training expertise must be developed at all Marine Corps units and installations. In response to these findings, MOS 8056 and MOS 8831 were established and CETEP coordinators were identified. In addition, professional quality standards for environmental instructors and instruction were formulated. For more information on these standards, see paragraph 5205 of this chapter.

a. MOS 8056, Hazardous Material/Hazardous Waste (HM/HW) Officer/Marine. MOS 8056 (formerly MOS 9954) was established as a secondary MOS to provide the Marine Corps with uniformed Marines trained to manage HM and HW, primarily at the unit level.

(1) Specific guidance regarding MOS 8056 is published in reference (a).

(2) Attainment of MOS 8056 may partially satisfy the training requirements established for Environmental Instructors discussed in paragraph 5203 of this chapter.

(3) HQMC has reviewed and approved three courses to fulfill 8056 MOS designation-training requirements. These courses are:

(a) Defense Hazardous Materials/Hazardous Waste Handling Course (Army Logistics Management College);

(b) Introduction to Hazardous Waste Generation and Handling (Civil Engineers Corps Officer's School (CECOS)); and

(c) HM/HW Marine (Marine Corps Institute available on MarineNET at www.marinenet.usmc.mil.)

b. MOS 8831, Environmental Engineering/Management Officer. MOS 8831 (formerly MOS 9631) was established as a secondary MOS to provide the Marine Corps with a cadre of uniformed, operational expertise in the areas of environmental engineering,

management, and science. These officers provide a unique view of environmental issues from a Marine's perspective.

(1) MOS 8831 is administered under the Marine Corps Special Education Program and Advanced Degree Program. Recipients of the MOS have earned a master's degree in environmental management, science, or engineering from designated colleges and universities. Alternatively, officers who possess a bachelor's degree in environmental engineering, science, or management, perform at least six months of on-the-job training in an Environmental Engineering Management billet, and are recommended by their command may be awarded a skill designator of 8831.

(2) Marine Corps Bulletin (MCBUL) specific information regarding MOS 8831 is published in references (a), (b), and (c).

c. CETEP Coordinators. CETEP Coordinators lead Marine Corps installation environmental training programs.

(1) CETEP Coordinators shall ensure installation environmental training programs are structured to identify and address local training requirements in addition to those mandated by Federal regulations.

(2) CMC (LF) sponsors professional development initiatives for CETEP Coordinators. CETEP Coordinator training and experience requirements are detailed in paragraph 5203.

6. Inter-Service Environmental Education Review Board (ISEERB). The ISEERB is composed of environmental and training representatives from the military services and the Defense Logistics Agency. The ISEERB addresses environmental training issues, and it identifies training resources and efficiencies across the Department of Defense.

a. CMC (LF) provides a Marine Corps representative to the ISEERB. This participation has permitted CMC (LF) to identify interservice environmental training courses and materials that meet Marine Corps training needs.

b. "ISEERB Approval" is an endorsement (i.e., "seal of approval") of selected environmental training courses. This approval signifies subject matter experts reviewed the courses and found them to have content suitable for DOD Component use.

A list of ISEERB-approved courses is available at www.denix.osd.mil in the training section. Installations, operating forces and units should utilize these courses before contracting for or developing similar courses.

5103. FEDERAL STATUTES. Almost all environmental laws and their implementing regulations require environmental training, either by mandate or implication. Federal agencies codify their environmental training requirements in the Code of Federal Regulations. These requirements may be applicable to Marine Corps personnel in addition to applicable State environmental training requirements. Appendix D summarizes the major environmental training provisions required by Federal regulations.

5104. REQUIREMENTS. This chapter implements environmental training program requirements established by Federal, State and local laws and regulations; by the Under Secretary of Defense for Acquisition, Technology, and Logistics; and by Marine Corps policies.

5105. TERMS AND DEFINITIONS

1. By Name Assignment (BNA). An automated system used for scheduling and enrolling students in courses offered by military formal schools.

2. Chesty Brigade. An honorary organization composed of active-duty Marines and other service members, military family members, civilian personnel, and private individuals contributing to Marine Corps environmental compliance efforts.

3. Environmental Training Needs Assessment. A comprehensive analysis of environmental training needs that serves as a justification for allocating training resources and requests for training services. The analysis also establishes a benchmark for evaluating the efficiency and effectiveness of environmental training efforts.

4. Explicitly Required Training. Training expressly required by specific laws, regulations, or policies that apply to Marine Corps personnel due to the nature of their work assignments/job functions and/or specific licensing or certification requirements mandated by such environmental laws, regulations, or policies.

5. Implicitly Required Training. Instruction and/or information that is not expressly stated as required by laws, regulations, or policies, but that can be reasonably inferred as being required to maintain compliance.

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 2: MARINE CORPS POLICY

5200. ENVIRONMENTAL TRAINING AND EDUCATION POLICY. Marine Corps personnel, the greater Marine Corps community, and appropriate segments of the public will be provided relevant environmental information and training. All environmental training will be validated, documented, and managed to ensure that it meets Marine Corps quality standards and complies with applicable environmental requirements.

5201. CETEP IMPLEMENTATION

1. Required CETEP Components. To ensure that all environmental training needs are appropriately identified and appropriately addressed, each installation and Marine Corps Forces Reserve (MARFORRES) shall establish a CETEP. The CETEP should be integrated into the EMS and shall contain the following components:

a. Environmental General Awareness Component. Individual awareness of environmental policies and programs is a prerequisite to attaining environmental compliance and pollution prevention goals. Therefore, each installation's CETEP shall include an environmental education component that is sufficient in scope to ensure that persons within the installation and surrounding community are informed of their environmental requirements and have access to information about, and the opportunity to support, the installation's environmental policies and programs.

(1) The CMC (LF) CETEP includes a Marine Corps-wide environmental education program that creates and distributes environmental education materials (e.g., posters, videotapes, booklets, web pages, and displays) that can be used to raise awareness of, and provide information about, Marine Corps Environmental programs. These materials target different audiences and are suitable for use locally as a training aid or as general awareness materials. CMC (LF) and installations may

use the Chesty Brigade program to recognize anyone contributing to Marine Corps or installation environmental programs.

(2) Installations should incorporate CMC (LF) environmental education materials to the maximum extent practicable into their CETEP environmental education component. Inter-installation (i.e., regional) development and use of environmental education materials is also highly encouraged. CMC (LF) will maintain a listing of all Marine Corps-developed environmental educational materials.

(3) Installations must provide specific and general awareness training, as appropriate, to ensure all aboard the installation understand their environmental responsibilities and can support environmental policies and programs.

(4) Installations should include environmental awareness materials in local outreach efforts such as New Arrival Check-In briefings, at military family Welcome Aboard briefings, personnel check-in, Earth Day celebrations, and events involving the surrounding community in which the installation is a participant and/or sponsor.

(5) Environmental education materials should be routinely evaluated for improvement and to ensure their validity and effectiveness.

b. Environmental Job-Specific Training Component. This CETEP component ensures personnel assigned environmental job responsibilities or job functions that may have a significant impact on the environment receive appropriate environmental training. No Marine or civilian employee should be assigned job responsibilities subjecting them to environmental training requirements without the appropriate training. These environmental training requirements should include:

(1) Explicit Training and/or Information Requirements. Appendix D summarizes the significant environmental training requirements included in Federal regulations and Marine Corps policy. Failure to provide this type of training is a compliance violation, so these requirements should be documented in the position/billet requirements. These training requirements vary widely in length, content, and required topics depending on the job functions performed.

(2) Implicit Training and/or Information Requirements. Implicit training ensures personnel understand and are able to perform their job functions in an environmentally-compliant manner. Implicit training requirements should be identified in turnover folders and in standard operating procedures for each practice. This training is often provided informally at the unit or shop and is also referred to as point-of-use training.

c. Commanding General/Commanding Officer (CG/CO) and Senior Executive Service (SES) Education Component. This CETEP component ensures senior Marine Corps civilian and military leadership understand their environmental program responsibilities.

(1) Environmental compliance responsibilities shall be part of the in-briefing each CG/CO receives upon assuming command on an installation. These responsibilities include an awareness of and access to environmental compliance publications, such as this Manual, and the latest editions of references (d), (e), and installation environmental orders and policies for ensuring operations comply with environmental requirements and achieve stated EMS objectives.

(2) Commanders of each unit visiting an installation shall be informed of their environmental responsibilities before conducting unit operations (e.g., training) on the installation. These responsibilities shall be included in any written agreements between the unit and installation and should be included in range regulations.

(3) Environmental responsibilities shall be part of the brief each battalion/squadron commander receives upon assuming command.

(4) Marine Corps CGs/COs and SES members should be aware of and participate in environmental training and education opportunities.

2. CETEP Execution. The installation CG/CO shall review and approve the CETEP plan. An electronic copy of the CG/CO's approved plan shall be forwarded to CMC (LF) to be maintained on file.

5202. CETEP PLANS

1. CETEP Plan Overview. A CETEP plan is an installation specific plan that inventories positions and populations that require environmental training and/or information and details the installation's cost effective strategy to provide each training requirement to the targeted population. The CETEP plan serves as a planning and management tool for meeting the environmental training challenge, compliance and pollution prevention goals, and EMS objectives and should be updated as necessary to achieve these purposes. A CETEP plan may be a stand alone management plan or it may be incorporated into the training section of the installation EMS manual, provided all required information is included.

2. Required Sections

a. Training Needs Analysis. This section describes procedures for identifying and updating installation environmental training requirements. New regulatory requirements and the results of the annual installation compliance self-audit should be reviewed to refine the training requirements and course content, as appropriate. The Training Needs Analysis contains, but is not limited to:

(1) Demographic Information. Demographic information shall describe and quantify the personnel in target populations whose job functions or association with the installation may require environmental training or information by one of the CETEP components. Relevant items include the total number of military and civilians assigned to the installation, major units and tenants, base housing populations, schools within the installation boundary, local community populations, and routine visiting units.

(2) Installation Environmental Characteristics. Installation environmental characteristics shall describe installation-specific areas, activities, operations, and plans that may trigger environmental training requirements. Relevant information to consider includes the hazardous waste generator status, number of less than 90-day and satellite accumulation areas, hazardous substances and petroleum stored, proximity to water bodies, sources of potable water, amount of petroleum products transferred over water, emergency response capability, and unique local requirements. This section should relate the

environmental characteristics to the associated training requirements in all CETEP components.

(3) Quantified Environmental Training Requirements.

Quantified environmental training requirements shall include a list of the number of positions/billets or total populations subject to each of the identified Federal, State, local and Marine Corps environmental training requirements referenced in appendix D and applicable chapters of this order. This section should also estimate the annual training requirement considering the number of personnel who have not yet received the training and military/civilian turnover rates.

b. CETEP Plan of Action and Milestone (POA&M). The CETEP POA&M describes the installation's detailed strategy for meeting the environmental training requirements identified. The CETEP plan should identify instructional strategies, delivery methodologies, and environmental training sources for each training requirement and demographic group identified. The POA&M should identify significant required resources (e.g., funding, instructor manpower, classrooms, and computers) and a schedule to achieve full compliance with all training requirements identified.

c. Quality Assurance. This section establishes procedures for ensuring that all environmental training identified in the CETEP plan is valid, relevant, and meets Marine Corps training quality standards. The procedures should include processes for reviewing and approving proposed course content, student and instructor course completion evaluations, and instructor qualifications.

d. Recordkeeping. This section describes procedures to properly document the environmental training identified in the CETEP plan.

e. Training Efficiencies. This section describes procedures for ensuring environmental training is provided at the best possible value. The procedures should:

(1) Discuss the use of centrally-provided courses and course materials;

(2) Use ISEERB, military service, and government agency training resources;

(3) Document factors considered in decisions to use or develop other training resources or commercial courses;

(4) Document estimated cost savings through use of distance learning or other innovative instructional delivery technology;

(5) Document efforts taken to remove unnecessary course overlap (i.e., redundancy); and

(6) Discuss collaborative efforts among installation tenant organizations.

f. Implementing Orders. This section lists and describes installation orders and policies implementing the CETEP Plan.

5203. CETEP COORDINATORS AND ENVIRONMENTAL INSTRUCTORS

1. Personnel developing and/or implementing an installation CETEP shall be appointed as CETEP Coordinators. Within 12 months after the date of appointment, each CETEP Coordinator must satisfactorily complete the following training requirements:

a. The SAT online course offered through the College of Continuing Education and available through the Marine Corps online training portal, MarineNET, at www.marinenet.usmc.mil (NOTAL);

b. The Curriculum Developer's Course (or equivalent) offered by the Marine Corps Instructional Management Schools if:

(1) Developing original curriculum or modifying existing curriculum greater than four classroom hours in length;

(2) Contracting for the development or modification of existing curriculum greater than four classroom hours in length;
or

(3) Developing any computer-based training courseware.

c. The Practical Applications for Environmental Management Course (or equivalent) taught by the Naval School, CECOS, Port Hueneme, California; or serve two years on a Marine Corps staff

in a billet with supervisory authority over multi-media environmental programs.

2. CETEP Coordinators may obtain information about required training courses from CMC (LF) and the BNA System per reference (f). CMC (LF) shall individually consider requests for waivers from CETEP Coordinator training requirements.

3. CETEP Coordinators should participate in CMC (LF)-approved CETEP Coordinators' workshops, seminars, task forces, and committees.

4. Before being designated an Environmental Instructor, personnel (other than those with duties limited to presenting environmental awareness information) must demonstrate a mastery of the environmental training subject and possess, at a minimum, basic instructor skills. To demonstrate basic instructional skills, personnel must satisfactorily complete the following training requirements:

a. Complete the Instructor Training Course (or equivalent) offered by the Marine Corps Instructional Management Schools;

b. Possess a minimum of one-year work experience in a position directly related to the environmental training subject, or complete formal training on the environmental training subject equivalent to no less than 15, six-hour training days at a Marine Corps/DOD service school, college, or university;

c. Instruct at least three sessions of Marine Corps students on the environmental training subject. The students' instructor ratings must average at least "satisfactory" in all areas; and

d. Possess a letter of recommendation from the CETEP Coordinator that is favorably endorsed by an installation environmental director, officer, or supervisor within the chain of command of the person requesting Environmental Instructor designation.

5. The installation CETEP Coordinator may individually consider requests for waivers from Environmental Instructor designation requirements.

5204. UNIVERSAL ENVIRONMENTAL TRAINING. Environmental requirements will be appropriately incorporated into all Marine Corps training. Marine Corps personnel will be trained to perform their occupational specialties and maintain their combat readiness in a manner supporting Marine Corps environmental goals.

5205. ENVIRONMENTAL TRAINING QUALITY STANDARDS

1. All Marine Corps environmental training shall:

a. Meet Marine Corps needs and follow an installation CETEP;

b. Consist of a POI with a syllabus, administrative guide, outline, or an equivalent document that clearly and concisely describes the training. At a minimum, the POI shall identify course training and training resource requirements and include:

(1) Course content and associated learning objectives;

(2) Time allocations;

(3) Instructional sequences of events;

(4) Student and instructor course evaluation procedures (where appropriate); and

(5) Established mastery levels.

2. CMC (LF) will monitor installation environmental training content for potential Marine Corps-wide application.

3. Installations shall maintain complete and accurate environmental training evaluations and records for at least three years after their effective date.

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 3: RESPONSIBILITIES

5300. CMC (LF)

1. Provide support to Marine Corps installations and units by interpreting Federal environmental training and education requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Provide liaisons with regard to environmental training and education with MCCDC, other Marine Corps commands and units, the DOD, other military services, private and public institutions, agencies, and organizations.
3. Fully implement all components of CETEP at the HQMC level, to include:
 - a. Developing and distributing Marine Corps-wide environmental training and education materials;
 - b. Maintaining a listing of all CMC (LF)-developed environmental training and education material;
 - c. Reviewing Marine Corps-wide job-specific guidance documents and training materials to ensure that environmental requirements are incorporated as appropriate.
 - d. Guiding and monitoring CETEP at all Marine Corps installations and MARFORRES.
 - e. Assessing Marine Corps-wide environmental training and education needs and remedies.
 - f. Monitoring Marine Corps environmental training costs and validating associated funding requirements; and

g. Promoting the professional development and career advancement of environmental personnel (e.g., obtain environmental training quotas and conduct periodic CETEP Coordinator meetings).

4. Serve as the MOS Specialist for environmental MOSs. Advise other MOS Specialists and community managers regarding environmental compliance responsibilities.

5. Secure quotas to Marine Corps, the DOD, and other service-supported/funded professional development programs and environmental courses for Marine Corps personnel with assigned environmental responsibilities.

6. Assess the effectiveness and adequacy of the Marine Corps CETEP through the Environmental Compliance Evaluation Program, augmentation to the Inspector General of the Marine Corps, and special reviews.

7. Research and employ existing and emerging training technologies, information transfer systems, and curricular innovations to expedite environmental training and to affect program efficiencies.

5301. COMMANDER, MARINE FORCES ATLANTIC; COMMANDER, MARINE FORCES PACIFIC

1. Ensure that all subordinate personnel subject to environmental training requirements are appropriately trained.

2. Include environmental training requirements in operational readiness review and inspections as appropriate.

3. Plan, program, budget, execute, and track environmental training costs.

5302. COMMANDING GENERAL OF MARINE CORPS INSTALLATIONS EAST, WEST, MID-PACIFIC, WESTERN PACIFIC, AND NATIONAL CAPITAL REGION

When established, coordinate appropriate regional training opportunities and initiatives to ensure relevant environmental training and information is available to support cost effective implementation of all components of installation CETEPs.

5303. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS
INSTALLATIONS AND COMMANDER, MARINE FORCES RESERVE (MARFORRES)

1. Attend a commander's environmental orientation briefing after assuming command.
2. Develop, implement, and maintain a CETEP Plan that specifically addresses the environmental training requirements of this Manual. Review the CETEP Plan annually as part of EMS management review and update as necessary to maintain an efficient and effective environmental training program.
3. Ensure that installation and tenant personnel subject to environmental training requirements are appropriately trained.
4. Designate an installation CETEP Coordinator.
5. Develop and implement programs required to support the installation CETEP.
6. Ensure that all forms of training (including operational exercises) conducted within the geographic boundaries of the command include environmental elements as appropriate.
7. Plan, program, budget, execute, and track installation environmental training costs.
8. Develop and implement programs to ensure that all Marine Corps personnel receive environmental awareness information on at least an annual basis.
9. Nominate candidates to receive CMC (LF) centrally-provided environmental training.
10. Ensure that no Marines or civilian employees are assigned job responsibilities without the appropriate required environmental training certification.
11. Ensure that position descriptions and or work plans and turnover folders reflect mandatory environmental training requirements.
12. Ensure that CETEP Coordinators and installation Environmental Instructors are appropriately trained.

5304. MARINE CORPS UNIT COMMANDERS

1. When practicable, attend a commander's environmental orientation briefing after command selection.
2. Ensure unit personnel subject to environmental training requirements are appropriately trained.
3. Designate a unit Environmental Coordinator to liaison with the installation CETEP Coordinator.
4. Plan, program, budget, execute, and track unit environmental training costs.
5. Propose candidate nominations to the installation CG/CO for CMC (LF) centrally-provided environmental training.

5305. MARINE CORPS OCCUPATIONAL FIELDS (OCCFLDs)/MOS SPONSORS

Ensure that OCCFLD and MOS individual training standards, guides, and manuals include environmental compliance responsibilities, as appropriate.

5306. ALL MARINE CORPS PERSONNEL

1. Perform job responsibilities in an environmentally compliant and responsible manner per training received and standard operating procedures.
2. Notify immediate supervisors of personal environmental training requirements and request appropriate environmental training.

REFERENCES

- (a) MCBUL 1200 (canc: Apr 08)
- (b) MCO 1520.9G
- (c) MCO 1560.19E
- (d) United States Marine Corps, "Commander's Guide to Environmental Compliance and Protection"
- (e) United States Marine Corps, "USMC Environmental Campaign Plan," PCN 50100380700
- (f) MCO 1553.7

CHAPTER 6

AIR QUALITY MANAGEMENT

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CHAPTER 6

AIR QUALITY MANAGEMENT

SECTION 1: INTRODUCTION

6100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with air quality and emissions requirements for stationary, mobile, and fugitive sources of emissions consistent with the reference (a), Department of Defense (DOD) and Department of the Navy (DON) policy, and Marine Corps policy and guidance.

6101. APPLICABILITY

1. See paragraph 1101 regarding applicability of Federal, State, and local laws, regulations, and ordinances to Marine Corps active and reserve installations and activities, generally. Reference (a) applies to installations and activities throughout the continental United States (CONUS), as well as within the territories and possessions of the United States to include the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.
2. Chapter 7 of this Manual provides in-depth coverage of the various statutes, regulations, and policy applicable to emergency planning and response requirements. Chapter 7 includes Clean Air Act (CAA) section 112(r) requirements relating to prevention of accidental releases of hazardous and extremely hazardous substances (EHSs) including Risk Management Plans, as well as the General Duty clause. In addition, it covers the annual air emissions reporting requirements under the Toxic Release Inventory (TRI) provisions of reference (b) and release reporting requirements regarding EHSs.
3. Marine Corps policy and guidance on management and use of ozone depleting substances (ODSs) and the ODS reserve is addressed in reference (c). The ODS emission reduction requirements of leak detection and repair or required replacement of refrigeration and comfort cooling equipment, recovery and reclamation, certification of recovery equipment and technicians, and recordkeeping and reporting appear in this chapter.

4. Radon policy, as specified in this chapter, also applies to overseas installations.

5. The Marine Corps Asbestos Safety Program and workplace policy to eliminate or limit potentially harmful exposure to asbestos is covered in reference (d). This chapter covers the requirements and policy regarding compliance with the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAPs) as described in subpart M of reference (e).

6102. BACKGROUND. Early efforts to control air pollution were predominantly State and local actions taken under public nuisance laws and ordinances to reduce visible smoke emissions or abate noxious odors. By the early 1960s, it was apparent that most State and local efforts were inadequate and air pollution episodes in several major cities, which reportedly caused thousands of deaths, and increased public pressure for a nationwide, Federal air pollution program. While the early opacity and odor laws and regulations remain available for local governments, and in some cases private citizens, to take actions to abate air pollution under nuisance theories, the vast majority of air pollution control laws and regulations today are the result of requirements driven by reference (a). The first Federal air pollution law was passed in 1955, but its primary purpose was to provide financial assistance to the states to study the problem and develop local solutions. In 1963, Congress enacted reference (a), which was the first Federal air pollution control law with any type of enforcement mechanism - procedures to control interstate air pollution. Reference (a) was amended in 1967, 1970, 1977, and again in 1990. Reference (f) laid the foundation for the modern version of reference (a). Reference (f) together with reference (g) and, particularly reference (h), resulted in what is widely regarded as the most comprehensive, complex, stringent, and technology-forcing environmental law ever enacted by Congress. Reference (a) primarily regulates three major categories of pollutants: criteria pollutants, hazardous air pollutants (HAPs), and stratospheric ODSs. Reference (f) established a Federal, State, and local partnership to control air pollution. The states were required to bear the primary implementation and enforcement responsibility for programs developed under the direction and oversight of the recently created U.S. Environmental Protection Agency (EPA). Reference (a) divides the nation into air quality control regions (AQCRs) and requires EPA to develop and monitor primary and secondary National Ambient Air Quality Standards (NAAQS) for criteria pollutants within those AQCRs to protect the public health and general welfare, respectively. Each state must achieve or maintain these standards by developing a State

Implementation Plan (SIP) that outlines how each AQCR will attain or maintain the NAAQS for EPA. In turn, air emission sources are required to comply with the abatement and control measures set forth in the individual SIPs that are designed to achieve or maintain the standards. Reference (a) also requires EPA to develop and implement national uniform standards for HAPs and NESHAPs as described in reference (e) to protect public health, national uniform emission standards for newly manufactured motor vehicles and nonroad engines and vehicles, and to develop control programs for ODSs to protect the stratospheric ozone layer.

6103. FEDERAL STATUTES

1. CAA of 1963, as amended (42 U.S.C. 7401 et seq.)

a. The 1990 Amendments to the CAA. The 1990 Amendments to the CAA contained six titles. Titles I-III amended subchapters I-III of the existing CAA and Titles IV-VI contained major additions to the Act. The 1990 amendments introduced sweeping changes including, but not limited to, the following:

(1) Additional SIP provisions and reclassification of ozone, carbon monoxide (CO), and particulate matter (PM) nonattainment areas as well as additional SIP provisions for sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead (Pb) nonattainment areas;

(2) Additional mobile source controls for nonattainment areas including transportation control measures and enhanced vehicle inspection and maintenance (I/M) requirements;

(3) Regulation of 190 initially listed HAPs with technology, instead of risk-based standards;

(4) The acid rain program under Title IV, a cap and trade program to control emissions of SO₂ and oxides of nitrogen (NO_x) from electric utilities for acid deposition control;

(5) A requirement for a Federal operating permit under Title V, incorporating all Federally-applicable requirements at major stationary sources; and

(6) Enhanced EPA and U.S. Department of Justice (DOJ) enforcement authority, as well as expanded provisions for enforcement of emission standards or limitations through citizen suits. In the everyday jargon of air quality program professionals, the major programs under the CAA are often

referred to by the title of the 1990 Amendments that changed or added the program. For example, the Federal operating permit requirements added to Subchapter V of the CAA is commonly referred to as the Title V Operating Permit program.

b. The CAA as Amended. The CAA, as amended, is divided into six subchapters as follows (see also table 6-1):

(1) Subchapter I - Programs and Activities. This subchapter contains, among others, the provisions for establishment of AQCRs; the NAAQS for criteria pollutants; SIPs to attain or maintain the NAAQS; New Source Performance Standards (NSPS); the NESHAP program; the recordkeeping, entry and inspection, and Federal enforcement provisions; and the waiver of Federal sovereign immunity in part A. Part C contains the provisions for New Source Review (NSR) in nonattainment areas, the Prevention of Significant Deterioration (PSD) program in attainment areas, and the Visibility Protection program. Part D, subpart 1, contains the general provisions for criteria pollutant nonattainment areas, including the General Conformity requirement for Federal agencies discussed below. Part D, subparts 2-5, contains the additional SIP provisions required for criteria pollutant nonattainment areas added by the 1990 Amendments discussed in paragraph 6103.1a(1) above. As a general rule the Subchapter I statutory provisions primarily establish requirements that apply to stationary sources and, to a lesser extent, fugitive sources of emissions of criteria pollutants and HAPs. Fugitive emissions are emissions that are not controlled by a stack, vent, or other pollution control device, such as the dust created by construction or demolition activities or emissions caused by prescribed burning of vegetation. One exception to this general rule appears in the implementation of the General Conformity provision for Federal actions, which in practice applies predominantly to fugitive emissions and mobile source emissions from Federal actions in nonattainment or maintenance areas.

(2) Subchapter II - Emission Standards for Moving Sources. This subchapter contains the provisions for national uniform standards for newly manufactured motor vehicle engines and nonroad engines and vehicles. It also contains the provisions relating to aircraft emission standards and the clean fuel vehicle requirements for centrally fueled and Federal agency fleets. As its title suggests, this subchapter applies to mobile sources of emissions.

(3) Subchapter III - General Provisions. This subchapter contains, among others, CAA general definitions,

citizen suit provisions, and provisions for judicial review of the EPA's promulgation of the NAAQS.

(4) Subchapter IV-A - Acid Deposition Control. This subchapter contains the cap and trade program requirements for fossil-fuel fired electric utility emissions of SO₂ and NO_x.

(5) Subchapter V - Permits. This subchapter contains the requirements for the so-called Title V Operating Permit program. The provisions of this permit program apply predominantly to stationary sources of emissions and, in some cases, fugitive emissions.

(6) Subchapter VI - Stratospheric Ozone Protection. This subchapter contains the provisions for the phase-out of certain ODSs, national recycling and emission reductions of ODSs, and the requirements applicable to servicing motor vehicle air conditioners.

c. Section 107 of the CAA (42 U.S.C. Sec. 7407). This section requires the EPA Administrator to designate interstate and intrastate AQCRs, in consultation with the states, for attainment and maintenance of the primary and secondary NAAQS. The section also expressly provides that states have primary responsibility for assuring air quality within their jurisdiction and directs the submission of SIPs that demonstrate how the NAAQS will be achieved and maintained.

d. Section 110 of the CAA (42 U.S.C. Sec. 7410). This section prescribes the requirements for preparation, submission, and revision of SIPs for the primary and secondary NAAQS established for criteria pollutants. SIPs implement pollution control programs such as NSPS, PSD, nonattainment NSR, the General Conformity requirements for Federal actions, and Federal operating permit requirements under Subchapter V of the CAA, the so-called Title V Operating Permit, at the State and local levels. Approved SIP requirements are also enforceable by EPA. Generally, states may require pollution control and prevention measures that are more stringent than those mandated by EPA, but they may not allow less stringent measures. Federal agencies must comply with all Federal, State, and local air pollution control regulations.

e. Section 111 of the CAA (42 U.S.C. Sec. 7411). This section contains the requirement for EPA to establish, and the states to implement and enforce, NSPS for certain categories of stationary sources.

f. Section 112 of the CAA (42 U.S.C. Sec. 7412). This section contains the initial list of 190 HAPs added by the 1990 Amendments along with extensive requirements for the completely revised NESHAPs program.

g. Section 113 of the CAA (42 U.S.C. Sec. 7413). This section contains the Federal enforcement provisions including civil administrative, civil, judicial, and criminal enforcement for violations of the Act's requirements.

h. Section 114 of the CAA (42 U.S.C. Sec. 7414). This section provides EPA the authority to require periodic or continuous recordkeeping and monitoring by regulated entities, as well as compliance certifications, and it provides EPA or delegated states broad authority to enter facilities and conduct compliance inspections.

i. Sections 118(a)-(d) of the CAA (42 U.S.C. Sec. 7418(a)-(d)). These sections generally waive the Federal government's sovereign immunity with respect to Federal, State, and local air pollution control laws and regulations; grants the President exemption authorities; and requires fleet and employee vehicles to comply with I/M program requirements in certain nonattainment areas. As a result of this waiver, Marine Corps activities are fully subject to the substantive and procedural requirements of Federal, State, and local air pollution control laws, including permitting requirements, and must obey compliance orders issued through administrative or judicial processes. Section 118(b) authorizes the President to exempt any Federal emissions source, with a few exceptions, from requirements of the Act up to one year. It also authorizes the President to grant a regulatory exemption for up to three years from the requirements of the Act for any weaponry, aircraft, vehicles, or other categories of equipment owned by the Armed Forces of the United States. With either exemption, the President must determine that it is in the paramount interests of the United States to grant such exemption. Section 118(c) requires Federal government fleet vehicles to comply with the provisions of an approved I/M program in ozone or CO nonattainment areas designated under subparts 2 or 3 of part D of subchapter I of the CAA. Section 118(d) requires that Federal agencies ensure that their employees operating their motor vehicles on Federal facilities comply with the I/M requirements in the same ozone and CO nonattainment areas.

j. Sections 160-169 of the CAA (42 U.S.C. Secs. 7470-7479). These sections contain the requirements for SIPs in attainment areas and the provisions for the PSD program preconstruction and

operating permit requirements for major emitting facilities in such areas. The PSD program requires new or modified major emitting facilities, as defined in the CAA and implementing regulations, to seek preconstruction authorization and to apply the Best Available Control Technology (BACT) to receive a final permit to operate the source(s). Source categories expressly listed in section 169 are major if their potential to emit (PTE) is equal to or greater than 100 tons per year of any regulated pollutant. All other sources are major if their PTE is equal to or greater than 250 tons per year of a regulated pollutant under the CAA.

k. Section 169A of the CAA (42 U.S.C. Sec. 7491). This section sets out the Visibility Protection requirements applicable to Federal Class I areas such as national parks, wilderness areas, and national monuments.

l. Section 173 of the CAA (42 U.S.C. Sec. 7503). This section established the general preconstruction review program, called nonattainment NSR, for all nonattainment areas designated under subpart 1 of part D of subchapter I. New or modified major stationary sources are required to obtain preconstruction authorization and install the Lowest Achievable Emission Rate (LAER) technology to obtain a permit to operate the source. Major stationary sources under subpart 1 of part D are sources with a PTE equal to or greater than 100 tons per year or more of the nonattainment criteria pollutant.

m. Section 176 of the CAA (42 U.S.C. Sec. 7506). This section contains the General Conformity requirements that prohibit Federal agencies from engaging in or approving any activity in any nonattainment or maintenance area that does not conform to the SIP.

n. Sections 181-190 of the CAA (42 U.S.C. Sec. 7511-7513b). These sections prescribe the additional SIP requirements, added by the 1990 Amendments as subparts 2, 3, and 4 of part D to subchapter I, applicable to ozone, CO, and PM nonattainment areas. The detailed statutory requirements establish various degrees of severity for these nonattainment areas, depending upon their design value, and impose increasingly more stringent requirements for each more serious classification. The thresholds for determining major stationary sources under the additional SIP provisions vary according to the degree of nonattainment. More specific detail of the requirements applicable to these various classifications of nonattainment areas is provided in paragraph 6104.10.

o. Section 209 of the CAA (42 U.S.C. Sec. 7543). This section preempts all states from enforcing emission standards on new motor vehicles and engines, unless the state had its own comprehensive emission controls in place before March 30, 1966. Originally, California was the only state that was not preempted under this provision regarding motor vehicles. Several other states have applied for, and received, authorization to enforce California standards (New York, Pennsylvania, and Florida among others). This section also preempts State regulation of nonroad engines and vehicles, except in California or other states whose standards are identical to California.

p. Section 302 of the CAA (42 U.S.C. Sec. 7602). This section contains the definitions applicable to the entire Act, except where a definition contained in another subchapter expressly provides differently for that Subchapter. For example, the definition of major stationary source and major emitting facility in section 302 is a source that has PTE of 100 tons per year or more of any pollutant, whereas the PSD program definitions (discussed above) provide that non-listed major emitting facilities are those with PTE of 250 tons per year or more of any air pollutant.

q. Section 304 of the CAA (42 U.S.C. Sec. 7604). This section authorizes citizen suits for certain violations of the CAA and establishes various prerequisites to such suits.

r. Sections 501-507 (42 U.S.C. Sec. 7661-7661f). This section provides the definitions and requirements applicable to the Federal Operating permit applications and operating permits for major stationary sources.

s. Section 601 (42 U.S.C. Sec. 7671). This section provides the definitions for the subchapter VI requirements to protect the stratospheric ozone layer.

t. Section 608 (42 U.S.C. Sec. 7671g). This section contains the recycling and emissions reduction requirements that apply to the repair, service, or disposal of various appliances containing ODSs.

u. Section 609 (42 U.S.C. Sec. 7671h). This section provides the requirements applicable to servicing motor vehicle air conditioners.

2. Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). This Act, also known as Title III of the Superfund Amendments and Reauthorization Act,

in addition to the CAA, addresses the release of hazardous substances into the environment through annual TRI reporting, and also requires the release reporting of certain EHSs to the environment. Certain chemicals subject to the HAPs and risk management provisions of CAA section 112 are also subject to the EPCRA. See chapter 7 of this Manual for detailed requirements.

3. The Alternative Motor Fuels Act (AMFA) of 1988, as Amended (Public Law 100-494). Congress passed AMFA in 1988 to achieve long-term energy security and to improve air quality. Under AMFA, a portion of the new vehicles the Federal Government acquires each year must be alternative fuel vehicles (AFVs) in order to encourage the production of these vehicles for consumer use.

4. The Energy Policy Act (EPACT) of 1992 (Public Law 102-486). EPACT seeks to enhance the Nation's long-term energy security by reducing dependency on imported oil and by improving energy efficiency. EPACT establishes a Federal leadership strategy that encourages automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and vehicles. Under EPACT, Federal agencies must acquire increasing numbers of AFVs.

5. Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. 2601 et seq.). In TSCA, the section on Indoor Radon Abatement requires Federal departments to conduct a study of radon levels in Federal buildings and to provide results of the study to EPA. EPA has submitted to Congress a consolidated report on radon levels in Federal buildings. Congress presently is considering new legislation for Federal departments as part of a comprehensive radon abatement program.

6. Energy Independence and Security Act of 2007 (Public Law 110-140). This Act seeks to move the United States toward greater energy independence and security; to increase the production of clean renewable fuels; to protect consumers; to increase the efficiency of products, buildings, and vehicles; to promote research on and deploy greenhouse gas capture and storage options; and to improve the energy performance of the Federal government. The Act requires Federal agencies to: reduce petroleum consumption and increase alternative fuel consumption for Federal fleet vehicles; increase energy and water efficiency in Federal buildings; and promote high-performance green Federal buildings, the procurement of energy efficient products, and their inherent environmental benefits.

6104. REQUIREMENTS

1. AQCRs. The regulations in reference (i) contain the published designations of AQCRs and the attainment, unclassifiable, and nonattainment designations for each state.

2. NAAQS. The regulations at reference (j) contain the primary and secondary NAAQS for each criteria pollutant. With respect to the NAAQS, EPA classifies all areas in the country as follows:

a. Unclassifiable. Any area that, on the basis of available information, cannot be classified as meeting or exceeding the NAAQS for a specific pollutant.

b. Attainment. Any area that meets the NAAQS for a specific pollutant.

c. Nonattainment. Any area that does not meet (or that contributes to ambient air quality in a nearby area which does not meet) the NAAQS for a specific pollutant.

(1) Maintenance Areas. A nonattainment area that achieves the NAAQS and becomes redesignated as an attainment area remains subject to maintenance plan requirements for a statutory defined period. These redesignated areas are referred to as maintenance areas. Maintenance areas are subject to the General Conformity requirements discussed below.

(2) Certain regulatory requirements are considered fundamental and apply to all areas, regardless of their attainment status, while other requirements apply only to nonattainment and maintenance areas, such as the General Conformity requirements. For help in determining attainment, nonattainment, and maintenance area designations, refer to reference (i) (see paragraph 6104.1); reference (k) online at <http://www.epa.gov/oar/oaqps/greenbk/>; or contact the State or local air pollution control office or the appropriate EPA Regional Office.

(3) States have the primary responsibility for implementing the CAA goals. Each state must develop a SIP that outlines the state's strategy for achieving and maintaining the NAAQS. EPA oversees this process.

3. SIPs. EPA-approved SIP rules for each state are published in reference (l).

4. NSPS. The extensive regulations for the NSPS program, over 1,000 pages, are contained in reference (m). The NSPS require covered new or modified stationary sources to install "the best system of emissions reduction" that EPA has determined has been adequately demonstrated. The NSPS apply to a wide variety of stationary source categories, regardless of location and any applicable PSD or nonattainment NSR requirements. The provisions of this regulation apply to the owner or operator of any stationary source that contains an affected facility, the construction, reconstruction, or modification of which is commenced after the date of publication in reference (m) of any standard (or, if earlier, the date of publication of any proposed standard) applicable to such facility. Examples of source categories with applicable NSPS requirements include, but are certainly not limited to, municipal waste combustors, fossil-fuel fired steam generators, incinerators, storage vessels for petroleum liquids, and volatile organic liquid storage vessels. Before constructing any new stationary source, modifying an existing stationary source, or operating any new or modified stationary source Marine Corps commands must determine, whether or not, the stationary source is subject to the NSPS.

5. NESHAPs. NESHAP regulations appear in reference (e) and (n). NESHAP regulations contained in reference (e), such as the asbestos NESHAP, are those promulgated by EPA prior to reference (h) which amended reference (a). Reference (n) contains all of the NESHAPs promulgated to date for the numerous source categories established for the 190 HAPs initially listed under section 112 of reference (a) by reference (h).

a. Major Source. A major source of HAPs is any stationary source (or group of stationary sources) located within a contiguous area and under common control that emits or may emit, 10 tons per year (tpy) or more of any HAP or 25 tpy or more of any combination of HAPs.

b. Area Source. An area source of HAPs is any stationary source of HAPs that is not a major source. The term does not include motor vehicles or nonroad vehicles.

c. Source Categories. Major and area sources are grouped into categories and subcategories. Regulations establishing emission standards for the source categories and subcategories must be issued according to a phased-in schedule, with 25 percent of all categories and subcategories having standards by 1994, 50 percent by 1997, and 100 percent by 2000.

d. Emission Standards. EPA must establish technology-based emission standards that achieve the maximum degree possible of emissions reductions for new and existing sources in the appropriate category, while giving consideration to cost, nonair quality health and environmental impacts, and energy requirements. Measures to achieve the desired emissions standards include: implementing process changes; material substitutions; and measures to treat or control emissions, generally through the application of Maximum Achievable Control Technology (MACT). EPA also must review the MACT standards within 8 years of promulgation to determine if any residual risk to public health remains. If so, it must develop and issue health-based standards in addition to the MACT that provide an ample safety margin to protect public health.

6. PSD. As discussed above under Federal requirements, NSR or preconstruction review must be conducted for all new or modified major stationary sources. The requirements for the Federal PSD program in attainment areas are contained in the regulations promulgated at section 21 in reference (1). These Federal PSD program regulations apply wherever a state lacks an EPA-approved program, either in whole or in part. The PSD program regulations for attainment area SIPs are contained in the regulations promulgated at section 166 in reference (o). While State programs must meet the minimum requirements of the Federal program, states are free to enact a more restrictive PSD program. In a nutshell, the PSD program requires, before construction or modification of a major stationary source occurs, that the project proponent applies for authority to construct the source. A modification occurs when an existing major source makes a physical or operational change that results in a potential significant increase of any regulated pollutant. Note that regulated pollutant covers more pollutants than criteria pollutants and includes ODSs. The application for authority to construct must show that the new or modified source will comply with the NAAQS, the attainment area applicable PSD air quality increment, and will incorporate applicable BACT requirements. Before construction proceeds, ensure all necessary permits have been issued. Before constructing a stationary source in a listed source category or any other stationary source that may be a major stationary source as defined under the regulations, Marine Corps commands must make a PSD applicability determination. At a minimum this requires determining the applicable regulations and whether the source is within a listed source category that will have a PTE equal to or greater than 100 tpy of a regulated pollutant or, if not listed, will have a PTE equal to or greater than 250 tpy of a regulated pollutant. EPA issued guidance to help ensure equitable

treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their State or local regulatory agency for approval to apply it as appropriate.

7. Visibility Protection. The regulations in reference (o), subpart P, contain the requirements for SIPs to protect visibility in Federal Class I areas. The regulations in subpart D of reference (i) identify Class I areas.

8. Nonattainment Area NSR. For nonattainment areas, the preconstruction review or NSR permit regulations for SIPs are promulgated at reference (o), sections 165(a) and (b). Before a new or modified major stationary source may be constructed in a nonattainment area, the project proponent must affirmatively show that there will be no net emissions increase in the area from the operation of the source and that progress will be made toward achievement of the NAAQS in the area (i.e., a net air quality benefit from the project). A modification is defined as any physical or operational change at an existing major source that results in a potential significant increase of a nonattainment pollutant. The preconstruction application must show that the source will be controlled by the applicable LAER technology and that the emissions from the source will, as a minimum, be offset by actual emission reductions (emission offsets) from existing sources within the same air quality area. The emissions offset must be certified by the EPA prior to permits being issued. Before constructing or operating new or modified major stationary sources in nonattainment areas, Marine Corps commands must make a nonattainment NSR applicability determination. At a minimum, this requires determining the applicable regulations and whether the source PTE equals or exceeds the applicable nonattainment area major source threshold. EPA has issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their State or local regulatory agency for approval to apply it as appropriate.

9. Nonattainment Areas. As discussed in paragraph 6103.1b(1), reference (a) has two similar, yet distinct, statutory schemes for criteria pollutant nonattainment areas. The basic, or general, provisions applicable to all criteria pollutant nonattainment areas appear in subpart 1 of part D in subchapter

I of reference (a). The major source threshold in nonattainment areas designated under subpart 1 is 100 tpy of the nonattainment pollutant or precursor. The additional SIP provisions contained in subparts 2, 3, and 4 of part D of subchapter I, divide ozone, CO, and PM nonattainment areas into various classifications based upon the severity of the area's nonattainment. The major source threshold in these areas and the period of years the area has available to demonstrate attainment of the NAAQS varies depending upon the severity of the nonattainment classification. The most severe degrees of nonattainment classifications have the lowest major source threshold and the longest period of years to demonstrate attainment. Reference (a) mandates that areas designated as nonattainment for any pollutant develop an implementation plan to achieve attainment of NAAQS for that pollutant within a defined period of years from the date of the nonattainment designation. New major sources or major modifications to existing major sources in nonattainment areas must obtain a Nonattainment NSR Permit before beginning any new construction or modification. The Nonattainment NSR Application must include LAER technology, applicable emission offsets, impact analysis, and other information relative to improving air quality. In addition, Reasonably Available Control Technology (RACT) emission controls are required for all existing major sources in nonattainment area SIPs. Additional Requirements for nonattainment areas are included below:

a. Ozone - 1-hour and 8-hour NAAQS. Most Volatile Organic Compounds sources at Marine Corps installations, such as emissions from gasoline stations, printing, and ground equipment coating operations, are ozone precursors which in sunlight form ozone. These are regulated under the National Primary and Secondary Ambient Air Quality Standards according to the type of attainment area. VOCs from certain source categories may also be regulated, directly or indirectly, under one or more NESHAPS established by EPA under section 112 of reference (a). Note: VOCs are ozone precursors in the lower atmosphere, which can cause serious human health effects. These substances should not be confused with chemicals such as freon, which deplete the protective ozone layer in the upper atmosphere.

(1) Early Action Compact (EAC) Areas (8-hour NAAQS). On 15 April 2004, the EPA Administrator signed the final rule designating and classifying ozone nonattainment areas for the new 8-hour NAAQS. The final rule also contained the final approved designations of EACs. EACs are nonattainment areas under the 8-hour standard that have been determined to be eligible for a deferred designation. If these areas develop SIPs by 30 September 2005 that demonstrate they will attain the

NAAQS by the end of 2007, and subsequently demonstrate attainment of the NAAQS, they will never be officially designated nonattainment. EPA plans to make final determinations regarding whether such areas have attained the NAAQS. In the interim, NSR and conformity (both transportation and general) requirements will not apply. However, if an EAC area misses any milestone under the compact with EPA, the area will immediately be designated as nonattainment and the applicable prescriptions of subchapter I, part D will apply. Such areas will be required to submit an attainment SIP within one year of the nonattainment designation.

(2) Basic Ozone Nonattainment Areas (8-hour NAAQS). On 15 April 2004, the EPA Administrator signed the final rule designating and classifying nonattainment areas for the 8-hour ozone NAAQS. The "Basic" ozone nonattainment area classification applies to those areas of the country that were designated under subpart 1 of part D under subchapter I. Subpart 1, discussed above, contains general, less prescriptive, requirements for nonattainment areas for any criteria pollutant, including ozone. Basic nonattainment areas are areas that had a design value (defined at section 900(d) in reference (o)), based on the most recent three years of monitoring data, of less than 0.085 parts per million (ppm) ozone. However, the 8-hour ozone standards were successfully challenged in a lawsuit brought by numerous states and municipalities. The Court vacated and remanded the EPA 8-hour ozone rule, allowing nonattainment areas to submit a streamlined SIP under subpart 1 (of part D of Title I) of reference (a). EPA plans to propose a rule responding to the remand late in 2008 and hopes to finalize that rulemaking in mid-to-late 2009. The other nonattainment classifications, under subpart 2 of part D under subchapter I, for the 8-hour NAAQS are identical to the classifications applied to 1-hour Ozone nonattainment areas discussed below, except that no area of the country was designated as "Extreme" nonattainment for the 8-hour standard. As mentioned above, the minimum SIP control requirements for these areas are not expected to be promulgated until August 2004, but they will most likely mirror the requirements for areas similarly classified under the 1-hour standard.

(3) Marginal Nonattainment Areas (1-Hour NAAQS). In "marginal" nonattainment areas, a major source is defined as one that emits, or has the potential to emit, 100 tpy or more of VOCs or NO_x. Standards have been published for sulfur oxides, PM, CO, ozone, NO_x, and Pb. In nonattainment areas, these substances are regulated according to the type of attainment

area and the volume emitted. Those areas classified as "marginal" nonattainment for OZONE must:

(a) Apply NSR requirements to major VOC and NO_x sources.

(b) Complete an emissions inventory from all sources, to be updated every 3 years.

(c) Apply RACT requirements which were in effect prior to the CAA enactment.

(d) Devise a construction and operating permit program for new and modified sources.

(e) Write an emissions statement for stationary sources of VOCs and NO_x.

(f) Devise an offset program, which requires that each new or modified major source of VOCs or NO_x be offset by the ratio of 1.1 to 1.

(g) Marginal Nonattainment Areas (8-Hour NAAQS). The SIP requirements for these areas, which are projected to be promulgated in a final rule during August 2004, will very likely mirror those listed above. These areas must submit SIPs that demonstrate attainment within 3 years of the effective date of their designation and classification - 15 June, 2004. The NSR major source and general conformity thresholds for VOCs and NO_x will be 100 tpy each, and a motor vehicle I/M program will not be required. However, an area may voluntarily implement an I/M program for additional credit (toward demonstrating attainment) in their SIP. The NSR offset ratio will be 1.1 to 1.

(4) Moderate Nonattainment Areas (1-hour NAAQS). In "moderate" nonattainment areas, a major source is defined as one that emits, or has the potential to emit, 100 tpy or more of VOCs or NO_x. In addition to meeting the requirements of "marginal" areas, "moderate" nonattainment areas must:

(a) By 1996, show reasonable further progress towards attainment through a 15 percent reduction in VOCs from the baseline.

(b) Apply RACT to all major stationary VOC and NO_x sources.

(c) Require Stage II vapor recovery systems for all facilities that distribute more than 10,000 gallons of gasoline per month or, for independent, small business marketers, 50,000 gallons of gasoline per month. Requirements for the installation and operation of Stage II controls are effective in the state where the facility is located as follows: for new facilities (i.e., built after enactment) within 6 months after a rule requiring Stage II controls is adopted, for existing facilities with 100,000 gallons or greater capacity (average monthly sales for 2 years prior to rule adoption date) within 1 year after adoption, or for all other facilities within 2 years.

(d) Initiate a basic vehicle I/M program.

(e) Have an offset program which requires each new or modified major source of VOCs or NO_x to be offset by the ratio of 1.15 to 1.

(5) Moderate Nonattainment Areas (8-hour NAAQS). "Moderate" areas must submit SIPs by 15 June 2007, and these areas must demonstrate attainment by 15 June 2010. Like marginal areas the NSR major source and general conformity thresholds will be 100 tpy each for NO_x and VOCs. The SIP must include a Basic I/M program for motor vehicles, and the NSR offset ratio will be 1.15 to 1.

(6) Serious Nonattainment Areas (1-hour NAAQS). In "serious" nonattainment areas, a major source is defined as one that emits, or has the potential to emit, 50 tpy or more of VOCs or NO_x. In addition to meeting the requirements of "moderate" nonattainment areas, "serious" nonattainment areas must:

(a) Operate an enhanced ambient monitoring program for NO_x, OZONE, and VOCs.

(b) Demonstrate through computer modeling that required provisions will lead to attainment.

(c) By 1996, show reasonable further progress towards attainment through a 15 percent reduction in VOCs from the baseline, plus an additional 3 percent per year averaged over each consecutive 3-year period until attainment.

(d) Institute an enhanced vehicle I/M program to be enforced through denial of vehicle registration.

(e) Establish a clean-fuel fleet program in those areas having a 1980 census population of 200,000 or more.

(f) Have an offset program which requires each new or modified major source of VOCs or NO_x to be offset by the ratio of at least 1.2 to 1.

(7) Serious Nonattainment Areas (8-hour NAAQS). These areas must submit SIPs by 15 June 2007 and must ultimately demonstrate attainment of the 8-hour standard by 15 June 2013. Comprehensive VOC and NO_x emissions inventories must be prepared by 2006 and must be updated every 3 years until the area attains the standard. The NSR major source and general conformity thresholds will be 50 tpy each for VOCs and NO_x, and the NSR offset ratio will be 1.2 to 1. In addition, these areas must implement the Enhanced I/M program for motor vehicles.

(8) Severe Nonattainment Areas (1-hour NAAQS). In "severe" nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 25 tpy or more of VOCs or NO_x. In addition to meeting the requirements of "serious" nonattainment areas, "severe" nonattainment areas must:

(a) Identify and adopt enforceable transportation-control measures to offset growth in vehicle miles traveled and require employers of 100 or more workers to increase average vehicle occupancy by 25 percent.

(b) Have an offset program requiring that each new or modified major source of VOCs or NO_x be offset by the ratio of at least 1.3 to 1.

(c) By December 31, 2000, submit to EPA a plan detailing enforcement provisions.

(9) Severe Nonattainment Areas (8-hour NAAQS). These areas must prepare and submit SIPs by 15 June 2007. Severe-15 areas must demonstrate attainment of the 8-hour standard by 15 June 2019; and Severe-17 areas must attain the 8-hour standard by 15 June 2021. The NSR major source and general conformity thresholds will be 25 tpy each for VOCs and NO_x, and the NSR offset ratio will be 1.3 to 1. In addition, these areas must implement the Enhanced I/M program for motor vehicles.

(10) Extreme Nonattainment Areas. In "extreme" nonattainment areas, a major source is defined as one that emits, or has the potential to emit, 10 tpy or more of VOCs or NO_x. In addition to meeting the requirements of "severe"

nonattainment areas, states with "extreme" nonattainment areas must:

(a) Have an offset program that requires that each new or modified major source of VOCs or NO_x be offset by the ratio of at least 1.5 to 1.

(b) Obtain an internal emissions offset of at least 1.3 to 1 for modifications of major stationary sources subject to NSR.

(c) Develop a plan that requires existing, new, or modified electric utility and industrial/commercial boilers emitting more than 25 tpy NO_x to burn as their primary fuel natural gas, methanol, ethanol, or other clean fuel, or develop a plan to use advanced technology to control NO_x emissions.

b. CO

(1) Moderate Nonattainment Areas. Areas designated as "moderate" nonattainment have a design value between 9.1 and 16.4 ppm. "Moderate" nonattainment areas must:

(a) Submit an accurate inventory of all emission sources and update the inventory every 3 years until attainment of the NAAQS is achieved.

(b) Annually provide and update a forecast of vehicle miles traveled, if the design value is 12.7 ppm or greater.

(c) Institute a vehicle I/M program applicable to CO with requirements equivalent to those for "marginal" OZONE nonattainment areas. For those areas with a design value greater than 12.7 ppm, the requirements applicable to CO are the same as the enhanced I/M program required of "serious" ozone nonattainment areas.

(d) Institute a clean-fuel fleet program like that required in "serious nonattainment for CO" or "serious nonattainment for ozone" nonattainment areas if the design value is 16 ppm or greater.

(e) Demonstrate attainment of the CO standard if the design value is greater than 12.7 ppm. Such a demonstration must incorporate specific annual emission reductions necessary to achieve attainment.

(f) Require those areas with a design value of 9.5 ppm or above to dispense oxygenated fuel during high CO portions of the year.

(2) Serious Nonattainment Areas. In those "serious" nonattainment areas where stationary sources are believed to contribute substantially to ambient CO levels, a major source of CO is one which has the potential to emit 50 tpy of CO. "Serious" nonattainment areas have a design value of 16.5 ppm and above. In addition to all the requirements of "moderate" CO nonattainment areas with a design value of 12.7 ppm or higher, "serious" CO nonattainment areas must:

(a) Require transportation control measures targeting CO like those which apply to "severe" OZONE nonattainment areas, with the exception that CO is targeted.

(b) Implement an economic incentive program to encourage emissions reductions of 5 percent per year until attainment. In those "serious" nonattainment areas where stationary sources are believed to contribute substantially to ambient CO levels, a major source of CO is one which has the potential to emit 50 tpy of CO pollution.

(3) Multi-State CO Nonattainment Areas. A multi-state CO area exists if a CO nonattainment area is part of more than one state. In such an interstate situation, each of the affected states must coordinate the revision and implementation of the CO SIPs as they apply to the affected areas.

c. Particulate Matter 10 Microns (PM₁₀) or Smaller. Areas designated as nonattainment for PM₁₀ are classified initially as "moderate" nonattainment areas; areas failing to attain by the specified attainment date are reclassified as "serious." In addition, if EPA determines that any "moderate" nonattainment areas are unable to achieve the NAAQS practicably by the specified attainment date, those areas will be reclassified as "serious" nonattainment areas.

(1) Moderate Nonattainment Areas. Areas designated as "moderate" nonattainment must achieve attainment as quickly as possible, but no later than 6 years after classification. EPA may extend attainment dates if implementation requirements have been met and if performance standards have been achieved. "Moderate" nonattainment areas must:

(a) Devise a construction and operating permit program for new and modified stationary PM₁₀ sources;

(b) Use computer modeling to demonstrate that attainment by the attainment date can or cannot be achieved; and

(c) Use Reasonably Available Control Measures, including RACT, by 10 December 1993, or within 4 years of classification as "moderate" nonattainment.

(2) Serious Nonattainment Areas. In "serious" nonattainment areas, a major source of PM₁₀ is defined as any stationary source (or group of stationary sources located in a contiguous area and under common control) that emits, or has the potential to emit, 70 tpy of PM₁₀. All of the requirements that apply to "moderate" nonattainment areas also apply to serious nonattainment areas. In addition, "serious" nonattainment areas must:

(a) Use Best Available Control Measures (BACMs) within 4 years of classification as "serious" nonattainment.

(b) Demonstrate attainment (or demonstrate the impracticability of attainment for those areas seeking an extension) within 4 years of designation as "serious." Those areas designated as "serious" due to a failure to attain the NAAQS must demonstrate attainment within 18 months of such designation. Also, provide an outline of the BACM to be employed within 18 months.

(c) If a "serious" PM₁₀ nonattainment area fails to attain the NAAQS, it must submit a demonstration of attainment, which provides for an annual reduction of PM₁₀ emissions of at least 5 percent in the area, based upon the most recent emissions inventory. All attainment demonstrations must include quantitative milestones which demonstrate how reasonable further progress will be achieved. "Serious" PM₁₀ nonattainment areas must achieve milestones every 3 years until reaching attainment.

(d) EPA may waive any requirements for a "serious" PM₁₀ nonattainment area if it is determined that man-made sources do not contribute significantly to ambient PM₁₀ concentrations. Likewise, attainment dates may be waived if it is determined that non man-made sources contribute significantly to the violation of the NAAQS.

d. Particulate Matter 2.5 Microns (PM_{2.5}) or Smaller. Under reference (a) section 109 (reference (q)) it is EPA's responsibility to establish both health- and welfare-based NAAQS for criteria pollutants - the primary and secondary standards, respectively. In addition, EPA is required to periodically review the efficacy of the NAAQS and promulgate new standards as required. Reference (r) was EPA's notice of promulgation of the final rule adding a new fine PM standard, the PM_{2.5} NAAQS. That rulemaking, codified at reference (j), established the PM_{2.5} primary and secondary NAAQS as well as the procedures for measuring and determining whether an area should be designated attainment or nonattainment. Such designations for PM_{2.5} became effective in 2005. General Conformity requirements apply in PM_{2.5} nonattainment and maintenance areas as of April 2006, one year after the effective date of the designations. In April 2007, EPA issued the final implementation rule that outlines the provisions states must include in their SIPs to attain the NAAQS.

10. Conformity Rule

a. Prohibition. Section 176(c) of reference (a) prohibits any Federal agency from engaging in, supporting, providing financial assistance for; or licensing, permitting, or approving any activity that does not conform to an applicable SIP or Federal Implementation Plan (FIP). EPA outlines criteria and procedures for determining conformity. A Federal agency must determine whether a Federal action conforms to the SIP or FIP before implementing it. The General Conformity Rule applies only to Federal actions in areas designated as nonattainment or maintenance (defined in paragraph 6105.13). The nonattainment and maintenance area thresholds, excluding the new 8-hour ozone standard, are set out in tables 6-1 and 6-2.

b. SIP Revision. SIP conformity criteria and procedures may be more stringent than EPA rules if the state adopts conformity requirements that are equally applicable to all nongovernmental sources.

11. Enforcement/Citizen Suit Provisions

a. Sovereign Immunity. The broad waiver of sovereign immunity in reference (a) subjects Federal facilities to all Federal, State, and local air pollution control requirements. These CAA requirements generally are enforced by the State or local air quality regulatory agency; however, EPA also has direct enforcement authority for Federal rules and has authority to enforce approved SIP rules.

b. State or Local Administrative Punitive Penalties.

Marine Corps commands that are assessed punitive civil fines or penalties by State or local authorities for violations of air pollution control requirements must consult with command or regional environmental counsel before entering into settlement negotiations or paying any penalty. As of this writing, the U.S. 6th Circuit Court of Appeals has ruled that Federal facilities must pay State or local punitive penalties for past violations under reference (a). (See reference (s)). Therefore, DOD installations located in Kentucky, Michigan, Ohio, and Tennessee must pay such penalties. A California State court has also ruled that DOD entities must pay such penalties (See reference (t)); the DOJ agreed with the Service's recommendation not to appeal this case, but views it as controlling only in that jurisdiction - Sacramento County. DOD policy in the 9th Circuit (Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington) is that installations may negotiate payment of state-levied penalties, but can pay them only upon the express approval of the DOJ. This was at least partly due to the DOJ's desire to preserve their position in regards to another case in the 11th Circuit (reference (u)) which was decided in favor of the government.

c. EPA Administrative Punitive Penalties. In 1997, the DOJ Office of Legal Counsel published an opinion that determined that EPA has authority under reference (a) to assess punitive civil monetary penalties against Federal facilities for violations of the Act. This authority includes penalties assessed by EPA inspectors under the Field Citation Program and administrative penalties under section 113 in reference (a). The EPA Consolidated Rules of Procedure (CROP) for administrative penalty proceedings are published in reference (v). Marine Corps activities that receive Administrative Complaints from their EPA Regional office under section 113 in reference (a) and the CROP, must immediately notify their command and regional counsel and their chain of command. Failure to properly submit a detailed answer to an Administrative Complaint to the Regional Hearing Clerk within 30 days of receipt of the complaint will be deemed an admission to all allegations contained in the complaint. The maximum penalty per violation under the Field Citation program, as adjusted for inflation in 1996 (reference (x)) and again in 2002 (reference (x)), is \$6,200. The procedures for issuance of field citations and for contesting them are published in reference (y). The maximum penalty, adjusted for inflation that EPA may assess under reference (v) is \$32,500 per day per violation up to a maximum total penalty of \$270,000; however, the \$270,000 maximum

total penalty per proceeding may be increased by EPA if the U.S. Attorney General concurs.

d. Administrative Fees. Marine Corps commands must pay administrative fees and assessments imposed by Federal, State, or local authorities when imposed to defray the costs of the air pollution regulatory program, when the fees are imposed generally on all similarly situated regulated entities in the same manner and extent (i.e., nondiscriminatory against Marine Corps facilities), and when the fees are not dependent upon the detection or processing of alleged violations.

e. Citizen Suits. The regulations for the prerequisite notice for CAA citizen suits are published in reference (z). Civil actions may be brought against any individual or governmental body (including the United States) for present or repeated CAA violations in the Federal District Court in the district where the source alleged to be in violation of reference (a) is located.

12. Title V Operating Permits. EPA regulations at reference (aa) establish minimum requirements for State programs. EPA regulations at reference (ab) establish the Title V Operating Permit requirements that apply in any state that has not obtained full approval from EPA for its part 70 program by the applicable deadline, or in any state that has lost approval for its program under reference (a), section 502(i)(4). Additional guidance for development of State programs and source compliance with the regulatory requirements was issued in three EPA White Papers -- references (ac); (ad); and (ae). EPA has also issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their State or local regulatory agency for approval to apply it as appropriate. Title V of reference (a) requires that each state develop, implement, and enforce an operating permit program. However, EPA retains significant authority to oversee State permit program implementation. The EPA must review and approve State permit programs, review proposed permits, veto improper permits, and, if a state fails to adopt or implement an approved program, develop and implement a Federal permit program. The permit program attempts to clarify, in a single document, all the requirements applicable to a source, including requirements from the SIP, the acid rain program, and the air toxics program. The permit program also requires that permit fees be used to finance State air programs. After the effective date of any permit

program approved under Title V, the law prohibits operating without a permit or operating in violation of any requirement of such a permit. The program applies to all existing and new major stationary sources of air pollution, including those operated on Federal facilities, which are subject to regulation under reference (a). The term "Major Source" is defined in paragraph 6104.5a for air toxics and paragraphs 6104.7-10 for criteria pollutants. Once a source is subject to a Title V permitting program, its emissions of all regulated air pollutants (except those which meet the permitting authority's criteria for "insignificant" emissions) must be described in the permit application along with all emissions of pollutants for which the source is considered major. Similarly, applications must describe all emissions units that emit regulated air pollutants, except for those emission units deemed insignificant. Regulated air pollutants include, but are not limited to, all criteria pollutants and precursors; any pollutant subject to a NSPS; any pollutant subject to reference (e) or a case-by-case MACT determination; and Class I or II ODSs.

a. Permit Application. Applications for operating permits must be "timely" and "complete." An application is "timely" and "complete" if submitted according to the approved State program.

b. Certification. A responsible official (typically the installation commander) must sign the Title V Operating permit application certifying its truth, accuracy, and completeness. The certification must include the facility compliance status and the method used to determine this status. In addition, under reference (a) section 503(b)(2), the responsible official must also certify the facility's compliance or noncompliance regarding all the permit's requirements for the previous 12 months, at least once a year. The Title V Compliance Certification must be filed with the State or local permitting agency, as well as the EPA regional office. These certifications necessarily require a thorough periodic and systematic review of a facility's compliance status throughout the reporting year, due to the potential for individual liability for false reporting by the responsible official in any certification, as well as possible regulatory or citizen-suit enforcement against the facility for any reported noncompliance. The annual compliance certification must be true, accurate and complete, based on information and belief formed after a reasonable inquiry.

13. State and Local Permit and Regulatory Programs. State or local air quality regulations typically require that all new or

modified stationary sources of emissions obtain a permit, unless the source category is expressly exempted in the regulations. Typical State or local regulations list a handful of insignificant stationary source categories that are exempt from permitting requirements, such as small portable emergency backup generators. However, insignificant sources expressly exempt from preconstruction and operating permit requirements may be subject to periodic recordkeeping, reporting, and other requirements or limitations, such as operating records detailing hours of operation, fuel usage, or the type or grade of fuel used. For all nonexempt source categories usually a preconstruction application or an operating permit application, or both, are required before any new stationary source of emissions may be constructed or operated. These regulations also typically require an application before reconstruction or modification occurs to any existing source, and the operator usually must obtain a new operating permit, or an amendment to an existing operating permit before operating the source after reconstruction or modification. Permits will usually include permit conditions under which a particular emission unit or group of emission units will be required to operate. The permit conditions will often be taken directly from Federal and State regulations, although they may also be based on the specific air pollutant emitting situation at the facility. State and local regulatory agencies typically have enacted general air quality rules that are designed to control or abate pollution that may, or may not, be included in permit conditions. These general rules address visible emissions (or opacity), odor, nuisance, and equipment breakdown provisions. The requirements from these rules are sometimes called facility-wide applicable requirements.

14. Provisions for Mobile Sources. For the most part mobile source programs do not have a direct impact Marine Corps installations or activities. With the exception of California (and states that adopt regulations identical to California's), mobile source emission controls are predominantly implemented through nationwide programs promulgated by EPA. The typical regulations under subchapter II of reference (a) target manufacturers of new motor vehicles and engines, nonroad vehicles and engines, and/or the fuels they operate on. These regulations typically contain an automatic national security exemption (NSE) for manufacturers to apply to engines for DOD weapon systems and armored vehicles. The regulations also typically contain provisions for case-by-case NSEs for engines that do not meet the criteria for an automatic exemption. Examples of potential application of the automatic NSE by a manufacturer would include the Light Armored Vehicles and the

M1-A1 Abrams Tank. An example of a possible application of a case-by-case NSE would be the outboard engines for Zodiac boats used by reconnaissance or Special Forces. A few mobile source programs, however, do expressly target the activities of Federal agencies, including the military, such as the centrally-fueled fleet program and fleet vehicle requirements under references (af) and (ag). These programs, among other things, are briefly discussed below.

a. Aircraft. Reference (a) authorizes EPA, in consultation with the Secretary of Transportation, to develop emission standards applicable to any air pollutant emission from any class or classes of aircraft engines. No State or local air quality region may adopt or attempt to enforce any standard respecting any air pollutant emission from any aircraft or engine unless such standard is identical to one developed by EPA and the Secretary of Transportation. While limited regulation of emissions from aircraft engines is possible, such regulation applies only to uninstalled aircraft engines. The regulations for control of air pollution from aircraft and aircraft engines are contained in reference (ah).

b. Nonroad Engines. EPA conducted and published a study of nonroad engine and vehicle emissions in November 1991. On the basis of this study, EPA initiated actions to establish national standards for certain categories of nonroad engines.

c. Vehicle I/M. Certain nonattainment areas require vehicle emissions testing. Section 118(c) in reference (a) requires Federal government fleet vehicles to comply with the provisions of an approved I/M program in ozone or CO nonattainment areas designated under subparts 2 or 3 of part D of subchapter I of reference (a). Military tactical vehicles are exempt from the I/M program requirements in those areas. Section 118(d) requires that Federal agencies ensure that their employees operating their motor vehicles on Federal facilities comply with the I/M requirements in those same areas designated as nonattainment for ozone and CO. To implement those requirements, EPA promulgated requirements for states to include in their SIPs for those areas at reference (o), subpart S. However, in a July 29, 1998 letter, the DOJ, Environment and Natural Resources Division, advised EPA that the portion of its regulations relating to State I/M requirements for Federal agency fleet and certain Federal employee vehicles under reference (a) sections 118(c) and (d), respectively, were invalid. In short, State SIP rules (under reference (o), subpart S) that target only Federal fleet vehicles or Federal employee vehicles for particular I/M related requirements based

upon EPA's rule are probably invalid. On the other hand, State SIP rules that apply to all fleet vehicle owners/operators in the State or employee vehicles of all employers within the state are probably valid requirements for which Federal sovereign immunity has been waived under section 118(a) of reference (a). EPA is in the process of promulgating a rule to implement reference (a) section 118(c) and (d) requirements for Federal fleet and employee vehicles. EPA has published draft guidance, reference (ai). However, until EPA promulgates a final rule, facilities will either need to comply with nondiscriminatory I/M programs (e.g., Washington State's fleet vehicle program), or maintain the status quo (e.g., fleet and employee vehicle I/M requirements in California), or seek guidance from CMC (LFL) or the advice of counsel whether any particular fleet or employee vehicle I/M requirements legally apply in the absence of the EPA rule. For installations currently complying with pre-existing State I/M requirements, including both fleet and employee vehicle programs, the DOD position is to maintain the status quo until EPA revokes existing invalid State SIP provisions under its own existing rule by promulgating a new Federal rule and implementation program.

d. Fuels

(1) Leaded Gasoline. All facilities in the United States that dispense fuel for vehicles with catalytic converters will be equipped to dispense unleaded gasoline to such vehicles. It is illegal to knowingly dispense leaded gasoline into vehicles with catalytic converters or into any vehicle labeled for unleaded gasoline. As of 1995, the production or sale of leaded gasoline or lead additives is prohibited.

(2) Oxygenated Gasoline. States that include all or part of an area designated nonattainment for CO and having a design value (defined in paragraph 6105) of 9.5 ppm or higher must include in their SIP a provision for selling and dispensing oxygenated gasoline in metropolitan areas within the nonattainment area. EPA requires that this provision be in effect during high CO portions of the year (winter). EPA may waive the requirement for oxygenated fuel if a state can demonstrate satisfactorily that imposing such a provision interferes with the attainment of any other NAAQS.

(3) Reformulated Gasoline. Beginning in 1995, the nine worst ozone nonattainment areas with a 1980 population greater than 250,000 must implement the use of reformulated gasoline. Other nonattainment areas may petition to opt-in to the reformulated gasoline program; however, if domestic supplies are

inadequate, EPA may delay extending the program into these areas by up to 3 years.

(4) Volatility. To reduce the substantial release of VOCs into the atmosphere, Federal guidelines limit the volatility of gasoline marketed during the high ozone season (summer) in the CONUS.

(5) Diesel Fuel Sulfur Content. Beginning with model year 2007, the sulfur content of highway diesel fuel cannot have a sulfur content higher than 15 ppm (reference (aj)). This requirement applies to the fuel used in Marine Corps fleet vehicles and privately owned vehicles. However, the regulation provides an exemption for the use of higher sulfur JP-5 and JP-8 in tactical vehicles used on highways if their engines have either the automatic NSE or case-by-case NSE discussed above. Proposed rulemaking would also lower the sulfur content dramatically in heavy duty nonroad diesel engines and vehicles. It is anticipated that the use of JP-5 and JP-8 in tactical ground support equipment will similarly be exempted from the low (and ultra low) sulfur diesel fuel requirements.

e. Clean Fuel Fleet Vehicles. According to reference (a), the clean fuel requirements impact the following owners/operators of centrally-fueled fleets of 10 vehicles or more: those located in "serious," "severe," or "extreme" ozone nonattainment areas, and those located in "serious" CO nonattainment areas. Beginning with model year 1998, 30 percent of new light-duty fleet vehicle acquisitions must be clean-fuel vehicles; in model year 1999, that percentage increases to 50 percent; after the year 2000, it increases to 70 percent. Reference (a) mandates that any Federal facility that dispenses clean alternative fuels to Federal fleet vehicles must offer such fuel for public sale during reasonable business hours, subject to national security concerns and the commercial availability of such fuels in the vicinity of the facility.

f. AFVs. References (af), (ag), and (ak) include certain requirements for Federal fleet vehicles and purchasing/leasing AFVs. These requirements do not apply to police and emergency vehicles or vehicles used for military purposes that have been certified by the Secretary of Defense as exempt. The CMC (LFS) implements the Fleet vehicle and AFV requirements of references (af), (ag), and (ak) in accordance with Department of Energy guidance.

15. Miscellaneous Provisions

a. Jet Engine Test Cells. Under reference (a), EPA is evaluating emissions from aircraft engine test cells. NO_x emissions from test cells will be studied jointly by the DOD, the Department of Transportation, and EPA. Following the completed study, states may choose to adopt or enforce any standard for NO_x emissions from aircraft engine test cells only after issuing a public notice stating whether such standards are in accordance with the findings of the study. The regulations for control of air pollution from aircraft and aircraft engines are contained in reference (ah).

b. FIPs. Section 110(c) of reference (a) requires EPA to issue a FIP when a state has failed to make a required SIP submission, when the SIP submission does not satisfy the minimum criteria, or when a SIP submission has been disapproved in whole or in part and the state has not corrected the deficiency in a timely manner. Typically, a SIP is disapproved because it does not contain sufficiently strict requirements to demonstrate attainment. A FIP generally will contain requirements that apply to more types of sources and that control emissions more stringently than did the SIP.

c. Emission Reduction Credits (ERCs). Sections 110(a)(2)(A) and 172(c)(6) of reference (a) authorize states, or their local Air Quality Districts (AQDs), to establish a trading system for ERCs. ERCs are created when pollution emitting equipment is removed from service or when emissions from in-service equipment are reduced, when the emission reductions are not otherwise required by reference (a) or a current SIP, and when the owner applies under the AQD regulations for reduction credit. Each ERC constitutes permission from the AQD to emit a stated amount of a specific air pollutant. Following validation by the AQD, ERCs may be transferred by sale, lease, or other disposal method for use by other emission sources within the same air quality districts. Marine Corps installations should obtain stationary and/or mobile source ERCs from any permanent, quantifiable, excess emission reductions in areas with emissions banking and trading programs. Marine Corps installations and activities shall not dispose of ERCs, or forego the creation of ERCs, without first coordinating the proposed disposition with CMC (LFL) and the United States Marine Corp (USMC)/DOD Regional Environmental Coordinator (REC).

d. Federal Contractor Restrictions. No Federal agency may enter into a contract with any person who is convicted of a criminal offense under reference (a). This restriction applies

to the procurement of goods, materials, and services to perform such contract at any facility which gave rise to the conviction if such facility is owned, leased, or supervised by such person.

e. Acid Rain. In order to reduce the detrimental environmental effects of acid deposition, Title IV of reference (a) mandates large-scale reductions in the emissions of SO₂ and NO_x through an innovative market-based approach aimed at electric utility plants. By the year 2000, the goal of Title IV was to reduce SO₂ emissions by 10 million tons below 1980 emission levels and to reduce NO_x emissions by 2 million tons from 1980 levels.

f. Aerospace and Marine Coatings. Reference (a) requires EPA to issue NESHAPs and Control Techniques Guidelines (CTGs) to control emissions from aerospace manufacturing/rework and shipbuilding/repair. The rules establish MACT and BACT requirements for aircraft and ship activities such as cleaning, painting, depainting, maskant application, and waste handling. Generally, the emission reductions are achieved through the use of compliant materials or control devices. Other requirements include testing, recordkeeping, and reporting protocols. These rules have substantial cost and labor impacts. References (e) and (n) address a specific source category under reference (a), similar to the NESHAPs for gasoline terminals or halogenated solvent cleaning.

g. Training. Workers who prepare or supervise the preparation of air emissions inventories, air emissions permit requests, and air emissions reports will receive environmental overview training as specified in chapter 5 of this Manual. They will receive specific comprehensive training in their assigned subject matter and must be familiar with the provisions outlined in chapter 5 of this Manual. In addition, reference (a) requires the following:

(1) Chemical Process Safety Management. Reference (a) requires the issuance of a chemical process safety standard to protect employees from the workplace dangers associated with accidental releases of highly hazardous chemicals. Employers must train workers in operating procedures, emphasize hazards and safe practices, ensure that contractors and contracted employees have appropriate information and training, and train and educate employees and contractors in emergency response as comprehensively and effectively required by reference (am). The standard and a list of highly hazardous chemicals can be found in section 119 of reference (an).

(2) Solid Waste Incineration. Reference (a) requires a program for the training and certification of operators of high capacity (greater than 250 tons per day) solid waste incineration units and high-capacity fossil fuel-fired plants. As of November 15, 1994, to legally operate any such unit, each person with control over processes affecting emissions from such units must satisfactorily complete a training program meeting EPA requirements.

h. Prescribed Burning/Vegetation Management. EPA does not directly regulate prescribed burning. However, EPA encourages states to develop Smoke Management Plans to mitigate impacts to public health and welfare from such activities. For more detail, see EPA draft policy guidance for prescribed burning activities in 1998, reference (ao) and refer to any applicable State or local requirements.

16. Radon. The Navy Radon Assessment and Mitigation Program (NAVRAMP) was submitted and approved by EPA as the plan to identify, mitigate, and prevent radon contamination in Navy/Marine Corps-occupied buildings. All Marine Corps installations were invited to participate in the NAVRAMP testing program to identify the level of indoor radon. Buildings determined to have indoor radon levels above 4 picoCuries per liter (pCi/L) will be mitigated to reduce levels. Appropriate radon reduction techniques will be incorporated into the design and construction phases of new structures where it has been determined necessary because of regulatory requirements, historical data, or geological conditions.

17. ODSs. Regulations promulgated in reference (ap) are enacted to implement reference (aq) and sections 608 and 609 of reference (a). These regulations, which in general ban the use of certain nonessential Class I and II substances and establish a myriad of requirements to promote responsible use, reuse, and recycling of essential substances, apply to all Marine Corps installations. Installations with large refrigeration and air conditioning units (i.e., equipment containing more than 50 pounds of refrigerant) or those installations using ODSs in metal parts degreasing operations will have more requirements than activities with smaller ODS consumption. For further detail on the ODS program, see reference (c). Appliances subject to regulation are those that use ODSs as a refrigerant and which are used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer. The regulations in reference (ap) establish requirements regarding the service, maintenance, repair, and/or disposal of a wide array of equipment containing ODSs for

refrigeration purposes. The regulations establish record keeping requirements, technician certification requirements, leak detection and repair requirements, periodic leak rate determination and replacement requirements, and requirements pertaining to the disposal of small and large appliances common to most of our installations. Besides building air conditioning and food service refrigeration units, other ODS-containing sources commonly used at Marine Corps installations include refrigerated drinking fountains, ice machines, soft drink vending machines, antifreeze recycling units, halon-charged fire suppression systems, and vehicle air conditioning recycling units.

18. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable Executive Orders, and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

6105. TERMS AND DEFINITIONS

1. Acid Rain. The acidic deposition caused by the atmospheric chemical transformation of SO₂ and NO_x emissions.

2. Air Pollution Emergency Episodes. The accumulation of air pollutants in an area that reaches levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of individuals.

3. Alternative Fuels. Substitutes for traditional petroleum products such as gasoline and diesel fuel. Reference (af) defines alternative fuels to mean methanol, denatured ethanol, and other alcohol; mixtures containing up to 85 percent (but not less than 70 percent) alcohol with the balance consisting of gasoline or other such fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived fuels; fuels derived from biological materials; electricity; and other substantially nonpetroleum-based fuels.

4. BACM. Emission control measures that achieve the greatest possible reduction in the emission of particulate matter.

5. BACT. Emission control technology to be applied to new sources which are located in areas that are in attainment of the NAAQS and that trigger NSR for the pollutants emitted from the new sources. 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.

6. Clean Fuels. Any fuel such as alcohol or fuel blends containing 85 percent alcohol with gasoline or diesel; natural gas; liquefied petroleum gas; hydrogen; reformulated gasoline and diesel fuel; hydrogen; or any power source, including electricity, that meets the clean-fuel requirements and emission standards of reference (a).

7. Conformity. A conformity determination is a certification by the installation that it will comply with all requirements of the SIP. A determination is required only if: emissions levels exceed de minimis levels, defined in section 853(b)(1) or (2) of reference (o), or the Federal action is regionally significant, and the installation is located in a nonattainment or maintenance area.

8. CTG. Documents published by EPA designed to assist the states/localities in selecting the most appropriate technologies to apply for the control of major sources of air pollution.

9. Criteria Pollutant. A pollutant that the EPA Administrator has determined will cause or contribute to air pollution, that may reasonably be anticipated to endanger public health and welfare and for which air quality criteria have been established. Criteria pollutants include: SO₂, NO₂, ozone, CO, Pb, and PM.

10. Design Value. The value (or range), usually measured in ppm, used for nonattainment classification of criteria pollutants; it reflects the severity of the nonattainment area.

11. FIP. 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.

12. LAER. That rate of emissions that reflects the most stringent emission limitation contained in the implementation plan of any state for such class or category of source, or the most stringent emission limitation achieved in practice by such class or category of source, whichever is more stringent. The application of an LAER will not permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under the applicable NSPS.

13. Maintenance Area. Any geographic region of the United States previously designated nonattainment pursuant to reference (h) and subsequently redesignated to attainment subject to the

requirement to develop a maintenance plan under section 175A of reference (a).

14. Major Modification. Any physical or operational method change of a major stationary source that would result in a significant net emissions increase of any pollutant regulated by reference (a).

15. Major Source. Any source capable of emitting more than a threshold amount of a particular pollutant per year. The threshold amounts vary according to the attainment classification of the area in which the source is located and the pollutant (or pollutants). EPA has issued guidance on major source issues (reference (p)).

16. MACT. Emissions control technology which achieves the maximum emission reduction possible. MACT is applicable only to major sources of pollutants listed as HAPs under section 112 of reference (a).

17. Motor Vehicle. Any self-propelled vehicle designed for transporting persons or property on a street or highway.

18. NAAQS. Air quality standards that EPA has established for six criteria pollutants in order to provide an adequate margin of safety in protecting the general health and welfare of the public.

19. NSPS. See Standards of Performance for New Stationary Sources (paragraph 6105.33).

20. NSR. State program for reviewing major sources and modifications prior to construction in both nonattainment and PSD program areas.

21. Nonattainment Area. An area which fails to meet the NAAQS for one or more of the criteria pollutants.

22. Nonroad Engine. An internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards for stationary internal combustion engines, or emission standards for new motor vehicles or new motor vehicle engines.

23. Nonroad Vehicle. A vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.
24. Offsets. Emission reductions obtained from one source in order to compensate for increased emissions from another.
25. Oxygenated Gasoline. Gasoline that is blended with any one of a number of additives in order to increase the oxygen content, resulting in more complete combustion and reduced emissions.
26. Ozone. The major constituent of "smog," ozone, is formed when VOCs and NO_x react in sunlight. The atmosphere has two distinct layers of ozone. For air quality purposes, interest rests in the formation and transport of ground level ozone. At ground level, ozone has been shown to adversely affect the respiratory system and has proven to be the primary criteria pollutant which has caused regions to be declared in nonattainment of the NAAQS. At altitudes above 7 miles, stratospheric ozone plays a vital role in blocking out dangerous ultraviolet radiation. Recent evidence of a decline in ozone levels has resulted in a worldwide call for the banning of ODSs.
27. ODSs. Any chemical that is listed as a Class I or Class II substance in section 602 of reference (a).
28. PM. A criteria air pollutant that includes dust, soot, and other small materials that are released into, and are transported by, the air. PM₁₀ is that portion of the total suspended PM with an aerodynamic diameter of 10 microns or less. PM_{2.5} is that portion of PM with an aerodynamic diameter of 2.5 microns or less.
29. PSD Program. Emission control program under NSR which applies to attainment areas.
30. Radon. A heavy, colorless, odorless, radioactive gas formed by the decay of radium. Radon can be found in soils, rocks, and some groundwater supplies, and can seep into buildings.
31. RACT. Emissions control technology that achieves the lowest possible emissions level given technological and economic considerations. RACT is applied to existing stationary sources in nonattainment areas and often involves the installation of new control equipment on older sources.

32. Reformulated Gasoline. Gasoline that has undergone special processing in order to meet performance requirements for NO_x emissions, oxygen content, benzene, heavy metals, and volatility.

33. Standards of Performance for New Stationary Sources or NSPS. National emission standards that limit the amount of pollution allowed from new or modified sources.

34. SIP. A plan developed by each state to implement and enforce regulations in order to achieve and maintain the NAAQS within that state.

35. Stationary Source. Generally, 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 as defined in section 216 of reference (a).

36. Title V Operating Permit. A Federally-enforceable document issued by the states to major sources, sources subject to NSPS, sources subject to any standard under section 112(d) of reference (a), and sources subject to NSR. This document defines emission standards, operational procedures, and all obligations of the source under reference (a).

37. VOCs. A VOC is a photochemically reactive organic compound which evaporates 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.

CHAPTER 6

AIR QUALITY MANAGEMENT

SECTION 2: MARINE CORPS POLICY

6200. STATIONARY SOURCES

1. It is Marine Corps policy to comply with all Federal, State, and local emission control standards and all other provisions of reference (a) and with specific air emission permit conditions for all stationary sources. Stationary sources are categorized as either major or minor based on their potential to emit regulated air pollutants. The determinations of "major" sources on military installations may be essentially the same as for non-military industrial and commercial facilities; however, some facilities may currently be inequitably characterized as a single stationary source of emissions fence-line to fence-line. EPA issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their State or local regulatory agency for approval to apply it as appropriate.

2. Fuel Standards. Marine Corps commands must comply with Marine Corps and regulatory fuel composition requirements applicable to solid, liquid, and gaseous fuels for stationary fuel-burning equipment.

6201. MOBILE SOURCES

1. The Marine Corps must comply with all Federal, State, and local emission control standards relevant to mobile sources.

2. Tampering with Emission Controls. Marine Corps personnel must not permanently remove or render inoperative any device or element of design in a Government motor vehicle or engine which is installed to comply with air quality regulations.

3. Fuel Standards. Marine Corps commands must comply with Marine Corps and regulatory requirements for the composition of fuels used in motor vehicles. Marine Corps installations dispensing gasoline must be equipped to dispense unleaded gasoline. The Marine Corps may not procure any gasoline-powered vehicle that cannot operate on unleaded gasoline.

4. Vehicle I/M. Marine Corps commands must comply with local area vehicle emission I/M program requirements for fleet vehicles and must furnish proof of compliance when required by the local regulatory authority. Commands are authorized to develop I/M procedures for their fleet vehicles as a part of normal preventive maintenance programs.

5. AFVs. Per reference (af), the Marine Corps must incorporate light-duty (medium/heavy duty trucks and buses are optional) AFVs into its Garrison Mobile Equipment (GME) vehicle fleet. In order to meet CAA requirements, the Marine Corps began acquiring AFVs (by both lease and new vehicle acquisitions) in 1993 and has been targeting the placement of these vehicles at those activities located within nonattainment and metropolitan statistical areas (areas with a population of 250,000 or more).

a. The CMC (LF) prescribes minimum AFV requirements for the quantity and type of vehicles to be used at Marine Corps activities that meet fleet criteria under reference (af). Marine Corps installations may meet these requirements by requesting AFV replacements for Marine Corps-owned vehicles and by leasing vehicles. Leased AFVs may be acquired through General Service Administration Interagency Fleet Management System under the Headquarters, Marine Corps-funded GME vehicle leasing program and/or by using local Operation and Maintenance, Marine Corps funds. Marine Corps activities that are not subject to reference (af) fleet criteria are encouraged to participate in the AFV program.

b. The Marine Corps prefers original equipment manufacturer AFVs to AFV conversions. However, when converting vehicles, every effort should be made to meet - at a minimum - certification requirements of the state in which the vehicles are located, such as those of the California Air Resources Board.

6202. AIR POLLUTION EMERGENCY EPISODES. Where required, Marine Corps facilities must have an air pollution emergency episode contingency plan identifying all actions that can reasonably be taken without compromising essential services and mission responsibilities.

6203. SIPs. Marine Corps installations must identify and take reasonable steps to quantify emissions growth planning requirements and coordinate them with the REC and regulatory agencies during SIP revision planning activities.

6204. CONFORMITY. Marine Corps commands located in nonattainment or maintenance areas must comply with the requirements of the CAA General Conformity Rule. Conformity determinations typically will be conducted at the same time National Environmental Policy Act (NEPA) analysis and documentation procedures are done for the planned action (see NEPA procedures in chapter 12 of this Manual).

6205. ERCs. Installations shall acquire and dispose of ERCs as if they were Government personal property.

1. Bases being closed or realigned under the process outlined in references (ar) and (as), or any subsequent base closure law, must consider the use of ERCs and dispose of them per DOD and DON policy.

2. Operating installations must use and dispose of ERCs 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 reduction may be banked, in the following order of priority, for:

(1) Future use by that same installation;

(2) Transfer to another Marine Corps 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 the transfer of credits; or

(4) Transfer to any other Federal agency within the same AQD or another AQD that will accept the transfer of credits.

b. Installations must employ the Environmental Management Hierarchy (EMH) and assess pollution prevention opportunities in considering the use of emission reduction credits.

c. ERCs may be transferred between services under reference (at), with or without compensation.

d. Installations must report ERCs determined to be Federal government surplus for screening and disposal using the existing personal property disposal mechanisms. Installations requiring ERCs must either:

(1) Purchase ERCs from other sources.

(2) Obtain offsets from on-installation sources.

(3) Purchase ERCs when and if requirements necessitate their purchase after coordination with the CMC (LF). No ERCs may be disposed of, creation forgone, or traded to non-Marine Corps facilities, unless such action has been coordinated with the CMC (LF) and the appropriate USMC/DOD REC. In addition, Marine Corps installations shall take reasonable steps to quantify ERCs from creditable reductions under their control and obtain legal title to them under applicable regulations.

6206. AIRBORNE RADIONUCLIDE EMISSIONS. Marine Corps installations must comply with reference (au) regarding airborne radionuclide emissions into the environment. Within the Navy and Marine Corps, the Naval Nuclear Propulsion Program is responsible for all aspects of compliance with requirements pertaining to nuclear propulsion.

6207. RADON. EPA has approved the NAVRAMP as the plan to identify, mitigate, and prevent radon contamination in Marine Corps-occupied buildings. All Marine Corps installations must implement the NAVRAMP testing program to identify levels of indoor radon. Radon testing and results should be coordinated with the cognizant Navy Engineering Field Division/Activity. In buildings with indoor radon levels above 4 pCi/L, the Marine Corps must reduce radon to acceptable levels. Appropriate radon-reduction techniques must be incorporated into the design and construction phases of new structures where it has been determined necessary due to regulatory requirements, historic data, or geological conditions.

6208. ASBESTOS NESHAP. Although EPA promulgated the NESHAP for asbestos in 1973 (reference (av), codified at reference (e)), it remains the subject of frequent civil and criminal enforcement under reference (a). Subpart M of reference (n) applies to the demolition, removal, and disposal of regulated asbestos containing material (RACM). Subpart m of reference (e) protects the public by minimizing the release of asbestos fibers during activities involving the processing, handling, and disposal of asbestos-containing material. Accordingly, subpart M of

reference (e) specifies work practices to be followed during demolitions and renovations of all structures, installations, and buildings. In addition, the regulations require the owner of the building and/or the contractor to notify applicable State and local agencies and/or EPA Regional Offices before all demolitions, or before renovations of buildings that contain a certain threshold amount of asbestos. The RACM removed must be wetted and kept wet, properly containerized and marked, and is subject to land disposal restrictions. Before undertaking demolition or renovations, Marine Corps installations and activities must determine whether subpart M of reference (e) applies and follow all applicable Federal, State, or local requirements. Note that some State requirements are more stringent than the Federal regulations (e.g., Asbestos is a hazardous waste in California and certain other states, but only a solid waste under Federal regulations).

CHAPTER 6

CLEAN AIR QUALITY MANAGEMENT

SECTION 3: RESPONSIBILITIES

6300. CMC (LF)

1. Coordinate the overall implementation of CAA requirements. Ensure that all Marine Corps activities comply with current Federal, State, and local air pollution control requirements.
2. Coordinate the review of proposed and final CAA regulations.
3. Coordinate the review of fines/penalties with the CMC (CL) and, as necessary, Office of the Assistant General Counsel, Installations and Environment.
4. Include requests for resources to meet air pollution control requirements in the Program Objectives Memorandum (POM)/budget submissions.
5. Implement strategies to eliminate reliance on ODSs and submit the required information to support the management of the DOD ODS Reserve.
6. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies, as required.
7. Conduct special environmental compliance and protection studies with regard to air quality management to assist in establishing policy or initiating actions.
8. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to air quality regulations.
9. Track Marine Corps progress toward meeting established air quality goals.

6301. MARINE CORPS RECS. In addition to the responsibilities identified in chapter 2 of this Manual, Marine Corps RECs must:

1. Coordinate input and comments to all applicable SIPs in their areas of responsibility.

2. Coordinate ERC trading among Marine Corps facilities.
3. Function as Marine Corps air pollution episode coordinator within the AQCRs, or portions thereof, under Marine Corps jurisdiction. Air pollution episode coordinators must ensure that air episode plans and actions are consistent in degree and timing for all Marine Corps activities in the affected episode area and also that the plans and actions are as consistent as possible with plans and actions of other Federal activities and State and local air pollution control authorities.

6302. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS
INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for air sources that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring are required to comply with air quality management requirements. Pay appropriate Federal, State, and local fees. Ensure that the EMH is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, State, and local permits are applied for and obtained. Sign or approve for signature: compliance statements/certifications; emission inventory reports; construction and operation permit applications, as required, for construction of all air quality management projects; and applications for permits related to the demolition, preconstruction, and construction phases of projects, unless multi-installation permit applications will be signed by a higher authority. Assist in the preparation of permit applications and studies and sign applications and negotiate conditions with regulatory agencies for operating permits and variances to temporarily operate those sources out of compliance.
3. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an environmental compliance and protection standard operating procedures document to implement all environmental requirements or by writing a separate base order to implement specifications of this chapter alone.

4. Assure that CAA general conformity rule requirements are satisfied for all applicable Marine Corps actions on the installation.
5. Survey emission sources to identify potential reductions, and where reductions are made, take reasonable steps to quantify them and acquire ERCs or comparable reduction credits/allowances in accordance with local regulations.
6. Coordinate ERC requirements/trading/disposition actions in advance with the appropriate REC and CMC(LFL).
7. Submit, via the chain of command, to the CMC (LF) all instances in which compliance with fuel standards is impractical.
8. Maintain current records of physical, operational, and emission characteristics of air emission sources per reference (ax), Standard Subject Identification Code 5090.4.
9. Ensure that air episode plans are developed as required, and provide copies of such plans to the REC.
10. Cooperate with the Marine Corps air pollution episode coordinator, EPA, and State and local air pollution control authorities in executing air episode plans as required for areas under the proclamation of an air pollution emergency.
11. Ensure that motor vehicles and other mobile sources comply with applicable emission standards and other requirements.
12. Develop and implement transportation control measures as required by the SIP.
13. Identify and quantify emissions growth planning requirements, and coordinate them with the REC and regulatory agencies during SIP revision planning activities.
14. Where applicable, furnish to the appropriate regulatory authority proof of compliance with applicable nondiscriminatory State and local motor vehicle I/M requirements for all vehicles operated on the installation.
15. Implement and maintain proper adjustments in stationary heating and power plant operations to reduce total emissions. Substantial fuel savings can also result from proper combustion operations and combustion air monitoring.

16. Ensure that CAA-required training and certification is provided to all applicable personnel to meet general awareness and billet-specific training requirements per chapter 5 and appendix D of this Manual.
17. Ensure that coordination occurs with the Safety Office when conducting risk evaluations or risk management.
18. Conduct a radon testing program for all regularly occupied buildings (includes existing and new structures), following NAVRAMP methodology for testing and quality assurance/quality control.
19. Maintain information, for each building location, on the radon levels and physical characteristics of Marine Corps facilities.
20. Identify compliance requirements for new construction and projects or modifications required for existing structures.
21. Identify and submit environmental compliance projects required to bring buildings into compliance.
22. Implement appropriate ODS procurement guidance as established by Commander, Naval Supply Systems Command and Commander, Naval Facilities Engineering Command.
23. Ensure that ODSs are included in the "authorized hazardous material use list."
24. Establish practices and procedures internally to reduce emissions of ODSs as much as possible.
25. Provide resources (e.g., tuition, travel, per diem) for training refrigerant technicians on recovery and recycling equipment and ensure compliance with applicable certification requirements.
26. Submit requests for waivers to any of the mandatory provisions of this policy via the chain of command.
27. Develop and implement an ODS phase-out plan to eliminate use of nonmission-critical class I ODSs and to eliminate use of nonmission-critical portable halon fire extinguishers.
28. Approve and submit plans to claimants for review and funding in the POM cycle.

29. Develop and implement a plan for ODS system leak checks, tracking periodic leak rate and required equipment replacement, supply management, and recycling and reclamation of Class I and Class II ODSs.

30. Ensure that required plans meet regulatory requirements.

6303. COMMANDERS OPERATING ABOARD MARINE CORPS INSTALLATIONS

1. Comply with all applicable air quality regulations and coordinate with the installation environmental staff for compliance requirements, including the preparation of permit applications and environmental studies.

2. Per chapter 4 of this Manual and existing tenant/host agreements, identify and submit environmental compliance projects that are necessary to bring air sources into compliance.

REFERENCES

- (a) 42 U.S.C. 7401 et seq.
- (b) 42 U.S.C. 11001 et seq.
- (c) MCO 5090.1
- (d) MCO 5100.8
- (e) 40 CFR 61
- (f) Public Law 91-604, "1970 Clean Air Amendments," December 31, 1970
- (g) Public Law 95-95, "1977 Clean Air Amendments," November 16, 1977
- (h) Public Law 101-549, "1990 Clean Air Amendments," November 15, 1990
- (i) 40 CFR 81
- (j) 40 CFR 50
- (k) Environmental Protection Agency (EPA), "The Green Book," January 1994
- (l) 40 CFR 52
- (m) 40 CFR 60
- (n) 40 CFR 62
- (o) 40 CFR 51
- (p) "Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the CAA," EPA memo dtd 2 Aug 96
- (q) 42 U.S.C. 7409
- (r) Federal Register Volume 62, page 38651-38701, July 18, 1997
- (s) U.S. Court of Appeals, Sixth Circuit, United States v. Tennessee Air Pollution Control Board, 185 F.3d 529, July 22, 1999

(t) Superior Court of California, Sacramento County, California v. United States, No. 98AS00723, March 18 2002 (NOTAL)

(u) U.S. Court of Appeals, Eleventh Circuit, City of Jacksonville v. U.S. Department of the Navy, 348 F.3d 1307, October 28, 2003

(v) 40 CFR 22

(w) Federal Register, Volume 61, page 69360, December 31, 1996

(x) Federal Register, Volume 67, page 41343, June 18, 2002

(y) 40 CFR 59

(z) 40 CFR 54

(aa) 40 CFR 70

(ab) 40 CFR 71

(ac) EPA, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995

(ad) EPA, "White Paper Number 2 for Improved Implementation of Part 70 Operating Permits Program," March 5, 1996

(ae) EPA, "White Paper Number 3, Draft Guidance on Designing Flexible Permits," August 7, 2000

(af) Public Law 102-486, "Energy Policy Act (EPACT) of 1992"

(ag) Public Law 110-140, "Energy Independence and Security Act of 2007," 19 December, 2007

(ah) 40 CFR 87

(ai) EPA 420-D-99-003, "Draft Interim Guidance for Federal Facilities Compliance with Clean Air Act sections 118(c) and 118(d) and Applicable Provisions of State Vehicle Inspection and Maintenance Programs," December 1999

(aj) Federal Register, Volume 66, page 5002, January 18, 2001

(ak) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007

- (al) 40 CFR 63
- (am) Public Law 99-499, "Superfund Amendments and Reauthorization Act (SARA)," October 17, 1986
- (an) 29 CFR 1910
- (ao) EPA, "Interim Air Quality Policy on Wildland and Prescribed Fires," April 23, 1998
- (ap) 40 CFR 82
- (aq) United Nations Environment Programme, "Montreal Protocol on Substances that Deplete the Ozone Layer," 2000
- (ar) 10 U.S.C. 2687
- (as) Public Law 101-510, "Defense Base Closure and Realignment Act," November 5, 1990
- (at) 10 U.S.C. 2571
- (au) MCO 5104.3A
- (av) Federal Register, Volume 38, page 8820, April 6, 1973
- (ax) SECNAV M-5210.1

Table 6-1.--The CAA's Six Subchapters at a Glance

Sub-Chapter	CAA §§	USC §§	Areas of Coverage
I	101-193	7401-7515	Air Quality Control Measures; Enforcement; PSD; NSR; NSPS; Enforcement; HAPS; NAAQS; Conformity
II	202-250	7521-7590	Mobile Sources and Fuels
III	301-328	7601-7627	Enforcement and Definitions
IV-A	401-416	7651-7651o	Acid Rain Control
V	501-507	7661-7661f	Federal Permit Program
VI	601-618	7671-7671q	ODSs

Table 6-2.--Threshold Rates for Criteria Pollutants
or Precursors in Nonattainment Areas

	Tons/year
Ozone (VOCs or NO _x)(1-hour standard)*:	
Serious nonattainment areas	50
Severe nonattainment areas	25
Extreme nonattainment areas	10
Other ozone* nonattainment areas outside an ozone transport region	100
Marginal and moderate nonattainment areas inside an ozone* transport region:	
VOC*	50
NO _x *	100
Carbon monoxide: All nonattainment areas	100
SO ₂ or NO ₂ : All nonattainment areas	100
PM ₁₀ :	
Moderate nonattainment areas	100
Serious nonattainment areas NAAs	70
PM _{2.5} (and all precursors):	100
Pb: All nonattainment areas	25

* The ozone precursor (NO_x and VOC) thresholds listed are for the 1-hour ozone NAAQS; however, it is anticipated that the final implementation rule for the 8-hour ozone NAAQS and/or any revision to the General Conformity Rule will apply the same thresholds for the various nonattainment area classifications.

Table 6-3.--Threshold Rates for Criteria Pollutants
 or Precursors in Maintenance Areas

	Tons/year
Ozone (NO _x)*, SO ₂ , or NO ₂ : All maintenance areas*	100
Ozone (VOCs)*:	
Maintenance areas inside an ozone* transport region	50
Maintenance areas outside an ozone* transport region	100
PM ₁₀ : All maintenance areas	100
CO: All maintenance areas	100
PM _{2.5} (and all precursors):	100
Pb: All maintenance areas	25

* The ozone precursor (NO_x and VOC) thresholds listed are for the 1-hour ozone NAAQS; however, it is anticipated that the final implementation rule for the 8-hour ozone NAAQS and/or any revision to the General Conformity rule will apply the same thresholds for the various maintenance area classifications.

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

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CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 1: INTRODUCTION

7100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for emergency planning and response. This chapter also identifies procedures for preventing and providing proper training for oil discharges and hazardous substance (HS) releases to the air, land, and water. It outlines the Marine Corps organizational structure for response to its own spills as well as to non-Marine Corps spills that occur on and off an installation. Finally, the chapter identifies the responsibilities of installation commanders; handlers of petroleum, oil, and lubricants (POLs) and HSs; and response team members.

7101. APPLICABILITY

1. See paragraph 1101.
2. For Marine Corps activities Outside the Continental United States (OCONUS), international oil pollution laws require that marine oil spills that impact, or may impact, the waters or shoreline of any coastal nation must be reported immediately to proper authorities in that nation.

7102. BACKGROUND

1. Provisions within the major statutes, as described below, recognize the need for emergency planning for uncontrolled releases of pollutants to the Nation's air, land, and water. Accordingly, these statutes require facilities with the potential for such releases to develop procedures to prevent releases, to provide written emergency procedures, and to implement the response provisions in the event of a release. Further, reference (a) requires that comprehensive information be provided to the public about possible or potential hazards associated with toxic, hazardous, and extremely hazardous chemical releases.
2. Many of these statutes contain overlapping requirements. The National Response Team (NRT) on June 5, 1996, published its Integrated Contingency Plan (ICP) Guidance contained in reference (b), enabling facilities to meet multiple plan

requirements in a single plan. Marine Corps installations are encouraged, as appropriate, to use this guidance.

3. Many State regulatory programs contain provisions for oil and hazardous substance (OHS) spill contingency planning and for notification of State and local authorities when OHS spills occur. Most State regulations complement the Federal OHS spill contingency planning and response efforts. However, some State regulations are more stringent than the Federal requirements. Each Marine Corps installation should obtain copies of its respective State regulations to determine if it is subject to State requirements that go beyond the Federal laws and regulations outlined herein.

7103. FEDERAL STATUTES

1. Water Quality Act (WQA) of 1965 (Public Law 89-234), Water Quality Improvement Act of 1970 (Public Law 91-224), Federal Water Pollution Control Act (FWPCA) of 1972, as Amended (33 U.S.C. 1251 et seq.), and Clean Water Act (CWA) of 1977, as Amended (33 U.S.C. 1251 et seq.)

a. The WQA provided Federal assistance for the establishment and enforcement of jurisdictional water quality standards for surface waters. It was amended in 1970 by the Water Quality Improvement Act to prohibit releases of oil and sewage into navigable waters.

b. The FWPCA made the Environmental Protection Agency (EPA) responsible for setting nationwide effluent standards on an industry-by-industry basis. This Act provided effluent and water quality standards and instituted a permit system for the regulation of oxygen-demanding pollutant discharges. In 1977, the Act was amended by the CWA which refocused the enforcement tools of the FWPCA on the control of toxics. The CWA amended the permit system, which is now the National Pollutant Discharge Elimination System. The CWA was amended in 1987 to include the regulation of storm water runoff and to strengthen enforcement mechanisms. The intent of the CWA is to restore and protect the integrity of the Nation's waters by controlling discharges of pollutants, including OHS spills, into those waters.

c. The CWA contains the following national policy: There should be no discharges of oil or HSS into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone; or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1977; or which may affect natural

resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act of 2006).

d. Section 311 of the CWA addresses OHS liability. Important statutory requirements contained in section 311 are summarized as follows:

(1) Section 311(b)(3) prohibits the discharge of oil or HSs in harmful quantities into or upon the navigable waters of the United States. As noted in 40 CFR 110.3, discharges of oil in harmful quantities include those that violate applicable water quality standards, cause a film or sheen upon, or discoloration of, the water surface or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the water surface or upon adjoining shorelines.

(2) Section 311(b)(5) requires the individual in charge of an onshore facility to notify immediately the United States Government of any discharge of oil or HS from the facility in violation of section 311(b)(3). Failure to notify the Government is punishable by a fine or by imprisonment for no more than five years or both.

(3) Section 311(b)(6) provides for various classes of administrative penalties for violating the OHS discharge prohibition or for failure to comply with regulations pertaining to Oil Facility Response Plans under the National Response System.

(4) Section 311(b)(7) provides for civil penalty actions for violating the OHS discharge prohibition or for failure to comply with regulations pertaining to Oil Facility Response Plans under the National Response System.

(5) Section 311(c) authorizes the Federal Government to ensure the effective and immediate removal of a discharge, and the mitigation or prevention of a substantial threat of discharge, of oil or an HS.

(6) Section 311(d) requires the development and revision of a National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which provides for organizational structure and procedures necessary to prepare for, and respond to, oil discharges and releases of HSs, contaminants, and pollutants. It assigns responsibilities for contingency planning and response to various Federal agencies, including the DOD, and

outlines State and local government and public and private interest group participation in these areas. The NCP also specifies notification procedures for certain oil discharges and HS releases.

(7) Section 311(e) provides for civil enforcement procedures, including orders to protect public health, for violating the OHS discharge prohibition, or for failure to comply with regulations pertaining to Oil Facility Response Plans under the National Response System.

(8) Section 311(f) specifies liability limits for discharges. This section further authorizes the President (and installation commanders as duly appointed representatives) to act on behalf of the United States to recover all costs for restoring or replacing natural resources damaged by OHS spills.

(9) Section 311(j) establishes the National Response System. This section requires the President to issue regulations mandating the development of Oil Facility Response Plans by owners or operators of tank vessels and oil transfer and storage facilities.

(10) Section 311(m) requires facilities to maintain records, to allow entry and inspection of premises, and to provide public access to records.

2. Oil Pollution Act (OPA) of 1990 (Public Law 101-380, 33 U.S.C. 2701 et seq.)

a. The OPA amends section 311 of the CWA to augment Federal response authority, to increase penalties for oil spills, to expand the organizational structure of the Federal response framework, and to provide an emphasis on preparedness and response activities. The OPA requires contingency planning for "worst case" discharges and demonstrated response capabilities through planning, equipment, training, and exercises and does not preempt states' rights for establishing more stringent planning requirements.

b. Important statutory requirements of the OPA are summarized as follows:

(1) Section 1002 specifies that each responsible party for a vessel or a facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, into or upon the navigable waters, adjoining shorelines, or the exclusive economic zone is liable for removal costs and damages that result from the discharge. Damages can include those for natural resources, real or personal property, subsistence use of natural resources, loss of revenue, loss of profits or impairment of earning capacity, and provision of public services during or after removal activities.

(2) Section 1003 establishes defenses to liability, such as discharges due to acts of God, acts of war, an act or omission by a third party, or any combination thereof.

(3) Section 1004 establishes limits of liability for responsible parties.

(4) Section 1006 specifies conditions pertaining to damages to natural resources. The President has designated Marine Corps installation commanders as the Federal trustees for all natural resources under their control.

(5) Section 1011 specifies Presidential consultation with the affected trustees on the appropriate removal action to be taken in connection with any discharge of oil.

(6) Section 1012 discusses uses of the Oil Spill Liability Trust Fund.

(7) Section 1018 specifies that the OPA must not be construed to authorize or create a cause of action against a Federal officer or employee in the officer's or employee's personal or individual capacity for any act or omission while acting within the scope of the officer's or employee's office or employment.

(8) Section 2002 of the OPA amends section 311 of the CWA. A discussion of section 311 as amended by the OPA is presented in paragraph 7103.2, above.

3. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as Amended (42 U.S.C. 9601 et seq.)

a. Since the initial passage of CERCLA, Congress has amended it over 20 times. CERCLA authorizes Federal action to respond to the release or threatened release of an HS from any source into the environment. Remedial actions (RAs) for past releases are covered by the Installation Restoration program, which is discussed in chapter 10 of this Manual.

b. Important statutory requirements of CERCLA pertaining to emergency planning and response are summarized as follows:

(1) Section 102 directs the EPA Administrator to promulgate and revise regulations that designate as HSs such elements, compounds, mixtures, solutions, and substances that, when released into the environment, may present substantial danger to the public health or the environment. These regulations also must specify the quantities of any released HS that necessitates a report to the National Response Center (NRC).

(2) Section 103 requires the individual in charge of an onshore facility to notify immediately the NRC of any release from the facility of an HS equal to or in excess of the reportable quantity (RQ) established by regulation pursuant to section 102. Section 103 also establishes civil and criminal penalties for failure to notify the NRC in the event of a release.

(3) Section 104 authorizes the Federal Government to ensure the effective and immediate removal and remediation of a release, and the mitigation or prevention of a substantial threat of release, of an HS, contaminant, or pollutant that may pose an imminent and substantial danger to public health, welfare, or the environment.

(4) Section 105 requires that the NCP be revised to include a national HS response plan to the NCP which was developed under the CWA.

(5) Section 106 authorizes the President to take any necessary measures, including securing judicial orders, to protect public health from an actual or threatened HS release.

(6) Section 107 specifies conditions of liability for costs incurred for the removal or RA taken to abate a release; other necessary costs; damages to, or destruction of, natural resources; or health assessment study costs. This section further establishes defenses to liability, such as discharges due to acts of God, acts of war, acts or omission by a third

party, or any combination thereof. Section 107 also establishes limits to liability. It authorizes the President (and installation commanders as duly appointed representatives) to act on behalf of the United States to recover all costs for restoring or replacing natural resources.

(7) Section 109 provides for civil penalty actions for violating the HS release prohibition or for failure to comply with applicable regulations promulgated under CERCLA.

(8) Section 120 applies CERCLA to Federal departments, agencies, and installations in the same manner as any non-governmental entity. Section 120(j) authorizes the President, when necessary, to protect the national security interests of the United States, to issue site-specific orders at any DOD facility to exempt it from compliance with any CERCLA title I or Superfund Amendments and Reauthorization Act (SARA) title III requirement. The exemption must be for a specified period not to exceed one year, although additional exemptions may be granted upon suitable justification.

(9) Section 310 allows citizens to file suits in a United States District Court against any individual, including a Marine Corps installation, allegedly violating CERCLA requirements.

4. Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901 et seq.)

a. Congress enacted RCRA to protect human health and the environment from the hazards associated with hazardous waste (HW) generation, transportation, treatment, storage, and disposal. Major revisions resulted from the Hazardous and Solid Waste Amendments and the Federal Facility Compliance Act.

b. Subtitle C of RCRA requires the owners and operators of HW facilities to develop comprehensive HW management plans that address spill prevention and cleanup for these facilities. If the facility has already prepared an emergency or contingency plan (e.g., Spill Prevention Control and Countermeasures (SPCC) Plan) in accordance with other regulations, the existing plan can be amended to incorporate HW management provisions.

c. Important statutory requirements of RCRA pertaining to emergency planning and response are summarized as follows:

(1) Section 3004(a)(5) requires the EPA Administrator to develop regulations applicable to owners and operators of HW treatment, storage, and disposal facilities (TSDFs) pertaining to contingency plans to minimize unanticipated damage from treatment, storage, or disposal of any HW.

(2) Section 3007 specifies the rights of the EPA and State agency personnel to enter and inspect the premises, facilities, and records of TSDF owners or operators to determine compliance with applicable requirements of RCRA. Section 3007(c) authorizes annual EPA and State inspections of Federal facilities.

(3) Section 3008 provides for Federal enforcement of RCRA requirements, including compliance orders issuance and civil and criminal penalties assessment for RCRA violations.

(4) Section 3013 authorizes the EPA Administrator to order the owner or operator of a TSDF suspected of releasing any HW that may impact human health or the environment to conduct such monitoring, testing, analyzing, and reporting as the EPA Administrator deems necessary.

(5) Section 3016 requires each Federal agency to commit to an ongoing biannual program to complete, publish, and submit to EPA and authorized states an inventory of each site that the agency owns, operates, or has owned or operated, at which HW has been treated, stored, or disposed of at any time. The inventory must describe any response actions initiated or contemplated at contaminated sites.

(6) Section 6001 requires that the following comply with all Federal, State, interstate, and local requirements: instrumentalities of the Federal Government Executive Branch, such as Marine Corps activities which have solid waste (SW) management facilities or disposal sites or which engage in activities that potentially result in SW or HW disposal or management.

(7) Section 7002 provides for citizen suits to be filed against any individual or the United States, allegedly in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which has become effective pursuant to RCRA.

(8) Section 7003 authorizes the EPA Administrator to bring suit in United States District Court against any individual or a Marine Corps installation, that is presenting an imminent and substantial danger to human health or to the environment due to present or past HW management practices.

(9) Section 9003 prescribes requirements for promulgating Underground Storage Tank (UST) regulations for release detection, prevention, and correction regulations (see chapter 18 of this Manual for further discussion of these regulations).

5. Clean Air Act (CAA) of 1970, as Amended (42 U.S.C. 7401 et seq.)

a. The CAA is the Federal statute mandating the prevention and control of air emissions from both stationary and mobile sources.

b. The CAA Amendments of 1990 added section 112(r), entitled "Prevention of Accidental Releases." The purpose of this section is to prevent the accidental release and to minimize the consequences of any such release of any regulated or extremely hazardous substance (EHS). The essential provisions of section 112(r) are as follows:

(1) Subsection 112(r)(1) requires that section 112(r) must not be interpreted, construed, implied, or applied to create any liability or basis for compensatory suit for bodily injury or any other injury or property damages to any person which may result from accidental releases of substances regulated under section 112(r).

(2) Subsections 112(r)(3) - (5) require the EPA Administrator to promulgate a list of substances that, in the case of an accidental release, are known to cause death, injury, or serious adverse effects to human health or the environment. The list also includes a threshold quantity for each substance, which accounts for its toxicity, reactivity, volatility, dispersability, combustibility, or flammability, and the amount which would result in death, injury, or serious and adverse effects to human health in the event of a release. The complete list of high-risk air pollutants is published as table 1 in 40 CFR 63.74.

(3) Subsection 112(r)(6) establishes an independent Chemical Safety and Hazard Investigation Board, which is responsible for investigating the cause of accidental releases of regulated substances resulting in a fatality, serious injury, or substantial property damages, for recommending ways to reduce the likelihood or consequences of accidental releases, and for establishing regulations for facilities to report accidental releases of regulated substances into the air.

(4) Subsection 112(r)(7)(A) authorizes the EPA Administrator to promulgate release prevention, detection, and correction requirements, including monitoring; recordkeeping; reporting; training; vapor recovery; secondary containment; and other design, equipment work practice, and operational requirements.

(5) Subsection 112(r)(7)(B) authorizes the EPA Administrator to promulgate regulations and guidelines to provide for the prevention and detection of accidental releases by owners and operators of such release sources. After this regulation is promulgated, subsection 112(r)(7)(E) makes it unlawful for any individual to operate in violation of these requirements any stationary source subject to them.

(6) Subsection 112(r)(9) authorizes the EPA Administrator to issue orders to, or to bring suit in United States District Court against, any individual or a Marine Corps installation presenting an imminent and substantial danger to human health or to the environment because of an actual or threatened accidental release of a regulated substance.

6. Emergency Planning And Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). This Act, which is title III of SARA, is intended to encourage and support emergency planning and to provide timely and comprehensive information to the public about possible or potential hazards associated with chemicals present at the facility and toxic chemical releases. Most notably, specific sections of EPCRA require immediate notification of releases of EHSs and HSS defined under CERCLA to State and local emergency response planners. EPCRA requires State and local coordination in planning response actions to chemical emergencies. The Act also requires the submission of information on chemical inventories and releases.

7104. REQUIREMENTS

1. General

a. Statutory Requirements. The statutes discussed in paragraph 7103 require regulated Marine Corps-owned and -operated activities to develop and implement various emergency response plans and to conduct related activities:

- (1) SPCC Plans mandated by reference (c).
- (2) Facility Response Plans (FRPs) mandated by reference (d).
- (3) Oil and Hazardous Substance Spill Contingency Plans (OHSSCPs) mandated by the CWA and by reference (e).
- (4) Hazardous Waste Facility Contingency Plans mandated by reference (f).
- (5) Air Emissions Risk Management Plans mandated by the reference (g).
- (6) Notifying the State Emergency Response Commission (SERC) that the facility is subject to emergency planning requirements, designating a Facility Emergency Coordinator (FEC), and notifying the Local Emergency Planning Committee (LEPC) of the FEC's identity as mandated by reference (a).
- (7) Participating in development of a Community Comprehensive Emergency Response Plan mandated by reference (a).
- (8) Filing an Emergency and Hazardous Chemical Inventory Form mandated by reference (a).
- (9) Filing a Toxic Release Inventory Reporting Form (Form R) mandated by reference (a).

b. Regulatory Requirements. This section discusses regulations promulgated by various Federal agencies to implement the statutory requirements identified above. These agencies include EPA, United States Coast Guard, the U.S. Department of Transportation (DOT) Research and Special Programs Administration (RSPA), the Department of the Interior (DOI) Minerals Management Service (MMS), the Occupational Safety and Health Administration (OSHA), the National Oceanic and

Atmospheric Administration (NOAA), and the DOI United States Fish and Wildlife Service (USFWS).

c. Executive Order (E.O.) Requirements. Several E.O.s issued by the President direct executive agencies, including the military departments, to comply with applicable requirements of Federal laws. The EOs pertaining to emergency planning and response are as follows:

(1) Reference (h) requires Federal facilities to comply with pollution control requirements pursuant to references (c), (f), (g), (i), (j), (k), (l), and (m).

(2) Reference (n) designated the Federal agencies that would form the NRT. In addition to placing the DOD on the NRT, the President also designated the Secretary of Defense (SecDef) as a Federal trustee for natural resources. The President further delegated to the SecDef the President's response authorities for releases or threatened releases from or on Federal facilities.

(3) Reference (o) amended reference (n) to implement provisions of reference (d). Reference (o) also delegated the President's responsibilities for promulgating regulations pertaining to oil facility response plans to the EPA Administrator and to the Secretary of the Department in which the Coast Guard operates.

(4) References (p) and (q) require all installations to comply with sections 301-313 of reference (a).

d. DOD Requirements. Several directives and instructions issued by DOD, mandating the military departments to comply with applicable requirements of Federal laws, pertain to emergency planning and response as follows:

(1) Oil and Hazardous Substances Pollution Prevention and Contingency Program. A DOD OHS Pollution Prevention and Contingency Program is required of DOD installations for responding to OHS discharges in a manner consistent with reference (r). Regulated installations must develop and implement SPCC plans and OHSSCPs.

(2) Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, State, interstate, regional, and intrastate statutory and regulatory environmental requirements. DOD policy identifies

the Department of the Navy as the DOD Executive Agent for the NRT and Regional Response Team (RRT).

e. Integrated Contingency Plan (ICP) Guidance

(1) The NRT, in conjunction with representatives from State and local agencies, industry, and environmental groups, has developed the ICP Guidance contained in reference (b) to provide facilities with a way to consolidate multiple contingency plans into a single functional response plan. The EPA, Coast Guard, RSPA, OSHA, and MMS signed the ICP Guidance and agree that integrated response plans prepared in the format provided by reference (b) will be acceptable and will be the federally preferred method of response planning.

(2) The purposes of the ICP Guidance are to:

(a) Provide a mechanism for consolidating multiple facility response plans into one plan that can actually be used in an emergency.

(b) Improve coordination of planning and response activities within the facility and with public and commercial responders.

(c) Minimize duplication and simplify plan development and maintenance.

(3) The ICP Guidance addresses planning requirements in the following Federal regulations:

(a) Sections 20 and 21 of reference (s), subpart F of reference (t), and references (u) and (v).

(b) Subpart G of reference (w), reference (s), and subpart D of references (x) and (y).

(c) Sections 38, 119, and 120 in reference (z).

(4) The ICP Guidance format includes the following three sections:

(a) Plan introduction.

(b) A core plan that serves as the primary response tool.

(c) A series of annexes that provide more detailed supporting information and regulatory compliance documentation.

(5) The ICP Guidance format is based upon the Incident Command System (ICS). This organization allows the plan to dovetail with established response management practices, thereby promoting its usefulness in an emergency. The ICP Guidance format also promotes a system of linkages to facilitate coordination with other facility plans as well as external plans, such as the LEPC Comprehensive Emergency Response Plan and the OPA Area Contingency Plan (ACP).

(6) Obtain copies of the ICP Guidance by contacting the EPCRA Hotline at 1-800-535-0202.

f. Protective Booming. Protective booming strategies shall be developed and implemented for POL transfer operations when any of the following conditions exist:

(1) Protective booming is required by law or regulation.

(2) The nature or volumes of fuels to be transferred is of sufficient magnitude that prudent operational risk management indicates that protective booming is required.

(3) When environmentally sensitive areas are likely to be negatively impacted in the event of a spill.

(4) When a potential spill could generate significant negative public perception or so adversely affect political relations with a host nation or local jurisdiction that continued port access may be jeopardized.

2. SPCC

a. Purpose. SPCC plans have two primary purposes:

(1) To establish procedures to prevent an oil spill into waters of the United States.

(2) To document existing oil spill prevention structures, procedures, and equipment and to recommend additional containment structures if needed.

b. Facilities Required to Prepare SPCC Plans

(1) EPA regulations in section 3(a) in reference (s) require owners or operators of onshore and offshore nontransportation-related facilities that have discharged or, due to their location, might discharge oil in harmful quantities into or upon navigable waters of the United States or adjoining shorelines to prepare an SPCC plan in accordance with requirements provided in section 7 of reference (s).

(2) EPA regulations in section 3(c) of reference (s) require Marine Corps units which deploy portable, tactical refueling equipment, such as sixcons and collapsible fabric tanks, to prepare and implement an SPCC plan. For these portable facilities, the SPCC plan may be a general plan prepared using good engineering practice per requirements provided in section 7 of reference (s). A new SPCC plan need not be prepared each time the facility is moved to a new site. When the equipment is redeployed to a new site, it must be located and installed using the spill prevention practices outlined in the SPCC plan for the facility. The SPCC plan applies only when the portable facility is in a fixed operating mode. During training exercises or deployments within the United States, mobile or portable facilities subject to this regulation must not operate unless the SPCC plan has been implemented.

(3) The regulations do not require SPCC plans for onshore fixed or portable facilities if:

(a) The facility has an aggregate aboveground storage capacity of 1,320 gallons (gal) or less of oil, has no single container capacity that exceeds 660 gal, and has a total underground storage capacity of 42,000 gal or less.

(b) The facility, due to its location, is not expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines. This determination is based solely upon consideration of the geographical and locational aspects (e.g., proximity to navigable waters or adjoining shorelines, land contour, drainage patterns, proximity to fish and wildlife and sensitive environments) of the facility and must exclude man-made dikes or other structures which would serve to hinder, contain, or otherwise prevent an oil discharge from reaching navigable waters or adjoining shorelines.

c. Plan Contents. Section 7 of reference (s) provides general requirements for the preparation and implementation of SPCC plans. The SPCC plan should be carefully considered and should follow the sequence outlined below:

(1) A description of the physical layout of the facility.

(2) A facility diagram marking the location and contents of each tank, including completely buried tanks, transfer stations, and connecting pipes.

(3) The type of oil in each container and its storage capacity.

(4) Discharge prevention measures including procedures for routine handling of products (e.g., loading, unloading, and facility transfers).

(5) Discharge or drainage controls, such as secondary containment, around containers and other structures and equipment, and procedures for the control of a discharge.

(6) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor).

(7) Methods of disposal of recovered materials in accordance with applicable legal requirements.

(8) Contact list and phone numbers for the facility response coordinator; NRC; cleanup contractors with whom the facility has an agreement for response; and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge.

(9) If the implementation of appropriate containment measures or diversionary structures is not practicable, section (d) of reference (s) requires that the facility owner or operator clearly explain such impracticability, and provide to the EPA Regional Administrator the following:

(a) An oil spill contingency plan following the provisions of reference (aa).

(b) A written commitment to manpower, equipment, and materials required for the expeditious control and removal of any harmful quantity of discharged oil.

d. Plan Certification. As specified in section (d) of reference (s), each SPCC plan must be certified initially by a registered professional engineer (PE). In addition, section 5(b) of reference (s) directs the owner or operator of the facility to review, update, and amend the plan at least once every five years. As specified in section 5(c) of reference (s), no amendment to an SPCC Plan can satisfy the requirements unless it has been certified by a PE.

e. Plan Availability. A complete copy of each SPCC plan must be maintained at the subject facility, as required in section 3(e) of reference (s). The SPCC plan also must be available to EPA representatives for on-site review during normal working hours.

f. Plan Amendments

(1) Under section 4 in reference (s), the EPA Regional Administrator may require the owner or operator of a facility to revise its SPCC plan if the facility, within any 12-month period, has discharged more than 1,000 gal of oil in a single discharge, or has discharged more than 42 gal of oil in each of two discharges into or upon United States navigable waters.

(2) Under section 5 in reference (s), the owner or operator of a facility must amend its SPCC plan whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for discharging oil. The amendments must be fully implemented no later than six months after such change occurs.

g. References. To prepare and implement oil SPCC plans, activities can use references (ab) and (ac), prepared by the DOD CWA Services Steering Committee and available on the Defense Environmental Network Information Exchange.

3. FRPs

a. Purpose. The purpose of an FRP is to ensure that appropriate successful removal actions will be initiated in response to oil discharges.

b. Facilities Required to Prepare FRPs. Reference (d) amended section 311(d) of reference (c) to require facilities to prepare contingency plans for "worst case" discharges and to demonstrate response capabilities through planning, equipment, training, and exercises. Facilities that store, transport, or handle oil and meet the threshold requirements of reference (d) must develop a FRP. Facilities subject to these requirements include the following:

(1) Nontransportation-related onshore facilities, regulated by EPA in section 20 of reference (s).

(2) Marine transportation-related facilities, regulated by the Coast Guard in reference (t).

(3) Bulk packaging containing oil, regulated by the DOT RSPA in reference (ad).

(4) Onshore oil pipelines, regulated by the RSPA in reference (u).

(5) Offshore facilities and pipelines, regulated by the DOI MMS in reference (v).

c. Nontransportation-Related Onshore Facilities

(1) Reference (d) required facilities to submit oil response plans to EPA by February 18, 1993. Reference (d) also stated that a facility may operate without an EPA-approved response plan for up to two years after the facility submits the plan for review, provided that the owner or operator has certified, by contract or other approved means, the personnel and equipment availability necessary for a worst case discharge response.

(2) EPA regulations in section 20 of reference (s) require the owner or operator of any nontransportation-related onshore facility that, because of its location, might cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines to prepare a FRP that satisfies the requirements of section 20 in reference (s), and to submit the plan to the cognizant EPA Regional Administrator.

(3) Facilities that meet the following criteria, when applied in accordance with the flowchart in attachment C-I to appendix C of section 20 in reference (s), must prepare and

submit a response plan and conform to all applicable requirements in section 20 of reference (s):

(a) A facility that transfers oil over water to or from vessels and has a total storage capacity greater than or equal to 42,000 gal.

(b) A facility with a total oil storage capacity greater than or equal to 1 million gal and which meets one of the four criteria provided in sections 12(f)(1)(ii)(A)-(D) of reference (s).

(4) The owner or operator of a facility located aboard a Marine Corps installation who determines that the facility, because of its location, is not expected to cause substantial harm to the environment by discharging oil into or upon United States navigable waters or adjoining shorelines must complete and maintain at the facility the certification form contained in appendix C of reference (s). The owner/operator should also send a copy to the cognizant regulatory agency.

(5) As required in section 20(g) of reference (s), an FRP must be consistent with the requirements of reference (r) and the applicable ACP. It should also be coordinated with the local community emergency response plan developed by the LEPC under reference (a). The facility must review annually the relevant portions of reference (r) and applicable ACP and, if necessary, revise its plan to ensure consistency with the two. Figure 7-1 depicts the relationships of these plans with the FRP.

(6) The FRP must follow the format outlined in appendix F of section 20 of reference (s). If it does not, the plan should at least include an emergency response action plan, as set forth in section 20(h)(1) of reference (s), and be supplemented with a cross-reference section to identify the location of elements listed in paragraphs (h)(2) through (h)(10) of section 20 of reference (s).

d. Marine Transportation-Related Onshore Facilities

(1) Per Coast Guard regulations in reference (t), an oil FRP is required of the owner or operator of any mobile or fixed facility that is capable of transferring bulk oil or hazardous material (HM) to or from a vessel with a capacity of 250 barrels (10,500 gal) or more and which, because of its location, might

cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines.

(2) The FRP must follow the format outlined in subpart F of reference (t) and must be submitted to the appropriate Captain of the Port (COTP).

(3) Section 1041 in reference (t) contains specific response information which mobile facilities must maintain.

(4) As required in Section 1050 in reference (t), the response plan must identify the training to be provided to each individual with responsibilities under the plan. It also must detail the type and frequency of response drills to be conducted under the plan, which are specified in section 1055 of reference (t). See section 1057 in reference (t) for spill response equipment inspection and maintenance requirements.

e. Bulk Packaging Containing Oil

(1) RSPA regulations in section 1 of reference (ad) prescribe prevention, containment, and response requirements of the DOT applicable to oil transportation. These requirements apply to any petroleum oil in packaging having capacities of 3,500 gal or more and any oil in a quantity of 42,000 gal or more per packaging. This regulation applies to Marine Corps fuel storage and transportation equipment such as 5,000-gal fuel tankers.

(2) RSPA regulations in sections 11 and 31 of reference (ad) prohibit any person, including Marine Corps units and activities, from transporting oil in a bulk packaging unless a readily available document indicating that the shipment contains oil is in the possession of the transport vehicle operator during transportation and has a current written response plan. The regulations do not require the plan to be submitted to RSPA unless the bulk packaging is greater than 42,000 gal.

(3) As specified in section 31 of reference (ad), the plan must:

(a) Describe the necessary response methods in the event of a discharge during transportation.

(b) Account for the maximum potential discharge.

(c) Identify who will respond to the discharge.

(d) Identify the appropriate persons and agencies, including the NRC, to be contacted in the event of a discharge, along with their telephone numbers.

(4) The owning unit or activity must maintain a copy of the plan at its headquarters location and at each location where vehicle dispatching occurs.

(5) Marine Corps installations through which a railroad passes that transports oil by train should request a copy of the railroad's response plan for the response zone in which the installation is located.

f. Onshore Oil Pipelines

(1) RSPA regulations in reference (u) require the owner or operator of any onshore pipeline that, because of its location, might cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines to prepare a request for proposal that satisfies the requirements of section 20 in reference (s) and to submit the plan to the RSPA. Section 101 of reference (u) specifies exceptions to this requirement.

(2) Pipeline operators must determine the worst case discharge in each response zone according to procedures specified in section 105 of reference (u).

(3) The FRP must meet the requirements prescribed in section 107 of reference (u), contain the information summary requirements specified in section 113 of reference (u), and list response resources as required in section 115 of reference (u).

(4) Section 121 in reference (u) specifies that response plans must be reviewed every five years.

(5) Marine Corps installations through which passes a commercially-owned or -operated oil or HS pipeline should request a copy of the pipeline operator's response plan for the response zone(s) in which the installation is located.

g. Oil Complexes. Oil complexes which are subject to more than one Federal agency and are required to develop response plans under each agency's regulations can prepare a single plan using reference (b) discussed in paragraph 7104.1e of this Manual. The plan can be supplemented with a cross-reference

section to identify the locations of all required elements for each agency's regulation and, in the case of EPA requirements, include an emergency action plan as specified in section 20(h)(1) of reference (s). The plan should be submitted to each of the regulatory agencies.

h. Reference. For more information on FRPs, refer to reference (ae).

4. OHSSCPs

a. Purpose. The purposes of OHSSCPs are to identify those areas where spill incidents are likely to occur and to predetermine responses appropriate to future spills and releases.

b. Facilities Required to Prepare OHSSCPs. Any facility that stores oil or HS and does not meet Federal requirements for preparing a FRP shall maintain an OHSSCP.

c. On-Scene Coordinator (OSC) Planning Responsibilities

(1) Section 120(c) of reference (r) predesignates the DOD as the Federal OSC for HS releases when the release is on, or the sole source of the release is from, any DOD facility or vessel. In section 120(d) of reference (r), the DOD is also designated as the removal response authority for incidents involving DOD military weapons.

(2) Since the DOD does not provide Federal OSCs for DOD component HS releases, the individual services predesignate and provide their own Federal OSCs. The CMC (LF) has designated each installation's Commanding General/Commanding Officer (CG/CO) to serve as the Federal OSC for Marine Corps HS releases originating aboard or threatening the installation. This authority may not be delegated. Figures 7-2 and 7-3 show the personnel relationships of the Marine Corps OSC for oil and HS pollution response incidents, respectively.

(3) As the Federal OSC, the installation CG/CO should predesignate an On-Scene Commander (OSCDR) to manage and direct all response operations for the activity. The OSCDR should be accustomed to obligating and managing resources. The OSCDR leads the On-Scene Operations Team (OSOT); establishes a spill reporting center; notifies OSOT members of a spill; provides the initial response, containment, and emergency functions; delegates appropriate duties to support personnel; and keeps the installation DOD/Command Duty Officer informed.

(4) For oil releases, the Federal OSC is the Coast Guard for coastal zone releases or EPA for inland zone releases. Agreements between EPA and the Coast Guard define the boundaries for Federal response actions as identified in Federal Regional Contingency Plans.

(5) Regulated installations must develop and implement OHSSCPs. These plans must be consistent with the relevant ACPs, as discussed in section 210 of reference (r).

d. Plan Contents

(1) The OHSSCP must be consistent with the applicable ACP as discussed in section 210 of reference (r). To obtain a copy of the local ACP, installations located in the inland zone should contact the appropriate EPA regional office while installations located in the coastal zone should contact the appropriate Coast Guard COTP. Figures 7-4 and 7-5 display EPA Regions and Coast Guard Districts, respectively.

(2) The OHSSCP should be compatible and coordinated with the LEPC Comprehensive Emergency Response Plan for the adjacent community. Compatibility is important because a Marine Corps incident could threaten surrounding areas, and local agencies may need to request trained Marine Corps response personnel to assist during a nonmilitary incident. Marine Corps installations should contact the LEPC to obtain a copy of its response plan.

(3) The OHSSCP should include information from RCRA facility plans for those facilities located aboard the installation.

e. Plan Certification. Unlike SPCC plans, OHSSCPs do not require certification by a registered PE. However, they must be approved by the installation CG/CO.

f. Plan Amendments. The OHSSCP should be reviewed annually to incorporate any changes which have occurred in facilities aboard the installation, in the response organization, or in related plans.

g. References. For guidance on developing and implementing OHSSCPs, refer to reference (ae).

5. RCRA Facility Contingency Plans

a. Purpose. RCRA facility contingency plans exist to minimize hazards to human health or the environment from fires; explosions; or any unplanned sudden or nonsudden release of HW or HW constituents to air, soil, or surface water.

b. Regulated Facilities. Owners and operators of permitted HW TSDFs must develop contingency plans per section 51 of reference (x). Large Quantity Generators are also required to have formal written contingency plans and emergency procedures in the event of a spill or release per section 50 of reference (y).

c. Plan Contents

(1) Section 52 in reference (x) specifies the contingency plan's contents. In particular, the plan must describe the actions that facility personnel must take to be in compliance with the emergency procedures specified in section 56 of reference (x).

(2) The contingency plan must include:

(a) Personnel action to fires, explosions, or unplanned sudden or nonsudden release of HW.

(b) Coordination of emergency response services with local and State entities.

(c) Names, addresses, and phone numbers of emergency coordinators.

(d) Emergency equipment at the facility (including location, physical description, and capabilities).

(e) An evacuation plan.

(3) If the activity already has a certified oil SPCC plan that complies with applicable requirements in section 7 of reference (s), or a compliant OHSSCP, the existing plan can be amended, as noted in section 52(b) of reference (x), to incorporate HW management provisions into the existing oil SPCC plan.

(4) The contingency plan also should incorporate OSHA requirements in section 120 (p) of reference (z) for an

emergency response plan to protect facility operators. These requirements include:

(a) Procedures for conducting pre-emergency planning and coordination with outside parties such as the SERC, LEPC, and local emergency response teams.

(b) Personnel roles, lines of authority/command, and lines of communication.

(c) Emergency recognition and prevention schemes.

(d) Safe distances and places of refuge during an emergency situation.

(e) Site security and access control.

(f) Evacuation routes and procedures.

(g) Decontamination procedures.

(h) Emergency medical treatment and first aid.

(i) Emergency alert and response procedures.

(j) Critique of response actions and follow-up discussions.

(k) Use of personal protective equipment and emergency equipment.

d. Plan Certification

(1) If the contingency plan is incorporated into an oil SPCC plan, it must be recertified by a registered PE. Subsequently, the plan must be reviewed, updated, and recertified by a registered PE at 3-year intervals.

(2) If the contingency plan is incorporated into an OHSSCP, it does not require certification by a registered PE. However, it must be approved by the installation CG/CO.

e. Plan Availability

(1) As required by section 53 of reference (x), maintain complete copies of the contingency plan and all revisions at the subject facility and submit it to all local police and fire

departments, hospitals, and State and local emergency response teams which may provide assistance.

(2) Provide copies of the plan to the installation fire department, the Provost Marshal's Office, the explosive ordnance demolition detachment, the Naval hospital or health clinic, and the public affairs office.

f. Plan Amendments. Under section 54 of reference (x), the owner or operator of a facility must amend its contingency plan whenever one of the following occurs:

(1) The facility permit is revised.

(2) The plan fails in an emergency.

(3) The facility changes in its design, construction, operation, maintenance, or other circumstance in a manner that materially increases the potential for fires, explosions, or releases of HW or HW constituents, or in a manner that changes the type of emergency response necessary.

(4) The list of emergency coordinators changes.

(5) The list of emergency equipment changes.

g. Reference. For information on incorporating HW management provisions into an existing SPCC plan or OHSSCP, refer to reference (ae).

6. CAA Risk Management Program

a. Purpose. A CAA risk management program provides facilities with an integrated approach to identifying and managing the hazards to human health or the environment posed by the CAA-regulated substances. Section 130 in reference (w) contains the list of regulated substances and thresholds for accidental release.

b. Facilities Required to Implement a Risk Management Plan (RMP)

(1) As required in section 10(a) of reference (w), an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as

determined under section 115 in reference (w), must comply with the RMP requirements no later than the latest of the following dates:

(a) June 21, 1999.

(b) Three years after the date on which a regulated substance is first listed under section 130 of reference (w).

(c) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) Covered processes fall into one of three program categories, as specified in section 10 of reference (w):

(a) Program 1 for processes with low risk.

(b) Program 2 for processes with moderate risk.

(c) Program 3 for processes with high risk, such as those in petroleum refineries, chemical manufacturing plants, and pulp mills.

(3) A Marine Corps process is eligible for Program 1, as provided in section 12 (b) of reference (w), if it meets all of the following requirements:

(a) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following off site: death, injury, or response or restoration activities for an exposure of an environmental receptor.

(b) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B, and section 25 of reference (w), is less than the distance to any public receptor, as defined in section 30 of reference (w).

(c) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(4) When a covered process no longer meets the eligibility criteria of its program level, the owner or operator must comply with the requirements of the new Program level that applies to the process and update RMP as provided in section 190 of reference (w).

(5) Under the general requirements specified in section 12 of reference (w), the owner or operator of a covered stationary source must submit a single RMP, as provided in section 150 to 185 of reference (w). Additional requirements for each of the three program requirements also are contained in section 12 in reference (w). The RMP must include a registration that reflects all covered processes.

(6) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 requirements must develop a management system to oversee the implementation of the RMP elements, as required in section 15 of reference (w).

c. Hazard Assessment

(1) Subpart B of reference (w) contains requirements for conducting a hazard assessment for each regulated substance present at the stationary source above the threshold quantity. The purpose of each hazard assessment is to evaluate the impact of significant accidental releases of regulated substances on the public and environment.

(2) Owners and operators of Program 1 processes must analyze and report in the RMP one worst-case release scenario for each Program 1 process as provided in section 25 of reference (w) and must complete the five-year accident history as provided in section 42 of reference (w). The owner or operator of a Program 2 or 3 process must comply with all Sections in subpart B for these processes.

d. Release Prevention Programs. Owners and operators of covered processes must implement a multi-element prevention program tailored to suit the degree of hazards present at the source and the degree of complexity of the source's operations. While Program 1 facilities have no such requirements, subparts C and D of reference (w) specify the requirements for Program 2 and Program 3 Prevention Programs.

e. Emergency Response Program. Subpart E of reference (w) contains emergency response requirements for Program 2 and Program 3 processes. An emergency response program is required to prepare for response to, and mitigation of, accidental

releases in order to limit the severity of such releases and their impact on the public health and environment.

f. Regulated Substances for Accidental Release Prevention. Subpart F designates substances to be listed under section 112(r) of the reference (g), identifies their threshold quantities, and establishes the requirements for petitioning to add or delete substances from the list.

g. RMP

(1) The owner or operator must submit a single RMP that includes the information required by reference (af), subpart G for all covered processes and in the method and format to the central point specified by EPA as of the date of submission. The facility owner or operator must submit the first RMP no later than the latest of the following dates:

(a) June 21, 1999.

(b) Three years after the date on which a regulated substance is first listed under section 130 of reference (w).

(c) The date on which a regulated substance is first present above a threshold quantity in a process. Subsequent submissions of RMPs must be per section 190 of reference (w).

(2) The RMP must exclude classified information. Classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by Federal and State representatives who have received the appropriate security clearances.

h. Recordkeeping, Public Information, Air Permit, and Auditing Requirements

(1) The stationary source owner or operator must retain records supporting the implementation of the RMP. These records must be retained as specified in section 200 of reference (w) and per reference (ag), Standard Subject Identification Code (SSIC) 5090.4.

(2) Although section 210 in reference (w) requires that the RMP be made available to the public, Marine Corps facilities

do not have to disclose classified information except as controlled by applicable laws, regulations, or E.O.s concerning its release.

(3) Permit content and air permitting authority or designated agency requirements apply to any stationary source subject to reference (w) and references (ah) or (ai). These requirements are specified in section 215 of reference (w).

(4) The implementing agency can conduct periodic audits of the RMP, in addition to requiring revisions when necessary to ensure compliance with subpart G of reference (w), as specified in section 220 of reference (w).

7. EPCRA Reporting. In compliance with reference (p), section 2(e)(i), 3(a)(vi), and 3(g) and reference (q), all Federal agencies are required to comply with the provisions in sections 301-304 and 311-313 of reference (a), all implementing regulations, and future amendments.

a. EPCRA Section 301. Section 301 requires the establishment of State emergency response commissions, emergency planning districts, and LEPCs. In designating emergency planning districts, the State emergency response commissions must indicate which facilities subject to reference (a) are within the planning district and appoint the members of the LEPC for each emergency planning district. Marine Corps facilities subject to EPCRA reporting requirements must be represented on the local committee. Responsibilities of the LEPC are to provide public notification of committee activities, hold public meetings to discuss the emergency plan, receive and respond to public comments on the plan, receive and process requests for information, and distribute the emergency plan.

b. EPCRA Section 302. A facility that has present on site any EHS in a quantity greater than the applicable threshold planning quantity (TPQ) will provide one-time notification to the SERC and LEPC that the facility is subject to the emergency planning requirements of reference (a) for that substance. Thereafter, if an EHS becomes present at the facility in excess of its TPQ, or if the EHS list is revised and the facility has present an EHS in excess of the TPQ, the facility must notify the SERC and LEPC within 60 days after becoming subject to the requirements.

c. EPCRA Section 303. A covered facility will provide any emergency planning information requested by the LEPC for developing and implementing the LEPC's emergency plan, to the

extent practical, while taking into consideration national security issues. At a minimum, a facility subject to EPCRA reporting requirements will appoint a facility emergency coordinator, a facility representative to serve as a liaison with the LEPC, and notify the LEPC of that representative.

d. EPCRA Section 304. A facility where an EHS or CERCLA HS is produced, used, or stored will provide an immediate verbal and written follow-up, notice as soon as practical of a substance released over a 24-hour period, to any environmental media, that exceeds the established RQ to all SERCs and all LEPCs for areas likely to be affected by the release. This notice does not relieve the facility of any notification requirements covered under other environmental regulations. Releases that result in exposure to personnel solely within the boundaries of the facility do not require notification to the LEPC or SERC, regardless of whether the RQ for the substance was exceeded. Notification to the LEPCs or SERCs is not required for releases exempted by section 40 of reference (aj).

e. EPCRA Section 311. A facility is required to submit applicable Material Safety Data Sheets (MSDSs), or a list of the hazardous chemicals (HCs) present on site grouped by hazard category, to the SERC, LEPC, and the fire department with jurisdiction over the facility:

(1) If the HCs present on site are greater than or equal to 10,000 pounds, or the HCs are EHSs and the amount present on site is greater than or equal to 500 pounds (or approximately 55 gal), or its TPQ (whichever is less).

(2) The HCs present on site require an MSDS under OSHA.

(3) If a newly identified chemical is discovered at the facility, a MSDS or revised list of HCs must be submitted within three months to the SERC, LEPC, and the local fire department.

f. EPCRA Section 312. A facility meeting section 311 reporting requirements must submit an annual Emergency and Hazardous Chemical Inventory Form (Tier I or Tier II) for applicable HCs to the LEPC, SEPC, and local fire departments. The annual submission is due by March 1 for the previous calendar year.

g. EPCRA Section 313. A facility meeting section 313 reporting requirements must annually submit a Toxics Release Inventory Report. Report Control Symbol DD-5090-04 is assigned to this report. The annual submission is due by July 1 for the

previous calendar year. Chapter 15 of this Manual includes a further discussion of section 313 requirements.

8. Response Training and Exercises

a. Training Requirements

(1) Train Marine Corps installation response personnel in compliance with the OSHA requirements specified in section 120(e) in reference (z).

(2) For SPCC plans, per section 7(f) of reference (s), owners/operators must train personnel regarding operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and the contents of the facility SPCC plan.

(3) For oil facility response plans, the following training requirements apply to each facility:

(a) Nontransportation-related onshore facilities regulated by EPA, per section 21(b) of reference (s), must develop and implement a facility response training program and a drill/exercise program. Section 21(b) of reference (s) recommends basing the program upon the Coast Guard's Training Elements for Oil Spill Response, as applicable to facility operations.

(b) For marine transportation-related facilities regulated by the Coast Guard, section 1050 in reference (t) identifies training requirements for facility response personnel.

(c) For bulk packaging containing less than 42,000 gal of oil regulated by RSPA, per reference (ad), the response plan need not describe the training for response personnel.

(d) For onshore oil pipelines, per Section 117 of reference (u), operators must conduct appropriate training for each individual with responsibilities under the plan and must maintain proper records for this training per reference (ag), SSIC 1510.4 for enlisted personnel, 1520.1 for officers, and 12410.4 for civilian personnel.

(4) Reference (r) does not specify training requirements for OHSSCPs.

(5) For RCRA facility contingency plans, section 16 of reference (x) specifies requirements for training HW facility personnel.

(6) For CAA risk management programs, sections 54 and 71 of reference (w), respectively, provide training requirements as part of the Program 2 and Program 3 prevention programs. In addition, section 95 of reference (w) would require the facility owner or operator to train all employees in relevant emergency response.

(7) References (aj) or (ak) do not specify training requirements for facilities subject to reference (a).

b. Facility Response Plan Exercises

(1) Reference (s) does not specify exercise requirements for facilities with SPCC plans.

(2) For oil facility response plans, facility drilling, and exercise requirements follow:

(a) For nontransportation-related onshore facilities regulated by EPA, section 21(c) of reference (s) requires the facility owner or operator to develop a program of facility response drills/exercises, including evaluation procedures. A program that follows the National Preparedness for Response Exercise Program meets this requirement.

(b) For marine transportation-related facilities regulated by the Coast Guard, 1055 of reference (t) identifies drill requirements which must be included within the facility response plan.

(c) For bulk packaging containing less than 42,000 gal of oil regulated by RSPA, reference (ad) does not require drill information in the response plan.

(d) For onshore oil pipelines, Section 107(c)(1)(ix) of reference (u) requires the FRP to contain a section on the drill program.

(3) Although reference (r), per section 212 of reference (r), requires OSCs to conduct periodic drills of removal capability without prior notice, these requirements are designed for Federal OSCs in areas for which ACPs are required. Marine

Corps OSCs, however, should conduct annual "no notice" drills to ensure that their OSCDRs and OSOTs are prepared to respond to OHS releases.

(4) No exercise requirements are specified for RCRA facility contingency plans. However, section 33 in reference (x) requires testing of facility alarm and communications systems, fire protection and spill control equipment, and decontamination equipment in order to ensure proper operation.

(5) Section 95(a)(2) in reference (w) provides drilling requirements to test and inspect emergency response equipment used for CAA risk management programs.

(6) References (aj) or (ak) do not specify exercise requirements for facilities subject to reference (a).

c. Reference. Reference (al) establishes consistent national standards for all exercises and minimum guidelines for ensuring overall preparedness within the response community. These guidelines can be obtained by contacting TASC Dept. Warehouse 33141Q, 75th Avenue, Landover, Maryland, via fax at (301) 386-5394, or via the Internet on the U.S. National Response Team website at <http://www.nrt.org>.

9. Release Notification Requirements

a. Release Notification under the CWA

(1) EPA regulations in section 10 of reference (am) and section 21 of reference (an) specify the CWA notification requirements for oil discharges and HS releases, respectively. Immediately report all harmful quantity oil discharges and all RQ HS releases to waters of the United States from a vessel, offshore facility, or onshore facility to the NRC at Coast Guard Headquarters at (800) 424-8802 or (202) 372-2428 by voice communication.

(a) Harmful quantities of oil (and oil-derived POL) discharged to navigable waters are those amounts which, according to section 3 in reference (am), violate applicable water quality standards, cause a film on, sheen upon, or discoloration of the water surface or adjoining shorelines, or cause sludge or emulsion to be deposited beneath the water surface or upon adjoining shorelines.

(b) EPA regulations in section 4 of reference (ao) and section 3 of reference (an) specify the HS designated under reference (c) and their RQs, respectively.

(2) Do not delay notification for lack of information or for the RQ to be reached when the release cannot be stopped in a timely manner. Immediately voice notify the NRC, thereby fulfilling Federal notification requirements and ensuring that the predesignated EPA or Coast Guard Federal OSC will be notified. Per Coast Guard regulations in section 203 of reference (ap), if direct reporting to the NRC is not practicable, report directly to the Coast Guard or EPA predesignated OSC for the geographic area in which the discharge occurs. If the NRC or OSC cannot be notified immediately, contact the nearest Coast Guard unit. State or territorial reporting requirements may apply as well.

(3) For OCONUS Marine Corps activities, international oil pollution laws require that marine oil spills that impact, or may impact, the waters or shoreline of any coastal nation must be reported immediately to proper authorities in that nation.

b. Release Notification under CERCLA

(1) EPA regulations in section 6 of reference (aq) specify the notification requirements for CERCLA HS releases. Immediately report all RQ HS releases from a vessel, offshore facility, or onshore facility to the NRC at Coast Guard Headquarters at (800) 424-8802 or (202) 267-2675 by voice communication.

(2) EPA regulations in section 4 and 5 of reference (aq) specify the HS designated under reference (e) and their RQs, respectively.

c. Emergency Release Notification under RCRA

(1) As required in section 56(a) of reference (x), the RCRA facility emergency coordinator must notify appropriate State or local emergency agencies if their assistance is needed in the event of an imminent or actual emergency.

(2) If the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, section 56(d)(1) in reference (x) requires the emergency coordinator to notify appropriate local authorities if an evacuation of the local area may be advisable.

Additionally, the emergency coordinator must notify the CG/CO, as the Federal OSC for Marine Corps HS releases. Section 56(d)(2) of reference (x) provides requirements for notifying the NRC of the release.

(3) Section 56(h)(2)(i) in reference (x) requires the facility to provide a written report to the EPA Regional Administrator within 15 days of the release.

d. Release Notification under the CAA

(1) Reference (w) does not contain specific release notification requirements for accidental releases of HCs. However, section 95(a)(1)(i) of reference (w), requires the emergency response plan to include notification procedures for informing the public and emergency response agencies about such releases.

(2) EPA regulations in section 130 of reference (w) specify the list of CAA-regulated substances and thresholds for accidental release prevention.

e. Emergency Release Notification under EPCRA

(1) As required in section 40 of reference (aj), Marine Corps-owned and operated facilities that release a RQ of any EHS or CERCLA HS must immediately notify the local community emergency coordinator for the LEPC of any area likely to be affected by the release and the SERC of any state likely to be affected. A written follow-up emergency notice is required as soon as practicable after the release. Commanders whose units release a RQ of any EHS or CERCLA HS at a location other than a DOD-owned and operated facility must immediately notify the local community emergency coordinator for the LEPC of any area likely to be affected by the release and the SERC of any state likely to be affected.

(2) Section 40(b)(2) in reference (aj) identifies specific required elements to be included in the notice.

(3) Appendix A of reference (aj) specifies the RQs of EPCRA EHSSs.

f. UST Releases. For UST releases, refer to chapter 18 of this Manual.

10. Response Requirements

a. Responsible Party. The party responsible for the release must take all necessary actions to contain and recover the release, if possible, and to mitigate natural resource damages. The responsible party is responsible financially for all response and restoration costs, whether incurred by it or another party. If a local government entity responds to an HS release aboard a Marine Corps installation, reference (ar) specifies procedures for reimbursing the local government for its expenses in connection with the response. Figure 7-6 displays the response process provided in reference (r).

b. ICS. As required by reference (d), the Marine Corps will use the ICS to facilitate coordination with its own, contractor, and regulatory personnel and the public during a spill event. Figure 7-7 displays the structure of the ICS.

c. Oil Discharges

(1) The Marine Corps must respond to the discharge and coordinate response efforts with the Federal OSC. EPA is the predesignated Federal OSC in the inland zone, and the Coast Guard is the Federal OSC in the coastal zone. The Federal OSC will monitor the response efforts of the Marine Corps and, if necessary, will advise the Marine Corps of appropriate actions. The Federal OSC may direct or take charge of response efforts if the Marine Corps response is determined to be inadequate. Subpart D of reference (r) outlines the operational response phases for oil removal. These phases are as follows:

- (a) Discovery or notification.
- (b) Preliminary assessment and initiation of action.
- (c) Containment, countermeasures, cleanup, and disposal.
- (d) Documentation and cost recovery.

(2) The response should be conducted in accordance with the oil facility response plan. The primary response asset available to the CG/CO is the activity's oil OSOT.

d. HS Releases

(1) References (c), (d), and (e) require the Marine Corps, as the responsible party, to contain, mitigate, and remove the release. As the Federal OSC for its HS releases, the Marine Corps CG/CO, through the OSCDR, directs the Federal response effort, including coordination with concerned Federal, State, and local authorities. Subpart E of reference (r) outlines the procedures for HS response. These procedures include discovery or notification, removal site evaluation, and removal actions. The response should be conducted in accordance with the appropriate response plan. As with oil spills, the primary response asset available to the CG/CO is the activity's HS OSOT.

(2) Reference (f), section 56(e)-(h) of reference (x) specifies response requirements to imminent or actual emergency situations.

(3) Reference (g), section 95 in reference (w) contains the requirements for emergency response to releases of listed chemicals.

(4) Reference (a), section 40 of reference (aj) contains requirements for emergency release notification of HCs and RQ EHSS.

11. Non-DOD Release Response

a. Local Releases

(1) Local non-DOD OHS releases can require responses by Marine Corps personnel and equipment. Some releases can originate off the installation and threaten to migrate onto it. Other releases may originate from a commercial pipeline, tank car on a railroad, or tank truck on a highway which directly crosses Marine Corps property through an easement. In any of these cases, Marine Corps assets may be the closest responders.

(2) The installation CG/CO represents the SecDef as the trustee for natural resources located aboard the installation. In this role, the CG/CO may need to activate installation response assets or simply monitor the response being conducted by the responsible party. Paragraph 7104.12 below outlines procedures for assessing the damages to natural resources resulting from OHS releases.

b. Assistance to Federal OSC. Section 175(b)(4) of reference (r) specifies DOD's responsibilities for responding to non-DOD releases when requested by the Federal OSC. As a participating NRT member, the DOD and its component services must provide any assistance requested by the Federal OSC in responding to OHS releases.

12. Marine Corps Natural Resource Trustee Responsibilities

a. Trusteeship. Section 600 of reference (r) assigns responsibilities to Federal officials for the protection of natural resources that are held in trust by the Federal Government for the public. The SecDef is responsible for natural resources located on, over, or under land administered by the DOD. Consequently, the installation commander is responsible for protecting natural resources aboard Marine Corps installations from any environmental damage, including OHS releases.

b. Natural Resource Damage Assessment (NRDA)

(1) As a trustee of Federal natural resources, the Marine Corps must assess the amount of damage suffered due to OHS spills using the appropriate NRDA procedures. Installation commanders and their staffs must use these procedures to determine the extent of injuries to the environment, determine the value of natural resources loss, develop a restoration plan, select a preferred alternative, and present the plan to the responsible party for implementation or to fund the trustee's costs of implementing the plan. Following the procedures will provide the installation with a defensible plan and a rebuttable presumption should the responsible party decline to settle a claim and litigation becomes necessary to recover monetary damages. Damages may be recovered for those natural resource injuries and losses that are not fully remediated by response actions. All money recovered in compensation for natural resource injuries must be used to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources. Trustee officials may also recover the reasonable costs of assessing natural resource damages and any prejudgment interest.

(2) In reference (as), DOI published the required procedures under reference (e) for assessing natural resource damages resulting from a discharge of oil or a HS release. Two types of NRDA's have been developed by DOI. The type A assessment involves standard procedures for a simplified assessment requiring minimal field observations. The type B assessment involves site-specific procedures for detailed

assessments in individual cases. Under both NRDA types, assessments consist of the following four phases:

(a) Phase I: Preassessment Screen. This phase involves the activities that precede the actual assessment. Trustee officials, once notified of a discharge or release, perform a preassessment screening to ascertain whether further assessment actions are warranted. Subpart B of reference (as) describes this phase.

(b) Phase II: Assessment Plan. This phase involves the preparation of an Assessment Plan, which is subject to public review and comment. The Assessment Plan assists the involvement of potentially responsible parties, other trustee officials, the general public, and other interested parties. Subpart C of reference (as) describes the procedures used to develop an Assessment Plan.

(c) Phase III: Assessment Implementation. Trustee officials conduct the work described in the Assessment Plan. The work involves three steps: injury determination, quantification, and damage determination. Subparts D and E of reference (as) describe the procedures for conducting type A and type B assessments.

(d) Phase IV: Post Assessment. Whether a type A or type B assessment, this phase consists of post-assessment activities such as preparation of a report of assessment, establishment of an account for damage assessment awards, and development of a restoration plan for use of the awards. Subpart F of reference (as) describes the procedures used for this phase.

(3) In reference (at), NOAA published required procedures for assessing natural resource damages resulting from a discharge of oil or an HS release to navigable waters under reference (d) and (c). These regulations discuss the meaning of a rebuttable presumption, coordination procedures, considerations for facility restoration, legal authorities and relationships with references (e) and (r), complying with reference (au) and its implementing regulations, settlement procedures, and provisions for emergency restoration. Unlike DOI four-phase NRDA procedures, the NOAA NRDA has the following three phases:

(a) Preassessment Phase. This phase requires the trustee officials to determine whether natural resources or services have been injured by the discharge or release. If response actions are not expected to eliminate the threat of ongoing injury, and feasible restoration alternatives exist, trustees should proceed with the assessment. Subpart D of reference (at) outlines jurisdiction, the determination to conduct restoration planning, data collection procedures, filing a Notice of Intent to conduct restoration planning, and maintaining an Administrative Record. Administrative Records are maintained per reference (ag), SSIC 5090.4.

(b) Restoration Planning Phase. This phase evaluates potential injuries to natural resources and services and uses that information to determine the need for, and scale of, restoration actions. Subpart E of reference (at) describes injury assessment determination and quantification, developing and evaluating restoration alternatives, selecting a preferred alternative, and developing a restoration plan or participating in a regional restoration plan.

(c) Restoration Implementation Phase. Subpart F of reference (at) outlines closing the Administrative Record for restoration planning, presenting a written demand for damages to the responsible party, resolving unsatisfied demands, and opening an account for recovered damages.

(4) If a discharge or release of a mixture of oil and HS injures natural resources and/or services, trustees must use reference (as) regulations to obtain a rebuttable presumption.

(5) Trustees may request assistance for conducting a NRDA from the local USFWS representative and the NOAA regional scientific support coordinator.

7105. TERMS AND DEFINITIONS

1. Aboveground Release. Any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system (reference (av)).

2. Adverse Weather. The weather conditions considered by the facility operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including significant wave height, icy conditions, temperature

ranges, weather-related visibility, and currents within the areas in which those systems or equipment are intended to function (reference (u)).

3. Analysis of Off-Site Consequences. A qualitative or quantitative analysis of a range of accidental releases, including worst case releases, to determine off-site effects including potential exposures of affected populations.

4. Below-Ground Release. Any release to the subsurface of the land and to groundwater. This includes, but is not limited to, releases from the below-ground portions of an UST system and below-ground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system (reference (av)).

5. Coastal Zone. All United States waters subject to the tide, United States waters of the Great Lakes; specified ports and harbors on inland rivers; waters of the contiguous zone; other waters of the high seas subject to reference (r); and the land surface or land substrate, groundwaters, and ambient air proximal to those waters (reference (r)).

6. Complex. A facility possessing a combination of transportation-related and nontransportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of reference (c) (reference (s)).

7. Contiguous Zone. The zone established by the United States under Article 24 of the Convention on the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial area (reference (s)).

8. Contract or Other Approved Means

a. Written contract or other legally binding agreement between the operator and a response contractor or other spill response organization identifying and ensuring the availability of the specified personnel and equipment within stipulated response times for a specified geographic area.

b. Certification that specified equipment is owned or operated by the pipeline operator, and that operator personnel and equipment are available within stipulated response times for a specified geographic area.

c. Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment to be available within stipulated response times for a specified geographic area (reference (u)) (a similar definition for facilities is provided in reference (s)).

9. Discharge. Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes the following:

a. Discharges in compliance with a permit under section 402 of reference (c).

b. Discharges resulting from circumstances identified, reviewed, and included as part of the public record with respect to a permit issued or modified under section 402 of reference (c) and subject to a condition in such permit.

c. Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of reference (c), that are caused by events occurring within the scope of relevant operating or treatment systems (reference (s)).

d. For purposes of reference (r), discharge also means threat of discharge.

10. Dispersant. Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column (reference (r)).

11. EHS. Any substance listed in appendix A or B of reference (aj).

12. Facility. All buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and are owned or operated by the same person (or by any person who controls, is controlled by, or under common control with, such person). Includes man-made structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft (reference (aj)).

13. Fish and Wildlife and Sensitive Environments. Areas that may be identified by either their legal designation or by evaluations of Area Committees (for planning) or members of the Federal OSC spill response structure (during responses). These areas may include wetlands, national and State parks, critical habitats for endangered/threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historic and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats (reference (s)).

14. Foreign Areas. Any countries, territories, or jurisdictions not contained under United States areas or waters when used in relation to section 311(a)(5) of reference (c) and section 101(27) of reference (e).

15. HC. Any chemical that is a physical or health hazard as defined under section 1200(c) of reference (z), except that such a term does not include the following substances:

a. Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.

b. Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.

c. Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.

d. Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

e. Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer (reference (aj)).

16. Harmful Quantity. Any quantity of discharged oil that violates State water quality standards, causes a film or sheen

on the water's surface, or leaves sludge or emulsion beneath the surface (reference (am)).

17. HM

a. Any substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. The term includes HS, HW, marine pollutants, and elevated temperature materials as defined in reference (aw); materials designated as hazardous under the provisions of section 101 in reference (ax); and materials that meet the defining criteria for hazard classes and divisions in reference (ay) (reference (aw)).

b. Any other hazard-specific guidance (instructions or directives) takes precedence over this instruction for control purposes of HM. Such materials include ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials should also be considered hazardous and personnel exposure may occur incident to manufacture, storage, use, and demilitarization of these items.

18. HS

a. As defined by section 101(14) of reference (e), an HS is:

(1) Any substance designated pursuant to section 311(b)(2)(A) of reference (c).

(2) An element, compound, mixture, solution, or substance designated pursuant to section 102 of reference (e).

(3) Any HW having the characteristics identified under or listed pursuant to section 3001 of reference (k), but not including any waste the regulation of which under the reference (k) has been suspended by Act of Congress.

(4) Any toxic pollutant listed under section 307(a) of reference (c).

(5) Any hazardous air pollutant listed under section 112 of reference (g).

(6) Any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of reference (m).

(7) The term does not include petroleum, including crude oil or any fraction thereof, that is not otherwise specifically listed or designated as a HS under (1) through (6) above, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas) (reference (r)).

b. As defined by reference (aw), a HS is a material, including its mixtures and solutions, that:

(1) Is listed in appendix A to section 101 in reference (ax).

(2) Is in a quantity, in one package, which equals or exceeds the RQ listed in appendix A to section 101 in reference (ax).

(3) When in a mixture or solution:

(a) For radionuclides, conforms to paragraph 7 of appendix A to section 101 in reference (ax).

(b) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the table provided in section 8 in reference (aw) (reference (aw)).

19. Injury. A measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge (reference (s)).

20. Inland Area. The area shoreward of the boundary lines defined in reference (az). In the Gulf of Mexico, it means the area shoreward of the lines of demarcation defined in sections 740- 850 in reference (ba). The inland area does not include the Great Lakes (reference (t)).

21. Inland Zone. The environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers (reference (r)).

22. Maximum Extent Practicable

a. The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore nontransportation-related facilities in adverse weather (reference (s)).

b. The planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the criteria in this subpart or in a specific plan approved by the cognizant COTP (reference (t)).

c. The limits of available technology and the practical and technical limit on a pipeline operator in planning the response resources required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a pipeline in adverse weather (reference (u)).

23. Mitigation System. Specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure to the public or environment (reference (w)).

24. NRT. Responsible for national response and preparedness planning, for coordinating regional planning, and for providing policy guidance and support to Regional Response Teams in addressing oil discharges and releases of HSs, pollutants, or contaminants. The NRT's membership consists of representatives from 16 Federal agencies including the DOD.

25. Natural Resources. The land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the Exclusive Economic Zone), any State or local government or Indian tribe, or any foreign government (reference (at)).

26. Navigable Waters. The waters of the United States including the territorial seas. This term includes:

a. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide.

b. All interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairies, 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:

(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.

(3) That are or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as waters of the United States under this paragraph.

e. Tributaries of waters identified above in (a) through (d).

f. The territorial sea.

g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified above in (a) through (d).

h. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of reference (c) (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland (reference (s)).

27. Off Site. Areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours (reference (w)).

28. Oil. Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, vegetable oil, animal oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil (reference (u)).

29. Oil Spill Removal Organization. An entity that provides response resources (reference (u)).

30. OSC. The single Federal representative designated pursuant to reference (r) and identified in approved Regional Oil and Hazardous Substances Pollution Contingency Plans (reference (bb)).

31. Onshore Facility. Any facility of any kind located in, on, or under any land within the United States, other than submerged land (reference (s)).

32. Qualified Individual. An English-speaking representative of an owner/operator, located in the United States, available on a 24-hour basis, with full authority to activate and contract with required oil spill removal organization(s), activate personnel and equipment maintained by the operator, act as a liaison with the OSC, and obligate any funds required to carry out all required or directed oil response activities (reference (u)).

33. Release. 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, or CERCLA HS (reference (aj)).

34. Remove or Removal. The removal of oil from the water and shorelines or the taking of such other actions the Federal OSC may determine to be necessary to minimize or mitigate damage to the public health or welfare, including but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches (reference (bb)).

35. RQ

a. Quantities that may be harmful as set forth in section 3 of reference (an), the discharge of which is a violation of section 311(b)(3) of reference (c), and requires notice as set forth in section 21 of reference (an) (reference (an)).

b. That quantity, as set forth in reference (aq), the release of which requires notification pursuant to reference (aq).

c. For any CERCLA HS, the RQ established in table 302.4 of reference (aq), for such substance. For any other substance, the RQ is 1 pound (reference (aj)).

d. The quantity specified in column 2 of the appendix to section 101 in reference (ax) for any material identified in column 1 of that appendix (reference (aw)).

36. Response Activities. The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or actions taken to minimize or mitigate damage to the environment (reference (u)).

37. Responsible Party

a. In the demise of a vessel, any person owning, operating, or chartering the vessel.

b. In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a Federal agency, state, municipality, commission, or political subdivision of a state, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.

c. In the case of a pipeline, any person owning or operating the pipeline (reference (at)).

38. Restoration. Any action (or alternative), or combination of actions (or alternatives), to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources and services (reference (at)).

39. Sheen. An iridescent appearance on the surface of water (reference (am)).

40. Significant Accidental Release. Any accidental release of a regulated substance that has caused or has the potential to cause off-site consequences such as death, injury, or adverse effects to human health or the environment or to cause the public to seek shelter or be evacuated to avoid such consequences.

41. Spill Event. A discharge of oil into or upon the navigable waters of the United States, or adjoining shorelines in harmful quantities, as defined in reference (am).

42. Spill Management Team. The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

43. Territorial Seas. The belt of the seas measured from the line of 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 of inland waters, and extending seaward a distance of three miles (reference (ao)).

44. TPQ. The established amount of an EHS, which when present on site at a facility in excess of the threshold limit, requires reporting under reference (a) sections, 302, 311, and 312. TPQs are listed in appendices A and B of reference (aj).

45. United States. The states, the District of Columbia, Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands (reference (am)).

46. Value. The maximum amount of goods, services, or money an individual is willing to give up to obtain a specific good or service, or the minimum amount of goods, services, or money an individual is willing to accept to forgo a specific good or service (reference (at)).

47. Vessel. Every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel (reference (s)).

48. Worst Case Discharge. The largest foreseeable discharge of oil, including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to section 105 of reference (u) (reference (u)).

49. Worst Case Release. The release of the largest quantity of a regulated substance from a vessel or process line failure that leads results in the greatest distance to an endpoint defined in section 22(a) of reference (w) (reference (w)).

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 2: MARINE CORPS POLICY

7200. MARINE CORPS ORGANIZATION FOR PLANNING AND RESPONSE

1. The Marine Corps must plan and prepare fully for oil discharges and HS releases, and when such incidents occur, must undertake immediate, direct action to contain and remove the spill while minimizing any harmful effects to the environment. If appropriate, the Marine Corps will coordinate its response efforts with other DOD commands.
2. Commanders whose activities are subject to the regulations discussed in section 1 of this chapter must establish emergency planning and response policies consistent with this Manual.
3. The installation CG/CO must act as the Federal OSC for HS releases originating on, or from, their installations to include the movement of an HS from the installation until it reaches its destination.
4. Marine Corps installations where OHS spill risks exist must fully train and equip OSOTs to control, contain, and clean up OHS spills. These teams can be supplemented by OHS pollution response contracts or arrangements to access such contracts with trained, ready response contractors who can rapidly respond to spills which are beyond the capability of the OSOTs. All such contracts must be coordinated with the OSC.

7201. RELEASE NOTIFICATION TO THE CMC (LF)

1. In addition to notifying the NRC, SERC, LEPC, and other appropriate agencies, all harmful quantity oil spills and RQ HS releases occurring within the Continental United States (CONUS) and OCONUS must be reported to the CMC (LF) as discussed below.
2. For releases that result in serious environmental harm or that may generate adverse publicity, notify the CMC (LF) within 24 hours of the release by telephone at DSN 426-2138 or commercial 703-695-8302.
3. For less serious releases, and to provide more detailed information on serious releases, notify the CMC (LF) via the appropriate chain of command by message within three working days using the format in appendix E for harmful quantity oil

discharges and RQ HS releases. Use a routine precedence for less serious releases; use a priority precedence for serious releases. Installations may also report via email to the appropriate point of contact at CMC (LFL-6) using the appendix E format.

4. For releases involving Marine Corps commands that are tenants of another service or agency or under the operational command of another service (e.g., Commander, Naval Base Norfolk), report the release to the host installation environmental office. All Marine Corps commands/units and tenants and non-Marine Corps tenants on Marine Corps property, even if under the operational command of another service, should report the release to the installation environmental office. This includes oil spills as described by reference (ap) for fueling operations.

7202. CONTINGENCY PLANNING

1. Marine Corps installations, including overseas activities, must prepare appropriate contingency plans providing geographic coverage for regulated Marine Corps-owned and -leased land or activities, including outlying or remote airfields, Reserve units, or mobile detachments.

2. Marine Corps installations may use a single contingency plan to meet all the diverse planning requirements but only if the plan meets the NRT ICP Guidance.

3. To meet Federal OSC contingency planning requirements, installation plans must identify and prepare for responding to "most probable" incidents and "worst case" discharges; identify Marine Corps, Navy, Federal, and commercial regional response assets; and be coordinated with other applicable Federal OSC plans. To meet State, local, and DOD planning requirements, these plans also must be tailored to the specific functions and risks of the installation.

4. Marine Corps tactical units that transport oil in bulk packaging or operate mobile facilities must provide a copy of the RSPA-required response plan or EPA-required SPCC plan, as appropriate, to the host installation's environmental office. Units deployed to another installation for training must provide a copy of the plan to that installation's environmental office upon arrival.

7203. RESPONSE OPERATIONS

1. Safety is the top priority for all Marine Corps response operations, both CONUS and OCONUS. The safety and health of response personnel should not be compromised at any point during on-scene response. All emergency response personnel should be trained per the requirements in sections 120, 38 and 146(k) of reference (z).

2. Each installation will conduct response exercises per the applicable regulations and each response plan's requirements. Following the exercise, if necessary, the plan should be revised to incorporate improvements.

3. The Marine Corps must respond promptly to all Marine Corps OHS releases. For Marine Corps HS releases under reference (e), the Marine Corps, as the predesignated Federal OSC, directs all required cleanup actions. For Marine Corps oil discharges under reference (c), either EPA (inland zone) or Coast Guard (coastal zone) is the predesignated Federal OSC and has statutory authority to assume control of the response if the OSC determines that Marine Corps actions are ineffective or inadequate. Marine Corps policy is to retain control of all Marine Corps OHS pollution responsibilities. This policy is consistent with provisions in reference (r) that define Federal agency response requirements. For HS releases under (f), the (g), or reference (a), the response will be consistent with applicable regulations and the appropriate response plan.

4. Under the terms and conditions of reference (r), the Federal OSC may request Marine Corps response assistance for non-Marine Corps spills. If the Federal OSC seeks Marine Corps assistance, this request will come to the Marine Corps through the DOD representative to the NRT or the RRT. The Marine Corps must respond to these requests to the extent that such response does not compromise essential mission requirements. Marine Corps resources also may respond to OHS releases in adjacent communities under the terms of mutual aid agreements.

7204. EPCRA. Marine Corps policy is to comply with all requirements of reference (a) as required by reference (p). Marine Corps facilities should comply with State EPCRA program requirements to the extent that resources allow, provided that such compliance does not interfere with command mission accomplishment or other legal obligations. The following procedures must be used by all Marine Corps installations in the customs territory of the United States:

1. All facilities must define the facility fenceline and the primary mission of the facility in support of EPCRA requirements. Inter-Service Support Agreements (ISSAs) must be updated to reflect the data collection requirements of the tenants to the host.

a. The facility fenceline is most appropriately defined by class I property lines with the fenceline owner responsible for all DOD tenants. The fenceline owner, otherwise known as the "host" command, must file one report for the entire facility for each section of reference (a) requiring a report. Marine Corps facilities are not responsible for reporting actions of non-DOD Federal agencies.

b. The primary mission should be a broad vision of the overall requirements of the installation and should be consistent with the Installation Master Plan.

2. All facilities must determine whether they meet or exceed threshold requirements for an EHS or HS used at the facility. Each Marine Corps facility that exceeds a threshold is subject to the reporting requirements of reference (a) for emergency planning, providing of information, and emergency notification. Host commands must ensure that thresholds are calculated using the entire facility inventory.

a. Each facility that exceeds a TPQ for an EHS must notify the SERC and the LEPC and provide a facility point of contact, telephone number, and an alternate point of contact.

b. Each covered facility must request to participate in local emergency planning functions and must appoint a facility representative to actively serve on the LEPC. As much as possible, each covered facility must provide any emergency planning information requested by the LEPC, while taking into consideration national security issues.

c. Each facility that releases an EHS or HS in excess of the RQ for that substance (into any environmental media) must:

(1) Immediately provide verbal notification to all LEPCs and SERCs in the area(s) likely to be affected.

(2) Submit a written follow-up notification of the release and actions taken as soon as practicable after the release.

(3) Prepare a standard facility form with approval chain identified to expedite the notification of covered releases.

(4) Notify the activity's higher headquarters in message form as soon as possible after the release has occurred.

d. Releases that result in exposure to personnel solely within the boundaries of the facility do not require notification to the LEPC or SERC, regardless of whether the RQ for that substance was exceeded.

3. All facilities must determine whether they meet or exceed threshold requirements for all HCs they possess that require a MSDS. Each Marine Corps facility that exceeds the threshold is subject to the reporting requirements of reference (a) for community right-to-know provisions. Host commands must ensure that thresholds are calculated using the entire facility inventory.

a. In general, if the quantity of an HC is present in amounts equal to or greater than 10,000 pounds, it is reportable; if the substance is an EHS, and the amount present is equal to or greater than 500 pounds (or 55 gal) or its TPQ, whichever is less, it is also reportable. For each reportable HC, facilities must provide a one-time submission of a copy of the MSDS or a list of reportable HCs, grouped by hazard category, to the LEPC, SERC, and the fire department with jurisdiction over the facility. A hard copy MSDS obtained from the Hazardous Material Information System is sufficient. The MSDS must be submitted to the fire department that would routinely be the first alerted during an emergency. While this generally would be the fire department located on the installation, it may be a fire department separate from the facility.

b. If a list is submitted, it must contain the following information:

(1) A list of the HCs for which an MSDS is required under OSHA regulations, grouped by hazard category. That list need only include those chemicals (either in mixtures or in the pure form) that meet or exceed threshold levels.

(2) The HC listed under all applicable hazard categories.

(3) The chemical and common name of each HC as provided on the MSDS.

(4) Amendments to this submission must be made within a three-month period after significant new information is received.

4. Facilities meeting or exceeding HC threshold requirements must annually submit Emergency and Hazardous Chemical Inventory Forms for those HCs to the LEPC, SERC, and the fire department with jurisdiction over the facility by March 1 covering the previous calendar year's inventory.

a. Facilities may submit either Tier I or Tier II information; however, they are not required to comply with requests to use any form other than the Federal Tier I or Tier II forms.

b. The SERC and the LEPC have the authority to request a Tier II submission for HCs present at the facility below threshold levels if the requester provides a written statement of need.

5. All facilities must determine whether they have exceeded any of the reporting thresholds for toxic chemicals used each calendar year. Each Marine Corps facility that exceeds the threshold is required to complete the Toxic Chemical Release Reporting Form R. Host commands must ensure that thresholds are calculated using the entire facility inventory.

6. Prior to the release of any reports, installations must review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the activity must develop alternative procedures for protecting activity and off-site personnel.

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 3: RESPONSIBILITIES

7300. CMC (LF)

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to emergency planning and response and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Advise installation commanders on preparing required plans and conducting response exercises.
3. Include requests for resources to meet emergency planning and response requirements in the Program Objectives Memorandum/budget submissions.
4. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies as required.
5. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local agencies with regard to emergency planning and response.

7301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit, to the CMC (LFL) and the CMC (LFF), project documentation and funding requests for emergency planning and response activities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with emergency planning and response requirements. Pay appropriate Federal, State, and local fees. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, State, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all emergency planning and response projects.

3. Ensure that a base or station order or an environmental compliance and protection standard operating procedures (ECPSOPs) document is written implementing this chapter. This requirement can be accomplished either by writing an ECPSOP to implement all of the requirements from this Manual or by writing a separate base order to implement this chapter alone.

4. Oversee response efforts for Marine Corps OHS releases within preassigned areas and support other Marine Corps and DOD installation response efforts, as necessary.

a. Serve as the Federal OSC under reference (r) for Marine Corps HS releases and, as such, direct the total response effort to the incident.

b. Initiate and direct response operations for Marine Corps oil spills unless officially relieved by the Coast Guard or the EPA Federal OSC.

c. Coordinate response operations with adjacent commands and communities for OHS releases that may impact more than one installation or activity or the surrounding community. Coordinate response operations with RRT DOD representatives.

5. Notify all required Federal, State, and local agencies of Marine Corps OHS releases and make Marine Corps chain-of-command notifications up to the CMC (LF).

6. Identify and program sufficient funds for hiring and training personnel, conducting exercises and drills, providing, operating, maintaining response equipment, and constructing facilities required for implementing the installation's emergency response plans.

7. Develop, review, and update emergency response plans using standard formats consistent with regulatory requirements.

a. Ensure that SPCC plans are up-to-date, reviewed at least every five years, and recertified by a PE if structural changes affecting its potential to discharge were made to the facility.

b. Coordinate emergency response plans with appropriate Federal OSCs and State and local environmental and emergency planning authorities.

c. Develop OHSSCPs and, within the United States, coordinate the development of the plans with overlapping ACPs, as prescribed in reference (r).

d. Annually review and certify that OHS spill contingency plans are current.

8. Ensure that the installation and tenant activities meet applicable EPA and State requirements related to the prevention of oil spills.

9. Retain responsibility for OHS in transit until the OHS has been accepted for disposition at its destination.

10. Establish, train, and exercise on-scene operations teams, spill management teams, and other response personnel for OHS responses.

11. Ensure that Installation Natural Disaster Plans incorporate the requirement for each unit to gather an inventory of HM and HW as part of the preparation process. The inventories will provide a commander with an accurate list of items to be accounted for should a natural disaster remove them from their storage or accumulation points.

12. Comply with reference (a) sections 302-312 reporting requirements as described in paragraph 7104.7 and:

a. Define the facility fenceline, including all tenants, and the primary mission of the facility to support EPCRA reporting requirements. Revise and update ISSAs to support these requirements.

b. Ensure that all thresholds are calculated using the entire facility inventory and that all reporting requirements for that facility under reference (a) are met.

c. Ensure that all publicly available data have been reviewed to prevent sensitive or classified information from being released.

d. Use data provided from EPCRA reporting to revise and maintain the installation Pollution Prevention Plan.

13. Ensure that coordination occurs as appropriate with the Safety Office and Federal Fire Departments in matters relating to emergency planning and emergency response actions.

7302. UNIT/TENANT COMMANDERS

1. Assist their installation commander emergency response efforts to the extent resources allow, provided such compliance does not interfere with command mission accomplishment or other legal obligations.
2. Notify all required Federal, State, and local agencies of off-base releases and make Marine Corps chain-of-command notifications up to the CMC (LF).
3. Prepare and implement an SPCC plan for all off-base use of portable, tactical refueling equipment, such as sixcons and collapsible fabric tanks in accordance with paragraph 7104.2b.

REFERENCES

- (a) 42 U.S.C. 11001 et seq.
- (b) Federal Register, Volume 61, page 28642, June 5, 1996
- (c) 33 U.S.C. 1251 et seq.
- (d) Public Law 101-380, 33, U.S.C. 2701 et seq.)
- (e) 42 U.S.C. 9601 et seq.
- (f) 42 U.S.C. 6901 et seq.
- (g) 42 U.S.C. 7401 et seq.
- (h) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (i) Public Law 92-516, 7 U.S.C. 136 et seq.
- (j) 33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.
- (k) Public Law 89-272, "Solid Waste Disposal Act of 1965," October 20, 1965
- (l) 42 U.S.C. 300(f) et seq.
- (m) 15 U.S.C. 2601 et seq.
- (n) Executive Order 12580, "Superfund Implementation," January 23, 1987
- (o) Executive Order 12777, "Implementation of Section 311 of the Federal Water Pollution Control Act of 1972, as amended, and the Oil Pollution Act," October 18, 1991
- (p) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (q) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (r) 40 CFR 300

(s) 40 CFR 112

(t) 33 CFR 154

(u) 49 CFR 194

(v) 30 CFR 254

(w) 40 CFR 68

(x) 40 CFR 264

(y) 40 CFR 265

(z) 29 CFR 1910

(aa) 40 CFR 109

(ab) "Joint Services Spill Prevention, Control, and Countermeasure (SPCC) Plan Template," April 2004

(ac) "Joint Services Spill Prevention, Control, and Countermeasure (SPCC) Plan Frequently Asked Questions," April 2004

(ad) 49 CFR 130

(ae) OPNAVINST 5090.1C, Chapter 15

(af) 40 CFR 58

(ag) SECNAV M-5210.1

(ah) 40 CFR 70

(ai) 40 CFR 71

(aj) 40 CFR 355

(ak) 40 CFR 370

(al) Department of Transportation, "National Preparedness for Response Exercise Program (PREP) Guidelines," August 2002

(am) 40 CFR 110

(an) 40 CFR 117

(ao) 40 CFR 116
(ap) 33 CFR 153
(aq) 40 CFR 302
(ar) 40 CFR 310
(as) 43 CFR 11
(at) 15 CFR 990
(au) 42 U.S.C. 4321
(av) 40 CFR 280
(aw) 49 CFR 171
(ax) 49 CFR 172
(ay) 49 CFR 173
(az) 46 CFR 7
(ba) 33 CFR 80
(bb) 40 CFR 113

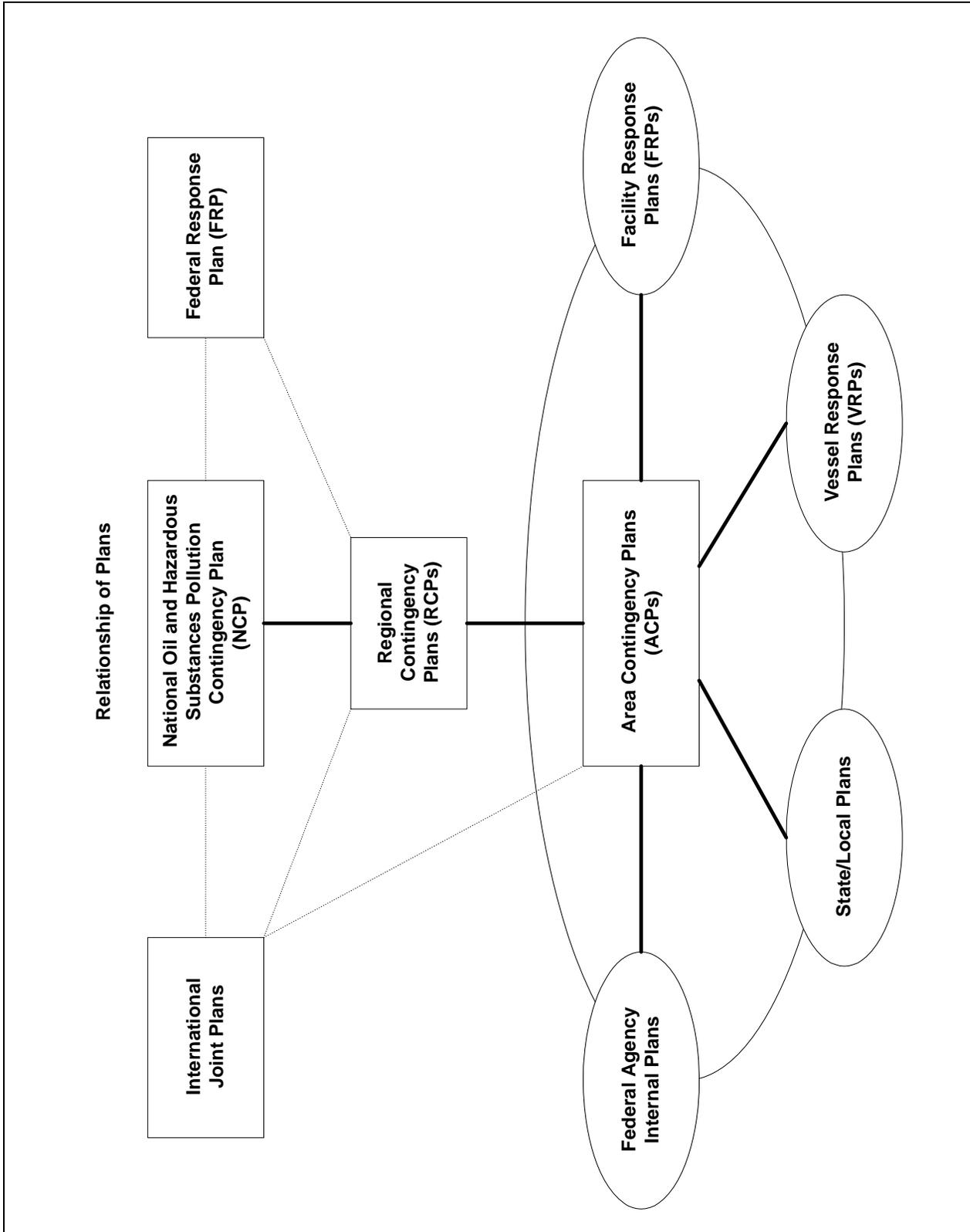


Figure 7-1.--Relationships of Contingency and Response Plans

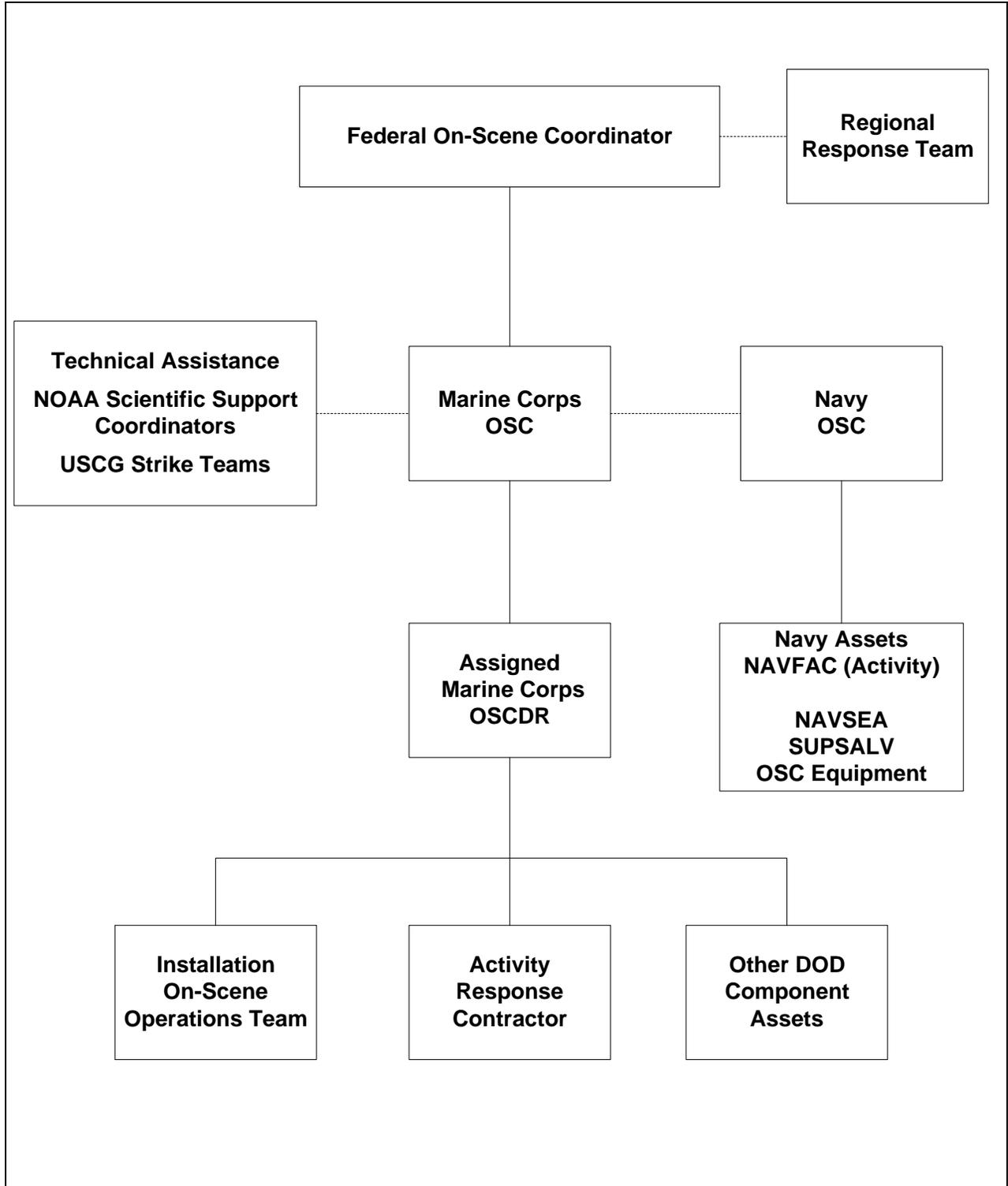


Figure 7-2.--Marine Corps Oil Pollution Response Organization

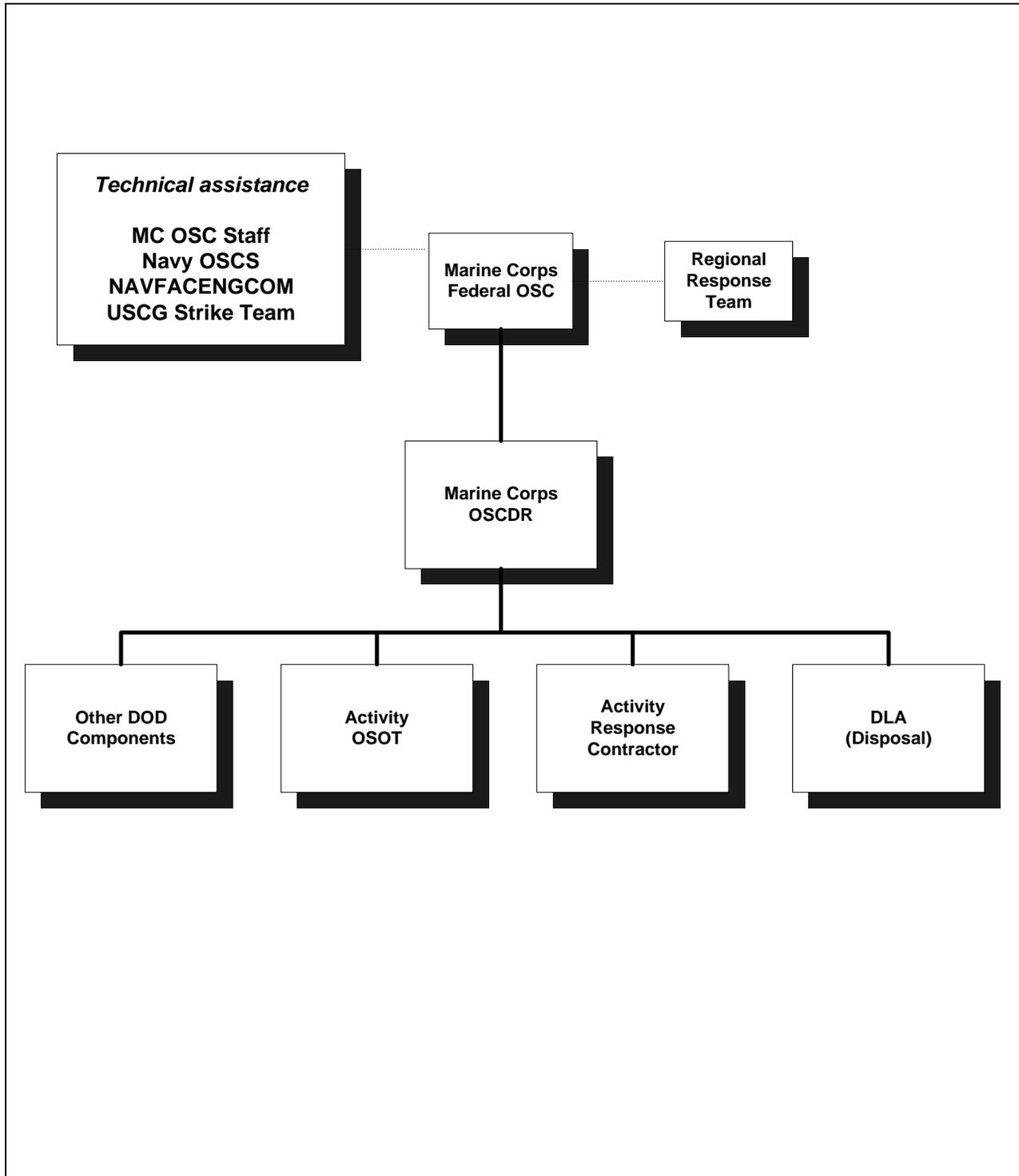


Figure 7-3.--Marine Corps Hazardous Substance Pollution Response Organization

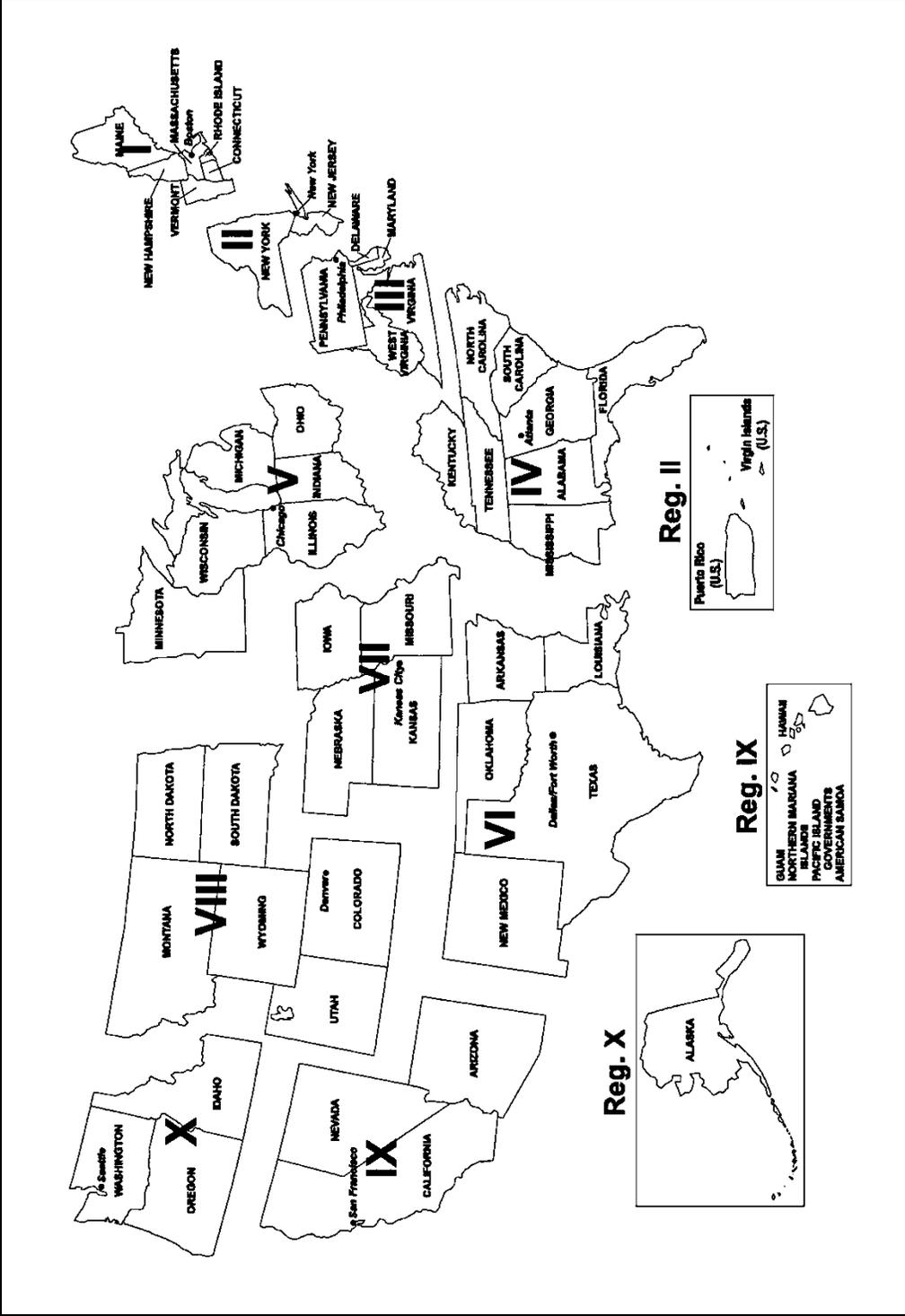


Figure 7-4.--Standard Regional Boundaries of the Environmental Protection Agency

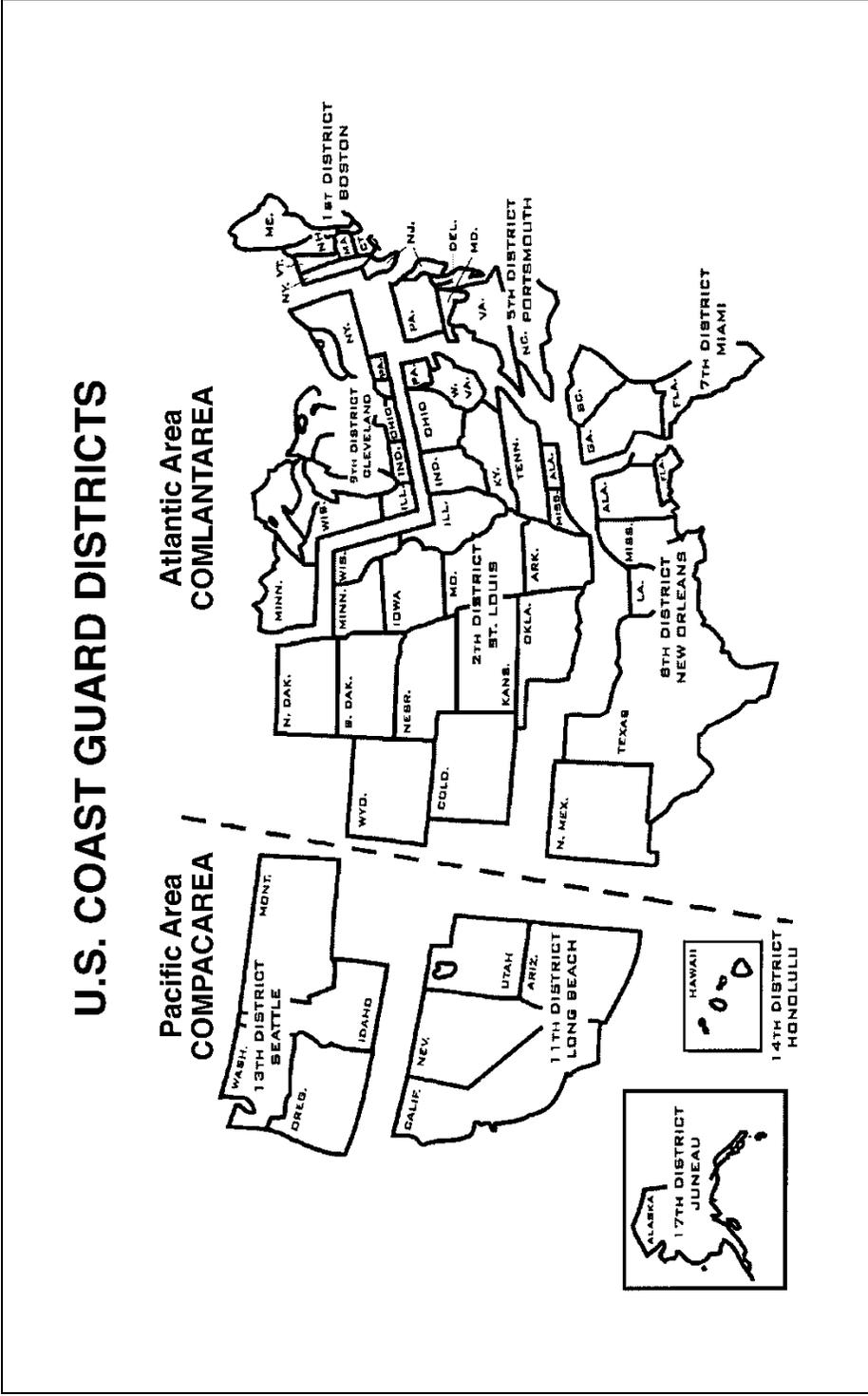


Figure 7-5.--United States Coast Guard District Boundaries

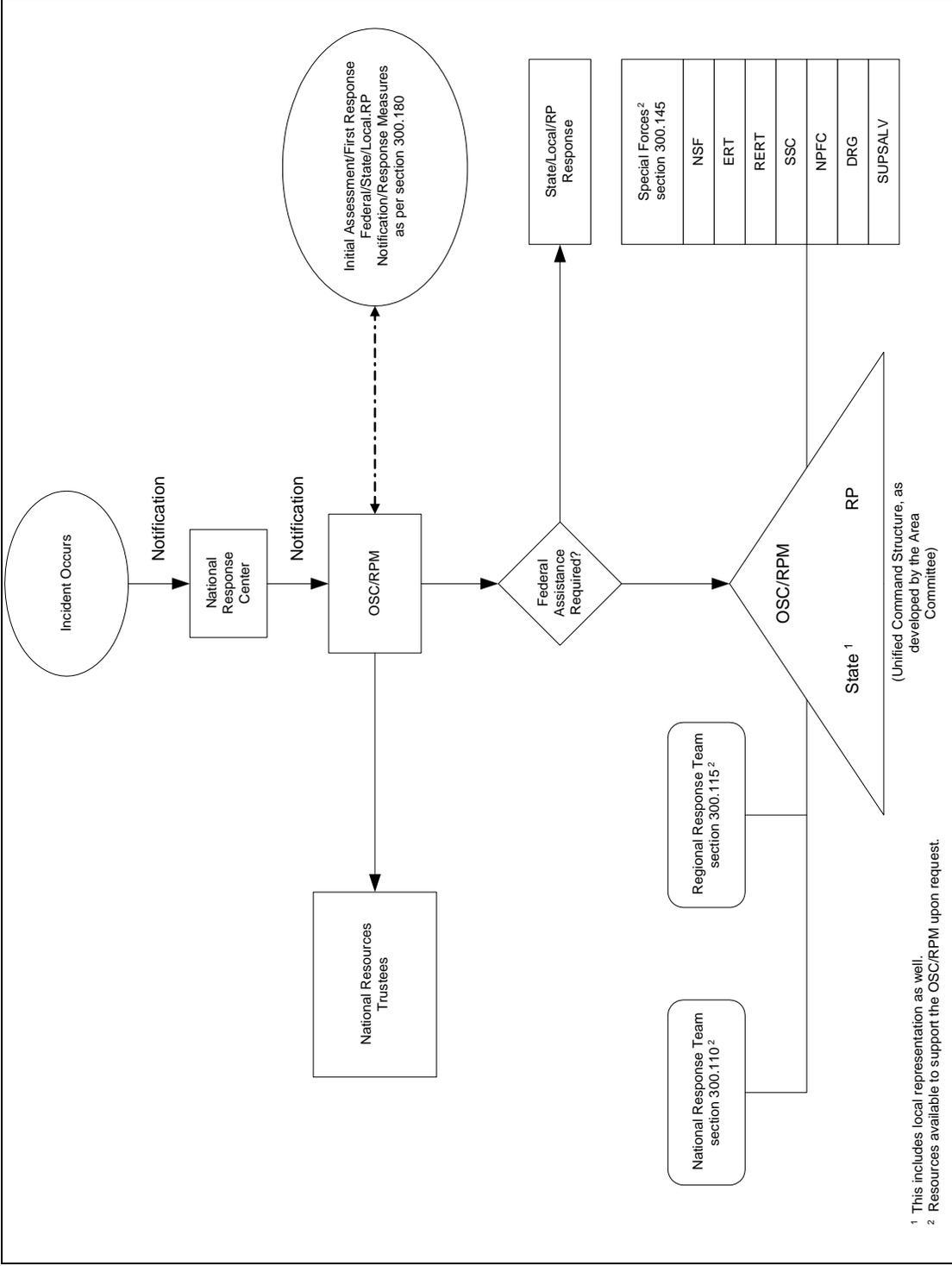


Figure 7-6.--National Response System Concepts: Response

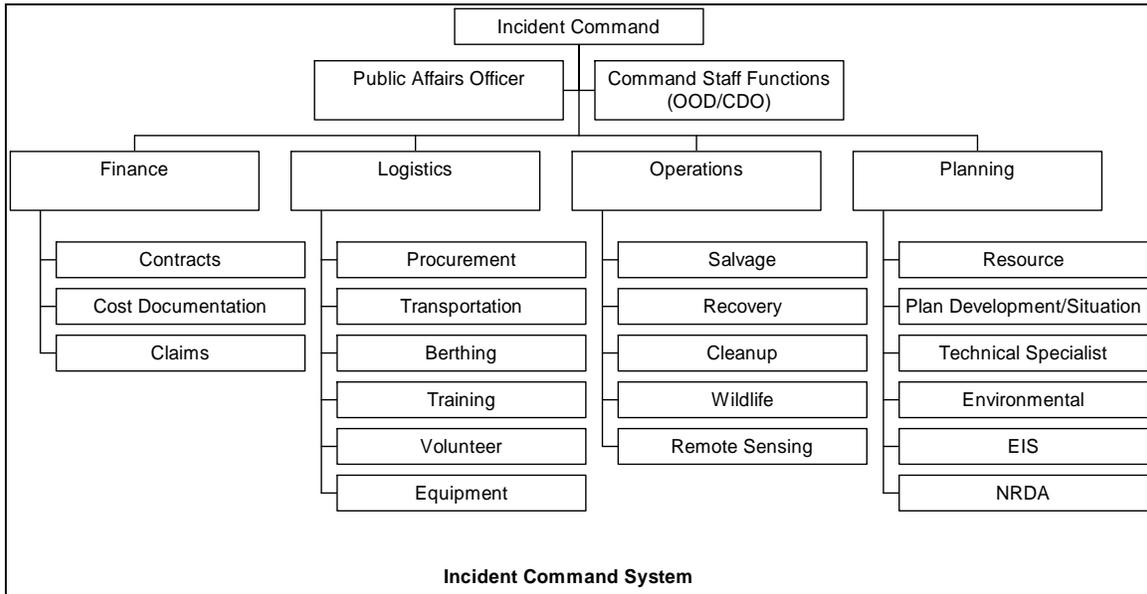


Figure 7-7.--Incident Command System

CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

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CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

SECTION 1: SCOPE

8100. PURPOSE. This chapter establishes Marine Corps policy and assigns responsibilities in accordance with the statutes and regulations cited in paragraph 8103 for achieving compliance with applicable Federal statutory and regulatory requirements, Presidential Memoranda, Executive Orders (E.O.s), and Department of Defense (DOD) regulations and policies for the integrated management of cultural resources on Marine Corps lands or that may be affected by Marine Corps actions.

8101. APPLICABILITY. This chapter applies to all real properties under the control of the Marine Corps by ownership, lease, or similar instrument that are located in the United States; the District of Columbia; and the commonwealths, territories, and possessions of the United States. This chapter also applies to lands not under Marine Corps ownership, lease, or similar instrument in those cases where actions financed, permitted, or sponsored by the Marine Corps may affect cultural resources on such lands. As noted in chapter 1 of this Manual, these policies apply to overseas locations as well; however, policies will be integrated with those specified under the Final Governing Standards (FGS) for the host nation. Waters contiguous to the land areas may contain cultural resources; therefore, this chapter also applies to water areas under direct control of the Marine Corps and to submerged cultural resources located therein. For water areas under partial control, or that will be subject to impacts related to Marine Corps actions, the Marine Corps will take into account the effects of those actions on submerged resources located therein.

8102. BACKGROUND. Marines need access to a variety of landscapes and facilities to conduct training. However, training can impact cultural resources on public lands. The American people place intrinsic value on certain resources; failure to protect those resources under the stewardship of the Marine Corps may lead to legislative, executive, or judicial directives limiting Marine Corps access to lands necessary to maintain military readiness. Accordingly, Marine Corps installation commanders must work to guarantee continued access to our land, air, and water resources for realistic military training and testing. Installation commanders must ensure that

the cultural resources entrusted to the Marine Corps care remain intact and available for future generations.

8103. FEDERAL STATUTES. This policy tiers off of the policies for cultural resources management outlined in Department of Defense Instruction (DODI) 4715.16 "Cultural Resources Management" and Secretary of the Navy Instruction (SECNAVINST) 4000.35A "Department of the Navy Cultural Resources Program". In addition, this policy incorporates the provisions of the following Federal legislation, Executive Orders, DOD regulations and guidance, as appropriate to the management of cultural resources under the purview of the U.S. Marine Corps.

a. Legislation

(1) National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321)

(2) National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470-470x)

(3) Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. 3001-3013)

(4) Archeological Resources Protection Act (ARPA) of 1979, as amended (16 U.S.C. 470aa-mm)

(5) American Indian Religious Freedom Act (42 U.S.C. 1996 and 1996a)

(6) Antiquities Act of 1906 (16 U.S.C. 431-433)

(7) Abandoned Shipwreck Act of 1987 (43 U.S.C. 2101-2106)

(8) Archeological and Historic Data Preservation Act of 1974 (16 U.S.C. 469-469cc)

(9) Cooperative Agreements for Management of Cultural Resources (10 U.S.C. 2684)

(10) Federal Records Act of 1950 (44 U.S.C. 3101)

(11) Historic Sites Act of 1935 (16 U.S.C. 461-467)

b. Federal Regulations

- (1) 36 CFR 60, "National Register of Historic Places"
(NRHP)
- (2) 36 CFR 63, "Determinations of Eligibility for
Inclusion in the National Register of Historic Places"
- (3) 36 CFR 65, "National Historic Landmarks Program"
- (4) 36 CFR 66, "Recovery of Scientific, Prehistoric,
Historic and Archeological Data"
- (5) 36 CFR 67, Section 7, "The Secretary of the
Interior's Standards for Rehabilitation"
- (6) 36 CFR 68, "The Secretary of the Interior's
Standards for the Treatment of Historic Properties"
- (7) 36 CFR 78, "Waiver of Federal Agency
Responsibilities, Under section 110 of the National Historic
Preservation Act"
- (8) 36 CFR 79, "Curation of Federally-Owned and
Administered Archeological Collections"
- (9) 32 CFR 229, "Protection of Archaeological
Resources: Uniform Regulations, Department of Defense"
- (10) 36 CFR 800, "Protection of Historic Properties"
- (11) 40 CFR 1500-1508, "Council on Environmental
Quality"
- (12) 43 CFR 3, "Department of the Interior, Preservation
of American Antiquities"
- (13) 43 CFR 10, "Native American Graves Protection and
Repatriation Regulations"

c. E.O.s and Presidential Memoranda

- (1) E.O. 11593, "Protection and Enhancement of the
Cultural Environment"
- (2) E.O. 13006, "Locating Federal Facilities on Historic
Properties in our Nation's Central Cities"

(3) E.O. 13007, "Indian Sacred Sites"

(4) E.O. 13175, "Consultation and Coordination with Indian Tribal Governments"

(5) E.O. 13287, "Preserve America"

(6) E.O. 13327, "Federal Real Property Asset Management"

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

d. Federal Guidance

(1) 48 FR 22716, "The Secretary of the Interior's Professional Qualification Standards"

(2) 53 FR 4742, "Guidelines for Federal Agency Responsibilities, Under section 110 of the National Historic Preservation Act"

(3) 62 FR 33707, "The Secretary of the Interior's Proposed Historic Preservation Professional Qualification Standards"

e. DOD Regulations and Guidance

(1) DODI 4710.02 "DOD Interactions with Federally-Recognized Tribes," 14 September 2006

(2) DOD Minimum Antiterrorism Standards for Buildings (UFC 4-010-01)

(3) SECNAVINST 11010.14, "Department of the Navy Policy for Consultation with Federally Recognized Indian Tribes"

(4) SECNAV M 5210.1, "Department of the Navy Records Management Program Records Management Manual"

(5) Nationwide Programmatic Memorandum of Agreement among the United States Department of Defense, the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers (Concerning World War II Temporary Buildings)

(6) Program Comment for Wherry and Capehart Era Family Housing at Air Force and Navy Bases

(7) Program Comment: DOD Cold War-Era Unaccompanied Personnel Housing

(8) Program Comment: DOD World War II- and Cold War-Era Ammunition Storage Facilities

(9) DOD Protocol for Consultation with Native Hawaiian Organizations

8104. REQUIREMENTS

1. General. The Federal legislation, E.O.s, DOD regulations, and guidance pertaining to cultural resources establish requirements applicable to Marine Corps installations in four areas as outlined below.

2. Inventory and Evaluation. Each Marine Corps installation with real property management responsibilities must prepare an assessment of the current status of its inventory of historic properties, the general condition and management needs of such properties, and the steps underway or planned to meet those management needs as required by section 110(a)(2) of reference (a) and in accordance with reference (b). Codes reflecting the inventory status of Marine Corps real property should be updated in internet Navy Facilities Assets Data Store (iNFADS) on an annual basis. Refer to section 8201 of this chapter for specific associated policies and requirements.

3. Resource Protection. Marine Corps installations must implement policies and procedures for assessing the condition of known cultural resources, avoidance or mitigation of impacts on cultural resources from Marine Corps actions or the actions of contractors or tenants working on Marine Corps installations, maintenance and treatment actions to ensure preservation or enhance the condition of cultural resources, management of the data related to cultural resources, and public outreach and education. Refer to section 8202 for specific associated policies and requirements.

4. Consultation. Marine Corps installations have a responsibility to consult with internal and external stakeholders on a regular basis. References (a), (c), and (d) require coordination with interested parties and other government agencies, depending on the action involved. Refer to section 8203 for specific associated policies and requirements.

5. Confidentiality Requirements. Cultural resource preservation statutes require Marine Corps installations to withhold certain information from disclosure to the public as explained in section 8204.

6. Sustainability. One of the primary focuses of environmental stewardship within the DOD is the concept of sustainability. Through conservation, improved maintainability, recycling, reduction and reuse of waste, and other actions and innovations, the Marine Corps can meet today's needs without compromising the ability of future generations to meet their own. Refer to section 8205 for specific associated policies and requirements.

7. Annual Reporting and Metrics. The Marine Corps is responsible for responding to various data calls and asset management inventories as explained in section 8206, including the new metrics outlined in reference (e).

8105. TERMS AND DEFINITIONS. As a general note, all of the following definitions apply to Marine Corps operations within the United States and its territories. For operations in overseas locations, Marine Corps personnel should apply the definitions provided in the FGS for the host nation, where applicable, or definitions provided in host nation cultural property laws. Consulting partners in overseas locations should include the agency or agencies responsible for cultural resources or cultural property under host nation laws.

1. Adaptive Reuse. A new or different use of a historic property that does not irreversibly alter its character-defining features, is appropriate for the context, and is consistent with the significance and character of the property.

2. Advisory Council on Historic Preservation (ACHP). A Federal council, established by Title II of reference (a) and charged with advising the President, Congress, and other Federal agencies, whose function is to encourage private and public interest in historic preservation and archaeological resources protection and to comment on Federal agency actions under section 106 of reference (a).

3. Archaeological Resource. Any material remains of past human life that are capable of contributing to scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques. To qualify as an "archaeological resource" under reference (f), the remains have

to be at least 100 years old. Archaeological remains less than 100 years old may be eligible for listing in the NRHP and, if so, would be historic properties for which compliance in accordance with reference (a) is required.

4. Archaeological Survey. Archaeological survey is a systematic analysis by a professional meeting Secretary of Interior Standards sufficient to allow categorization of archaeological potential to the degree required to make decisions. The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognizes several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important archaeological properties including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing.

5. Architectural Survey and Evaluation. A survey and evaluation effort to determine which buildings, structures, works of engineering, industrial facilities, fortifications, and landscapes are eligible for listing in the NRHP. Survey efforts typically involve examination of the historic context of the resource as well as its current integrity.

6. Area of Potential Effect (APE). The APE for an undertaking is determined in consultation with the State Historic Preservation Office (SHPO), Native American tribes/Native Hawaiian organizations, and other interested parties. The APE includes not only the construction or ground disturbance footprint of the undertaking, but also the settings of any historic properties that may be impacted by the intrusion of new visual or noise elements.

7. Assessment of Effect. A process to determine whether an undertaking may affect in any way the qualities of a property that make it eligible for listing in the NRHP. The assessment is made by the installation's Commanding General or Commanding Officer (CG/CO) in consultation with the SHPO, Native American tribes/Native Hawaiian organizations, and other interested parties. If the Marine Corps finds that no historic properties are present or affected by the proposed action, it provides documentation to the SHPO and other consulting partners and, barring any objection in 30 days, proceeds with its undertaking. If the Marine Corps finds that historic properties are present, it proceeds to assess possible adverse effects based on criteria

found in reference (g). If the SHPO and any consulting partners agree that there will be no adverse effect, the Marine Corps proceeds with the undertaking and any agreed-upon conditions. If the determination is that the action will have an adverse effect, or if the parties cannot agree and the ACHP determines within 15 days that there is an adverse effect, the agency begins consultation to seek ways to avoid, minimize, or mitigate the adverse effects.

8. Collections and Associated Records (per reference (h)). Collections are material remains that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource, and associated records that are prepared or assembled in connection with the survey, excavation, or other study (section 4(a) of reference (h)). Associated records are original records (or copies thereof) that are prepared or assembled, that document efforts to locate, evaluate, record, study, preserve, or recover a prehistoric or historic resource (see section 4(2) of reference (h)). Associated records that are prepared or assembled in connection with the survey, excavation, or other studies are maintained per reference (i) SSIC 5750.2.

9. Consensus Determination. A consensus determination is a determination of a property's eligibility for listing on the NRHP made by consensus between the Marine Corps installation and the SHPO. Alternatively, installations or the SHPO can request an official determination of eligibility from the Keeper of the National Register.

10. Consultation. The process of seeking, discussing, and considering the views of others and, where feasible, seeking agreement with them on how historic properties shall be identified, considered, and managed.

11. Cultural Items. As defined by reference (d), human remains and associated funerary objects, unassociated funerary objects (at one time associated with human remains as part of a death rite or ceremony, but no longer in possession or control of the Federal agency or museum), sacred objects (ceremonial objects needed by traditional Native American religious leaders for practicing traditional Native American religions), or objects of cultural patrimony (having ongoing historical, traditional, or cultural importance central to a Federally recognized tribe or Native Hawaiian organization, rather than property owned by an individual Native American, and which, therefore, cannot be

alienated, appropriated, or conveyed by any individual of the tribe or group).

12. Cultural Landscape. A cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values. A cultural landscape can be a historic site, historic designed landscape, historic vernacular landscape, or ethnographic landscape (see reference (j)).

13. Cultural Resources. A generic term commonly used to include buildings; structures; districts; archaeological sites; historic landscapes; cemeteries; resources of interest to Native American tribes or Native Hawaiian organizations; and objects of significance in history, architecture, archaeology, engineering, or culture. The term also includes associated documents and records. Definitions for "cultural resources" in overseas locations should follow those provided in host nation laws and statutes.

14. Cultural Resources Manager. Ideally, the cultural resources manager for each Marine Corps installation shall be a cultural resources professional (e.g., a qualified anthropologist, archaeologist, architectural historian, historic architect, historian, or preservation planner) with specialized training and experience that meets the professional standards and qualifications established by the Secretary of the Interior. For large installations or installations with diverse cultural resources issues, the CG/CO is strongly encouraged to appoint a cultural resources manager that meets these requirements. For smaller installations or installations with fewer cultural resources issues, management of the cultural resources program is often performed as a collateral duty. In those instances, the cultural resources manager can be a staff person not necessarily qualified as a cultural resources professional who performs routine cultural resources compliance functions and contracts out for professional expertise as needed for specific projects. Such an individual must complete appropriate training to perform the cultural resources manager duties.

15. Curation. The management and preservation of an archaeological collection, including all associated documentation, according to professional museum and archival practices, in accordance with reference (h), to insure long-term care and protection of that collection.

16. Determination of Eligibility. A process to determine if a property is eligible for listing in the NRHP. A property can be determined eligible by consensus agreement or by determination by the Keeper of the National Register. Decisions by the Keeper cannot be challenged. Reference (a) provides equal protection to resources that are determined eligible for listing on the NRHP and those that are listed on the NRHP. For overseas locations, apply the relevant process outlined in the FGS or host nation cultural resources laws.

17. District. A geographically definable area (urban or rural) that possesses a significant concentration, linkage, or continuity of sites, structures, buildings, or objects united aesthetically by the plan or physical development or united by past events. A district may also comprise individual elements separated geographically but linked by association or history.

18. Effect. Any condition of a project or undertaking that may cause a change in the quality of the historic, architectural, archaeological, or cultural character of a property that qualifies it for listing in the NRHP. An undertaking is considered to have an effect on a historic property when any aspect of the undertaking changes the integrity of location, design, setting, materials, workmanship, feeling, or association of the property that contributes to its significance according to the NRHP criteria. Direct effects are caused by the undertaking and occur at the place and time of the undertaking. Indirect effects are those caused by the undertaking that occur later in time or are further removed in distance, but are still reasonably foreseeable.

19. Federal Preservation Officer (FPO). The individual responsible for coordinating the agency's activities under references (a) and (k), including nominating properties under the agency's ownership or control to the NRHP. The Department of Navy has an FPO, who has appointed Deputy FPOs for the Navy and the Marine Corps.

20. Federal Land Manager. With respect to public lands, the secretary of the department or head of any other agency or instrumentality of the United States, having primary management authority over such lands, including persons to whom such management authority has been officially delegated.

21. Heritage Assets. Plant, property, and equipment items that are considered to be unique due to their historical or natural significance; cultural, educational or artistic importance; or

significant architectural characteristics for the purposes of accountability under the Chief Financial Officers (CFO) Act. "Heritage Assets" are addressed by CFO Act procedures and "historic properties" as addressed by reference (a) are related, but separate, categories.

22. Historic Property. Reference (a) defines a "historic property" as any district, site, building, structure, landscape, traditional cultural property, or object that is included in or eligible for inclusion in the NRHP. For overseas locations, section 402 of reference (a) extends this definition to include any resources on the World Heritage List or on a host nation's equivalent to the NRHP.

23. Indian Tribe. Any tribe, band, nation, or other organized American Indian group or community of Indians, including any Alaska Native village or corporation as defined in, or established by, reference (1) that is recognized as eligible for special programs and services provided by the United States to Indians because of their status as Indians. Such acknowledged or "Federally recognized" Indian tribes exist as unique political entities in a government-to-government relationship with the United States. The Bureau of Indian Affairs maintains the listing of Federally recognized Indian tribes.

24. Integrated Cultural Resources Management Plan (ICRMP). A five-year plan developed and implemented by an installation commander to provide for the management of cultural resources in a way that maximizes beneficial effects on such resources and minimizes adverse effects and impacts without impeding the mission of the installation and its tenants.

25. Memorandum of Agreement (MOA). A document arising from section 106 consultation that is signed by the CG/CO, SHPO, and ACHP and that resolves incompatibilities between a Marine Corps undertaking and the SHPO preservation requirements by stipulating measures to reduce adverse effects, or that accepts the effects as being unavoidable and in the public interest.

26. Mitigation. In cultural resources management, mitigation is a means of lessening the adverse effects of an undertaking on properties listed in or eligible for listing in the NRHP. Mitigation can include limiting the magnitude of the action; repairing, rehabilitating, or restoring the affected property; recovering and recording data that may be destroyed or substantially altered from cultural properties; and avoiding the

effect altogether by not taking an action or part of an action, or by relocating the action.

27. National Historic Landmark. An historic property designated by the Secretary of the Interior as having exceptional significance in the Nation's history and which is subject to the most stringent preservation requirements.

28. National Park Service (NPS). The NPS is the bureau of the Department of the Interior (DOI) to which the Secretary of the Interior has delegated the authority and responsibility for administering the National Historic Preservation Program.

29. National Register Criteria. The criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for listing in the NRHP, as per reference (m).

30. NRHP. A nationwide listing of districts, sites, buildings, structures, and objects of national, State, or local significance in American history, architecture, archaeology, or culture that is maintained by the Secretary of the Interior. NRHP listings must meet the criteria found in section 4 of reference (m). For overseas locations, refer to either the World Heritage List or the host nation's equivalent to the NRHP.

31. Native Hawaiian. Any descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.

32. Native Hawaiian Organization (NHO). An NHO is defined as any organization that:

- a. Serves and represents the interests of Native Hawaiians;
- b. Has as a primary and stated purpose the provision of services to Native Hawaiians; and
- c. Has demonstrated expertise in aspects of historic preservation that are culturally significant to Native Hawaiians. The term includes, but is not limited to, the Office of Hawaiian Affairs of the state of Hawaii and Hui Malama I Na Kupuna O Hawai'i Nei, an organization incorporated under the laws of the state of Hawaii.

33. Programmatic Agreement (PA). A written agreement among the Marine Corps activity, SHPO, ACHP, Native American tribes, or Native Hawaiian organizations, that stipulates how to carry out

a program or a class of undertakings, repetitive in nature or similar in effect, so as to avoid or mitigate adverse effects on cultural resources. A PA is used to streamline compliance with section 106 of reference (a); PAs cannot be used for compliance with other Federal statutes.

34. Recordation. Measured drawings, photographs, and other techniques that are:

a. undertaken to provide a permanent record of resources that must be destroyed or substantially altered and

b. performed under the guidance of the keeper of the NRHP through the Historic American Buildings Survey/Historic American Engineering Record.

35. Restoration. The act or process of accurately recovering the form and details of property and its setting as it appeared at a particular period of time.

36. SHPO. The person who has been designated in each state to administer the State Historic Preservation Program, including identifying and nominating eligible properties to the NRHP and otherwise administering applications for listing historic properties in the NRHP. For overseas locations, refer to the host nation's cultural resources laws or policies to identify the equivalent agency.

37. Stewardship. The management of resources entrusted to one's care in a way that preserves and enhances the resources and their benefits for present and future generations.

38. Tribal Historic Preservation Officer (THPO). A THPO appointed or designated in accordance with reference (a) is the official representative of a Tribe for the purposes of section 106.

39. 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" as presented in section 16(y) of reference (g).

CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

SECTION 2: MARINE CORPS POLICY

8200. GENERAL. In accordance with reference (a) and DOD policy, the Marine Corps is responsible for managing and maintaining cultural resources under its control through a comprehensive program that considers the preservation of their historic, archaeological, architectural, and cultural values, is mission-supporting, and results in sound and responsible stewardship. Through the integration of its cultural resources management policies and procedures with Marine Corps mission, the Marine Corps will provide stewardship of cultural resources in a sustainable manner that supports the mission and promotes the quality of life for stakeholders.

8201. INVENTORY AND EVALUATION. Section 110 of reference (a) and in accordance with reference (n) call for Federal agencies to maintain accurate information on the state of Federally-owned historic properties. Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of reference (a), the general condition and management needs of such properties, and the steps underway or planned to meet those management needs.

1. Inventory. All Marine Corps installations are responsible for identifying cultural resources within the installation boundaries, and maintaining complete and current information regarding resource location, significance, condition, and use. Marine Corps installations will proactively program projects for survey of unsurveyed or inadequately surveyed land parcels or unevaluated buildings/structures within the installation, prioritizing surveys according to land use and the potential to affect cultural resources. Survey priority goals may be aligned with section 106 compliance (e.g., surveys in support of section 106 undertakings may take priority); however, annual programmed survey goals should typically exceed acreage or buildings/structures to be affected by section 106 undertakings. Inventory of historic buildings and structures should be done in conjunction with their evaluation and take place when buildings/structures turn 50 years in age; both survey and evaluation should be preceded by development of detailed historic contexts for the installation. Inventory of resources of traditional, religious, or cultural significance to Native

American tribes or Native Hawaiian organizations should be completed in consultation with representatives of affiliated tribes or organizations.

2. Evaluation. All Marine Corps installations are responsible for evaluating the National Register eligibility of identified resources within the boundaries of the installation. Marine Corps installations will proactively program projects for evaluation of archaeological sites and historic buildings/structures/objects on an annual basis, prioritizing evaluation of resources in consultation with internal and external stakeholders, and as necessary to support section 106 compliance for undertakings. Evaluation of traditional cultural properties or other resources of traditional, religious, or cultural significance to Native American tribes or Native Hawaiian organizations should be completed in consultation with representatives of affiliated tribes or organizations. Properties previously determined eligible or ineligible may periodically require re-evaluation due to the passage of time, evolving understanding of historical significance, or inadequate previous evaluations.

3. Nomination. All Marine Corps installations are responsible for nominating historic properties to the NRHP, as appropriate to facilitate the mission, in consultation with Headquarters United States Marine Corps (HQMC). Nomination forms prepared by installations should be submitted to the SHPO and any consulting partners, as applicable, for review and comment, and should be staffed for signature by the USMC Deputy Federal Preservation Officer. Once signed, the forms will be returned to the installation for submittal to the Keeper of the National Register through the SHPO. Marine Corps commanders should prioritize nominations based on installation planning requirements; those resources that have potential for public use or access should be nominated first to facilitate outreach or heritage tourism efforts. CG/COs should be aware that resources determined eligible for listing on the NRHP are afforded the same level of protection as those listed on the NRHP.

4. Permits. In some instances, archaeological investigations may require Federal or State permits. The most common categories of permits are described below.

a. ARPA Permits. ARPA permits are required when the following three criteria are met:

(1) The project is on Federal land;

(2) Digging or collection of artifacts will occur; and

(3) The participants are not directly contracted to or by the Marine Corps. ARPA permits for archaeological investigations that could result in the excavation or removal of American Indian human remains and other cultural items as defined in reference (d), or in the excavation of archaeological resources that are of religious or cultural importance to Federally recognized tribes and Native Hawaiian organizations, will be issued after the CG/CO conducts consultation in accordance with section 5 of reference (o) and section 7 of reference (p) with the culturally affiliated Indian tribes or Native Hawaiian organizations. ARPA permits shall provide for the disposition of NAGPRA cultural items in accordance with subsections 3(a) and 3(b) of reference (d) and in accordance with reference (o). The CG/CO will ensure that documentation of consultation with culturally affiliated Indian tribes is prepared and maintained as part of the record of each such permit. Archaeological resources, objects of antiquity, and significant scientific data from Federal installations belong to the installations, except where reference (d) requires repatriation to a lineal descendant, federally recognized tribe, or Native Hawaiian organization. Archaeological resources, objects of antiquity, and significant scientific data from non-federal land belong to the state, territory, or landowner. Such resources from lands used by the Marine Corps, but for which fee title is held by another agency, are the property of the agency designated as the land manager in the land-use instrument (e.g., public land order, special use permit). CG/COs should ensure that land use instruments allowing for military use are reviewed to determine proper roles and responsibilities. For the purposes of Marine Corps compliance with reference (f), the CG/CO is considered the Federal land manager as defined in section 3(c) of reference (p). As the Federal land manager, the CG/CO will issue ARPA permits when required, or the CG/CO may determine that certain archaeological resources in specified areas under his or her jurisdiction, and under specific circumstances, are not or are no longer of archaeological interest and are not considered archaeological resources for the purposes of reference (f) (in accordance with section 3(a)(5) of reference (p)). All such determinations shall be justified and documented by memorandum and shall be formally staffed for review prior to final determination. The CG/CO will ensure that military police; installation legal staff; the installation PAO; and the fish, game, and recreation management staff are familiar

with the requirements and applicable civil and criminal penalties under reference (f). Also in accordance with section 9 of reference (f), the CG/CO may withhold information concerning the nature and location of archaeological resources from the public under Subchapter II of chapter 5 of Title 5 of the United States Code (see reference (q)) or under any other provision of law. ARPA permits can take up to six months to acquire.

b. Other Federal Agency Permits. In situations where the Marine Corps must conduct archaeological investigations on lands owned by other Federal agencies, the Marine Corps will coordinate with that agency's representative to determine whether permits are necessary in advance of the investigations. Examples of Federal agencies that require permits include the Bureau of Land Management and the U.S. Forest Service.

8202. RESOURCE PROTECTION. Although inventory and evaluation of cultural resources are critical aspects of the Marine Corps cultural resources management program, as well as necessary for compliance with Federal statutes and regulations, management must also include policies and procedures for assessing the condition of known resources, avoidance or mitigation of impacts on cultural resources from Marine Corps actions or the actions of contractors or tenants working on Marine Corps installations, maintenance and treatment actions to ensure preservation or enhance the condition of cultural resources, management of the data related to cultural resources, and public outreach and education. The Marine Corps will ensure that such properties are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.

1. ICRMPs. Reference (e) requires that all installations develop and implement ICRMPs in consultation and partnership with internal and external stakeholders of the cultural resources management program. The ICRMP is the planning tool for consolidating the inventory and management requirements as per reference (a) and other statutes, and so is an essential element in legal compliance with those statutes. The Marine Corps develops ICRMPs as management tools to insure the most time- and cost-efficient method of integration with project and operations planning to facilitate mission. Guidelines for preparing ICRMPs for Marine Corps installations are provided by HQMC, based on the list of required elements for ICRMPs noted in reference (e). All ICRMPs will be reviewed annually and updated as required.

2. Project Review

a. NEPA Review. The NEPA process is intended to help public officials make decisions that are based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment, including the cultural environment. Although reference (c) and section 106 of reference (a) processes can be coordinated for specific undertakings, the two processes are separate requirements. For example, a project may receive a Categorical Exclusion under reference (c), but still require review under Section 106 of reference(a). Marine Corps installations are responsible for ensuring that accurate information regarding cultural resources and the potential impacts of a Proposed Action or Alternatives on such resources are included in all NEPA analyses completed for the installation.

b. NHPA. Section 470f of reference (a) states: "The head of any Federal agency having a direct or indirect jurisdiction over a proposed Federal or Federally-assisted undertaking in any state and the head of any Federal department or independent agency having authority to license an undertaking shall, prior to approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effects of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. The head of any such Federal agency shall afford the ACHP established under part B of this subchapter a reasonable opportunity to comment with regard to such undertaking." An undertaking is defined as any Federal, Federally-assisted, or Federally-licensed action, activity, or program, new or continuing, that may have an effect on historic properties. Consultation with the SHPO and/or the ACHP is a critical step in this process. If an undertaking on Federal lands may affect properties having historic value to a Native American tribe, Alaskan Native village or corporation, or Native Hawaiian organization, such entity shall be afforded the opportunity to participate as consulting parties during the consultation process defined in reference (g).

The section 106 process is designed to identify possible conflicts between historic preservation objectives and the proposed activity, and to resolve those conflicts in the public interest through consultation. Neither reference (a) nor ACHP regulations require that all historic properties must be preserved. They only require the agency to consider the effects of the proposed undertaking on those properties and fulfill the procedural requirements for reference (a) prior to implementation. The underlying purpose of reference (a) is to balance progress with preservation. Failure of the Marine Corps to take into account the effects of an undertaking on historic properties, and afford the ACHP a reasonable opportunity to comment on such effects, can result in formal notification from the ACHP to the Secretary of the Navy of foreclosure of the ACHP's opportunity to comment on the undertaking pursuant to reference (a). Litigation or other forms of redress can be used against the Department of the Navy (DON) in a manner that can halt or delay critical activities or programs. A summary of the procedural requirements of section 106 is available on the ACHP's Web site www.achp.gov (incorporates amendments effective 5 August, 2004). Because both reference (a) and its implementing regulations (see reference (g)) are subject to change, Marine Corps personnel should check this website periodically. Compliance with section 106 can also be governed by the terms of an agreement document or program alternative, such as a Program Comment, MOA, or PA. Installation CG/COs should review all agreement documents that pertain to management of cultural resources on their installations to identify the roles and responsibilities assigned to the installation under each agreement. Examples of such agreements include the Program Comments referenced in paragraph 8103.c and PAs governing section 106 compliance for the various public-private venture (PPV) ground leases.

3. Emergency Situations. Per section 12 of reference (g)(emergency situations), the timeline for section 106 review of renovations and repairs to historic buildings can be substantially reduced if the renovation or repair is required as a result of an emergency situation (e.g., flooding, tornados, earthquakes, or hurricanes). The reduction of the timeline only applies in those situations where the President or the Governor has declared an official state of emergency. The Marine Corps notifies the ACHP, the SHPO/THPO, and any other interested parties of the project; these parties then have seven days rather than the traditional 30 days to comment on the undertaking. As a proactive measure, the Marine Corps could also work with the ACHP, SHPO/THPO, and interested parties to

develop a PA (see paragraph 8202.3) outlining streamlined procedures for emergency situations. Marine Corps installations will ensure that all reasonable efforts are made to avoid or minimize disturbance of significant cultural resources during emergency operations and will communicate with applicable Marine Corps personnel and external stakeholders regarding potential effects on significant cultural resources that could occur in association with such activities. Once the emergency has passed, Marine Corps installations will complete all appropriate actions to complete the section 106 process, including submittal of any reports or correspondence documenting the actions taken.

4. Program Alternatives. Program alternatives, as defined in section 14 of reference (g), may be used as an alternative to case-by-case NHPA section 106 consultation. Appropriate applications are described in reference (g) and include efforts to streamline compliance with respect to categories of similar undertakings, categories of similar effects, or programmatic approaches that apply state, regional or nationwide. Implementation and use of program alternatives generally requires up-to-date inventories and a comprehensive management approach. As applicable, cultural resources staff shall incorporate the terms of existing programmatic alternatives into NHPA section 106 consultations. Such programmatic alternatives include PAs, program comments, standard treatments, exemptions, and alternative procedures. Adopting any program alternative requires consultation with relevant stakeholders and, for regional or national alternatives, coordination with the chain of command and other affected commands and agencies. Marine Corps installations are encouraged to pursue program alternatives with stakeholders, as appropriate, to streamline compliance with Federal regulations or structure protocols for consultation and responses to situations such as inadvertent discovery of human remains. Program alternatives are recommended as best practice with Marine Corps policy as a way to document adequate consultation within the administrative record as well as streamline Marine Corps actions and facilitate mission.

5. Monitoring, Maintenance, and Treatment

a. For archaeological resources, Marine Corps installations must develop procedures for monitoring the condition of known archaeological sites for evidence of disturbance from natural processes such as erosion, fire, or floods; or human action, such as training activities, landscape maintenance activities, recreational use, or intentional looting. Monitoring procedures should be paired with procedures for stabilizing site condition should impacts be noted, documenting site condition, and reporting impacts to the appropriate stakeholders such as the SHPO or American Indian tribes and NHOs with ancestral ties to the installation. Cultural resources managers (CRMs) and Conservation Law Enforcement Officers should obtain ARPA training in order to learn the proper procedures for reporting ARPA violations on Marine Corps installations, and should ensure that all installation personnel who conduct activities that have the potential to impact archaeological resources are provided with training on how to avoid such impacts as well as standard operating procedures to follow should archaeological materials be inadvertently discovered.

b. For situations involving resources of interest to Indian tribes, Alaskan Native villages and corporations, or NHOs that have a tangible, physical footprint on Marine Corps installations (e.g., areas containing medicinal plants, human burial sites, petroglyphs, identified cultural landmarks), the Marine Corps should develop a monitoring procedure in consultation with the appropriate tribes, villages/corporations, or organizations. Marine Corps installations should ensure that procedures for reporting inadvertent discoveries of human remains or items of cultural patrimony are distributed to all installation personnel, tenants, and contractors. To facilitate consultation regarding inadvertent discoveries, Marine Corps installations are encouraged to pursue comprehensive agreements or NAGPRA Plans of Action with affiliated tribes or organizations.

c. For historic buildings, structures, or districts that are eligible for or listed on the NRHP, installations should develop Maintenance and Treatment Plans (MTPs) for long-term care of these resources. An MTP identifies the historic properties (buildings, structures, landscapes, and districts), their character-defining features and contributing elements, building materials and condition, and promotes the preservation of these resources through planning, design, cyclic maintenance, and appropriate treatments for repair, rehabilitation, and

restoration. An MTP is typically a five-year management plan that provides guidance to CRMs and installation maintenance and facilities personnel working with historic structures to address problems of deterioration or failure of building materials and systems and addresses repair and renovation materials that will continue to maintain historic significance of the historic property. An MTP is generally installation-specific due to the complexity of each installation and overlaying construction periods, and should focus on a range of alternatives and treatments from stabilization to restoration.

6. National Historic Landmarks

a. Section 101(b) of reference (a) provides for the inclusion of National Historic Landmarks (NHLs) in the NRHP. Section 110(f) affords NHLs more stringent protection than other NRHP resources. Federal regulations outline procedures for consultation with the SHPO, the ACHP, and the NPS to minimize harm to NHLs by Federal agency undertakings.

b. The NPS maintains a continued relationship with owners of NHLs. Agencies must cooperate with the procedures of periodic visits, contacts with SHPOs, and other appropriate measures that the NPS uses to ensure that landmarks retain their integrity, to advise agencies concerning accepted preservation standards, and to update administrative records on landmark properties. The DOI reports annually to Congress regarding damaged or threatened NHLs.

c. Although property owners and SHPOs may nominate NHLs, designation ordinarily occurs after a study by the NPS. Preservation is not absolutely required as long as mandated procedures are followed and documented in any decision not to preserve. A finding of adverse effect to a NHL requires full ACHP participation in the consultation process.

7. Curation. The overall goal of the Federal curation program, as set forth in reference (h), is to ensure the preservation and accessibility of cultural resource collections and documents for use by members of the public interested in the archaeology and history of the region. In accordance with the requirements of reference (h), the installation CG/CO must ensure that all archaeological collections and associated records, as defined in part 79.4(a) of reference (h), are processed, maintained, and preserved. Associated Records shall be maintained, and preserved per reference (i), SSIC 5750.2.

Collections from Federal lands should be deposited in a repository that meets the standards outlined in reference (h) to ensure that they will be safeguarded and permanently curated in accordance with Federal guidelines. A curation facility is specifically designed to serve as a physical repository where collections and records are sorted, repackaged, assessed for conservation needs, and then placed in an appropriate, environmentally-controlled, secure storage area. Collections from Federal lands remain the property of the Federal government; accordingly, CRMs should schedule an annual visit to the curation repository to insure that the collections are being managed appropriately.

8. Data Management. Integrating cultural resources management data with the installation geographic information system (GIS) program allows the cultural resources program to more efficiently support the Marine Corps mission of readiness. GIS layers should be developed for all categories of cultural resources present within the installation (e.g., historic buildings, archaeological sites, and resources of interest to Indian tribes and NHOs). GIS layers should also be developed to show the progress of archaeological survey efforts and any sensitivity assessments used by the installation to prioritize survey efforts. GIS can facilitate integration of cultural resource best management practices into installation planning and projects. GIS layers and themes depicting archaeological resources and sacred sites are considered sensitive and will not be released to the general public. These layers should be password protected. When preparing the scope of work for contracts addressing cultural resources issues, installations should include the language for GIS requirements provided in reference (r) to ensure that GIS deliverables meet Federal standards and are compatible with Marine Corps data models.

9. Public Outreach. Reference (b) encourages Federal agencies to preserve America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal government; promoting intergovernmental cooperation and partnerships for the preservation and use of historic properties; inventorying resources; and promoting heritage tourism. A preservation awareness program must be directed to both Marine Corps personnel and external interests if it is to be effective. Education can promote awareness of important Marine Corps cultural resources projects and the rationale behind them. Special events with local and national significance offer excellent opportunities to educate the public on cultural

resources preservation. Events such as Earth Day (22 April), Fourth of July, Veteran's Day, National Historic Preservation Week (third week in May), National Public Lands Day (last Saturday in September), and local town celebrations are opportunities for the Marine Corps to help educate people about cultural resources and preservation principles.

8203. CONSULTATION

1. Consultation with Internal and External Stakeholders. To insure that management of cultural resources is integrated with installation planning and in compliance with Federal statutes and regulations, the Marine Corps has a responsibility to consult with internal and external stakeholders on a regular basis. References (a), (c), and (d) require coordination with interested parties and other government agencies, depending on the action involved. External agencies and stakeholders that might be involved in cultural resources management include:

- a. Other Federal Agencies.
- b. SHPOs.
- c. American Indian tribes, Alaskan Native villages and corporations, or NHOs.
- d. ACHP.
- e. NPS.
- f. Keeper of the National Register, DOI.
- g. Interested members of the public, including ethnographic groups, historic organizations, and others. Although the Marine Corps might contract cultural resources professionals to conduct surveys and evaluations, it is the responsibility of the Marine Corps to consult with external stakeholders. Consultation should not be delegated to contractors. The Marine Corps will comply with all pertinent laws and regulations concerning the management and preservation of cultural resources and will, where appropriate, consult with external stakeholders, as required:
- h. To comply with reference (a) sections 106, 110, and 402.
- i. To comply with reference (c).

j. In accordance with reference (a), if the Marine Corps and the SHPO come to a disagreement regarding NRHP eligibility recommendations, the Keeper of the National Register can be consulted. Guidance on preparing a determination of eligibility can be found at section 3(d) in reference (s).

k. In accordance with reference (a), if the Marine Corps and the SHPO come to a disagreement regarding the section 106 process, the ACHP may assist. The Marine Corps must also invite the ACHP to participate in consultations regarding the resolution of adverse effects to historic properties.

l. In accordance with references (a), (c), (d), and (f), the CRM shall coordinate with interested American Indian tribes, Alaskan Native villages and corporations, or NHOs.

m. In accordance with reference (a), the CRM will consult with the NPS for all section 106 undertakings that have the potential to affect an NHL.

2. Consultation with Native Americans. References (a), (t), (u), (v), (w), and (x) include guidance on how Federal agencies should consult with federally recognized American Indian tribes, and Alaskan Native villages and corporations, and NHOs. It should be noted that not all of this guidance refers to all Native entities (e.g., reference (w) refers only to Indian tribes and Alaskan Native Villages). Consultation takes on many forms, but must be conducted on a government-to-government basis unless delegated by agreement to subordinate representatives of each government (e.g., the THPO and installation CRM). Consultation responsibilities cannot be delegated to contractors, even in those instances where management responsibility for some resources has been delegated to another entity (e.g., in the case of PPV contracts, the Marine Corps retains the responsibility for consultation with American Indian tribes and NHOs). The Marine Corps might need to consult on a project basis for proposed actions that could affect cultural resources of interest to American Indian tribes, Alaskan Native villages and corporations, and NHOs. If Marine Corps activities have the potential to affect such resources, all interested American Indian tribes, Alaskan Native villages and corporations, and NHOs will be consulted early in the planning process and their concerns will be addressed to the greatest extent possible. Establishing a permanent relationship with American Indian tribes, Alaskan Native villages and corporations, and NHOs will lead to better understanding of each party's interests and concerns and development of a trust

relationship. This will streamline future project-based consultation and streamline the inadvertent discovery process. It is the goal of the consultation process to identify both the resource management concerns and the strategies for addressing them through an interactive dialogue with appropriate American Indian tribes, Alaskan Native villages and corporations, and NHOs.

8204. CONFIDENTIALITY REQUIREMENTS. Section 470w-3(a) of reference (a) (Confidentiality of the location of sensitive historic resources) states that:

1. "The head of a Federal agency or other public official receiving grant assistance pursuant to this Act, after consultation with the Secretary, shall withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may:

- a. cause a significant invasion of privacy.
- b. risk harm to the historic resources.
- c. impede the use of a traditional religious site by practitioners."

On Federal property, reference (f) also provides provisions for restriction of information on archaeological site locations. American Indian tribes and NHOs have an interest in restricting this information and are not expected to divulge such location information unless they can be reassured of restrictions for access. Therefore, it is extremely important that persons using this document and other cultural resources reports and maps understand that access to all archaeological resource descriptions and locations is restricted to the CRM or Environmental Manager for internal use only. Access to such information in databases and GIS should be limited to CRMs, cultural resource professionals and others with a substantial need to know.

8205. SUSTAINABILITY. The Federal government encourages agencies to take the lead in being stewards of the environment, to preserve today's resources for the future. One of the primary focuses of environmental stewardship within the DOD is the concept of sustainability; this concept applies to design, construction, operations, and resource conservation. Sustainability is responsible stewardship of the nation's

natural, human, and financial resources through a practical and balanced approach. Sustainable practices are an investment in the future. Through conservation, improved maintainability, recycling, reduction and reuse of waste, and other actions and innovations, the Marine Corps can meet today's needs without compromising the ability of future generations to meet their own. Applying sustainability principles to cultural resources management, chapter 4 of reference (y), notes that "sustainability has often been an integral part of the composition of both tangible and intangible cultural resources. Ecological sustainability and preservation of cultural resources are complementary. In large part, the historic events and cultural values that are commemorated were shaped by humankind's response to the environment. When a cultural resource achieves sufficient importance that it is deemed historically significant, it becomes a nonrenewable resource worthy of consideration for sustainable conservation. Management, preservation, and maintenance of cultural resources should be directed to that end."

1. Archaeological Resources. Archaeological sites provide a physical record how people have interacted with their environment in the past and what that tells us of how they led their lives. It is the product of ongoing change, stretching from the distant past into the present. Physically, this record is non-renewable - in each period, a combination of natural and cultural processes almost inevitably impacts the record of previous periods. Intellectually, the record is in a constant flux of discovery, redefinition and interpretation through archaeological investigation and dissemination. Present uses will provide grist for the archaeologists of the future - the physical record of how we have lived and treated our environment and how much of our past we pass on to our successors. With respect to sustainability, archaeological sites on Marine Corps installations can be considered:

a. The only source for understanding the development of human society in prehistoric and much of historic times within the lands contained within installations.

b. A source of enjoyment and interest through intellectual and physical engagement and leisure-time pursuits, contributing to general mental, spiritual and physical health.

c. An important medium for general education, life-long learning, and personal development.

- d. A vital basis of people's awareness of historical and cultural identity, sense of community and place, and a key source of perspective on social change.
- e. A means of understanding long-term environmental change in relation to sustainability.
- f. A source of evidence about past use of renewable energy and recyclable resources such as water, timber, mineral resources, and organic waste.

These benefits can be maximized by enhancing people's awareness of archaeology and the historic environment and developing a culture, within government and the private sector and in their dealings with others, of promoting active involvement, care, and appreciation for the benefit of present and future generations.

Archaeology and the historic environment contribute significantly to people's quality of life. The Marine Corps has a responsibility for stewardship of this environment so that it can continue to inform present and future populations about our shared past. At the same time, stewardship must be integrated into the Marine Corps mission. In addition to promoting public awareness of archaeological information and the benefits of preservation to the larger installation community (see paragraph 8202.9), Marine Corps installations should employ innovative technical and interpretive practices to integrate archaeology into the success of the mission.

2. Historic Buildings and Structures. When making decisions regarding replacement, renovation, or demolition of historic buildings and structures, it is Marine policy to:

- a. Prefer continued or adaptive use of historic buildings and structures to new construction by accurately analyzing the life-cycle benefits and costs of sustainable or adaptive reuse.
- b. Employ innovative technical and design practices to facilitate mission use of historic buildings and structures with the minimum loss of historic integrity.
- c. Prefer partnerships with government, public, and private organizations to promote local economic development and vitality through use of historic properties in a manner that contributes to the long-term preservation and productive use of those properties in lieu of demolition.

d. Consider systematic deconstruction and architectural salvage of historic building fabric when demolition is necessary, especially where historic fabric may be reused to preserve other similar properties in the inventory.

8206. ANNUAL REPORTING AND METRICS. The Marine Corps is responsible for responding to various data calls and asset management inventories on an annual basis. Responses to data calls may include input of data by installation CRMs into DON databases (e.g., iNFADS heritage asset codes), or responses via phone or email to HQMC personnel. In order to ensure accurate reporting of assets and asset status each year, installations must maintain records of their responses to each data call, labeled with the fiscal year of the response, and including any supporting information to explicate their responses, in a file accessible to their supervisors or to the HQMC Cultural Resources Specialist.

CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

SECTION 3: RESPONSIBILITIES

8300. CMC (LF)

1. Establish a cultural resources management program and promulgate guidelines and attendant responsibilities.
2. Designate a qualified staff person to serve as the Marine Corps Federal Historic Preservation Officer (FHPO) and representative on the DOD Conservation Committee.
3. Coordinate with the Deputy Under Secretary of Defense, Environmental Security, DOD Components, DOI, ACHP, and the National Conference of SHPOs in matters related to cultural resources management.
4. Identify Marine Corps-wide priorities and allocate centrally-managed funds that may be used for cultural resources management. Maintain cost records of inventory and treatment of cultural resources.
5. Maintain Marine Corps procedural and policy-making expertise for inter-agency coordination and other aspects of compliance with preservation legislation; assist in resolving disputes with Federal, State, local, and foreign regulatory agencies.
6. Forward NRHP nominations to the Office of the Assistant Secretary of the Navy, Installations and Environment, and the keeper of the NRHP.
7. Respond to congressional and other inquiries to satisfy Office of the Secretary of Defense reporting requirements.
8. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, State, local, and overseas historic and archaeological resource requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
9. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and

compliance with Federal, State, and local regulatory agencies with regard to cultural resources statutes and regulations.

8301. CG/CO of MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. 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.
2. Develop and implement an ICRMP for all installation lands and waters that contain cultural resources, and integrate the ICRMP with other installation planning documents and routine procedures applicable to activity projects and programs.
3. Coordinate among subordinate and tenant activities to achieve maximum efficiency regarding compliance with cultural resources management requirements within the region.
4. Provide for the professional identification, evaluation, inventory, nomination, and protection of cultural resources under their control and ensure that the appropriate data management systems, including spatial data systems, accurately reflect the eligibility status of such resources.
5. Follow all legally-mandated procedures if historic properties (as defined under reference (a)) are to be transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
6. Consult with the SHPO and other consulting parties, interested groups and individuals as required under reference (c) and sections 106 and 402 of reference (a) when proposed actions have the potential to effect cultural resources. When appropriate or in the interests of best management practices, enter into agreements to facilitate consultation and establish consultation protocols or response procedures. Neglecting to consult with these interested parties early in the planning process could result in unnecessary tension, which will cause delays that translate into government time and cost.
7. Consult with American Indian tribes and NHOs prior to any Marine Corps action that might impact American Indian tribal or Native Hawaiian interests as defined by applicable laws and

regulations, including planned excavation and inadvertent discovery provisions in accordance with reference (d).

8. Ensure that inadvertently discovered archaeological resources, human remains, or cultural items (as defined per reference (d)) are protected at the site of discovery until cultural resource professionals evaluate the resources' significance and make recommendations regarding protection or recovery. Ensure that the chain of command is kept informed.

9. Whenever practical, use historic buildings instead of new acquisition, construction, or leasing to satisfy mission requirements.

10. Ensure that funds budgeted for historic preservation are applied to NRHP resources.

11. Provide for storage and professional curation of salvaged archaeological resources and records which result from compliance actions.

12. Take appropriate action on archaeological permit requests. Review requests for permits to allow the excavation and removal of archaeological resources from Marine Corps lands.

13. Provide for the identification and repatriation of Native American remains and associated cultural items in accordance with reference (d) and other implementing regulations issued by the DOI.

14. Allow American Indians and Native Hawaiians access to sites and resources that are of religious importance or that are important to the continuance of their cultures, as consistent with the military mission, the American Indian Religious Freedom Act, and other appropriate laws and regulations subject to the same considerations as the general public.

15. When warranted by the presence of cultural resources, designate a staff person to serve as CRM. CRMs should be provided with adequate training to ensure that they have a full understanding of their position duties and can provide adequate guidance on compliance with cultural laws and regulations to other stakeholders.

8302. CRM

1. Provide day-to-day management for cultural resources at the installation level, help ensure that all installation activities are in compliance with applicable cultural resources requirements, serve as a liaison between all persons involved in the ICRMP, write the ICRMP or develop its statement of work, and implement the ICRMP.
2. Understand the military mission and have a clear understanding of how their job supports the military mission.
3. Locate, inventory, evaluate, and protect historic buildings; structures; districts; archaeological sites; resources of traditional, religious, or cultural significance to American Indian tribes or NHOs; and other cultural resources in accordance with Marine Corps policy and Federal statutes and regulations. If survey and evaluation tasks are contracted to cultural resources professionals, prepare statements of work, monitor work progress, and review all work products prior to submission to external stakeholders.
4. Disseminate technical guidance regarding maintenance, storage, and protection of cultural resources to installation personnel whose actions have the potential to affect cultural resources.
5. Coordinate the maintenance of cultural resources records in the appropriate data management systems, to assure that accurate information regarding Marine Corps cultural resources can be provided to Congress, the Marine Corps FHPO, and other interested parties when required.
6. As the CG/CO's delegated representative, coordinate and consult with outside entities including the SHPO, American Indian tribes and NHOs, and local interest groups, as mandated in references (a), (c), (d), (f), (w), and other laws and regulations listed in paragraph 8103 of this chapter.

REFERENCES

- (a) 16 U.S.C. 470-470x
- (b) Executive Order 13287, "Preserve America," March 3, 2003
- (c) 42 U.S.C. 4321
- (d) 25 U.S.C. 3001-3013
- (e) DOD Instruction 4715.16, "Cultural Resources Management," September 18, 2008
- (f) 16 U.S.C. 470aa-mm
- (g) 36 CFR 800
- (h) 36 CFR 79
- (i) SECNAV M-5210.1
- (j) Department of Interior, NPS-28 "Cultural Resource Management Guidelines," August 16, 2002
- (k) Executive Order 11593, "Protection and Enhancement of the Cultural Environment," May 13, 1971
- (l) 43 U.S.C. 1601-1629h
- (m) 36 CFR 60
- (n) Executive Order 13327, "Federal Real Property Asset Management," February 5, 2004
- (o) 43 CFR 10
- (p) 32 CFR 229
- (q) 5 U.S.C. 552
- (r) MCO 11000.25
- (s) 36 CFR 62
- (t) Executive Order 13007, "Indian Sacred Sites," May 24, 1996
- (u) Executive Order 13175, "Consultation and Coordination with

Indian Tribal Governments," November 6, 2000

(v) Presidential Memorandum, "Government-to-Government Relations with Native American Tribal Governments," April 29, 1994

(w) DOD Instruction 4710.02, "DOD Interactions with Federally-Recognized Tribes," September 14, 2006

(x) "Department of Defense American Indian and Alaska Native Policy (Annotated)," October 20, 1998

(y) Department of the Interior, NPS Publication, "Guiding Principles of Sustainable Design," December 15, 1994

CHAPTER 9

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CHAPTER 9

HAZARDOUS WASTE MANAGEMENT

SECTION 1: INTRODUCTION

9100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory and regulatory requirements for hazardous waste (HW) management. Requirements for hazardous material (HM) and hazardous substance (HS) spills are discussed in chapter 7 of this Manual. Chapter 21 of this Manual provides specific information on the requirements for waste military munitions.

9101. APPLICABILITY. See paragraph 1101.

9102. BACKGROUND. Reference (a) was enacted in 1976 as an amendment to reference (b). Reference (a) has since been amended by several statutes, including references (c), (d), and (e). The objectives of reference (a) are to assist State and local agencies in the development of solid waste (SW) management plans; prohibit open dumping on the land and require the conversion of existing open dumps to facilities that do not pose a danger to the environment or to human health; and ensure that HW management practices protect human health and the environment. Reference (a) provides for the "cradle-to-grave" tracking of HW from generator to storage, treatment, and ultimate disposal.

1. The Environmental Protection Agency (EPA) may delegate authority to a state to manage a Resource Conservation and Recovery Act (RCRA) program in lieu of all or part of the Federal HW program.

2. In a state that has final EPA authorization to manage a RCRA program, all installations generating HW are subject to the State program in lieu of the Federal HW program. Therefore, many of the Federal regulatory requirements set forth in this chapter may not be directly applicable to installation HW management activities.

3. Reference (d) waived sovereign immunity under RCRA; therefore, the Marine Corps is subject to civil and administrative fines and penalties levied by Federal, State, and local regulators. Full discussion of reference (d) is presented in paragraph 9103.2.

9103. FEDERAL STATUTES

1. RCRA of 1976 (42 U.S.C. 6901 et seq.)

a. Subtitle C: HW Management. Provides the statutory basis for EPA to promulgate the regulations contained at 40 CFR parts 260 - 279. The major topics covered in subtitle C are discussed briefly below.

(1) Section 6921: Identification and Listing of HW. Tasks EPA with developing criteria for identifying the characteristics of HW and for listing HW. Properties taken into account are toxicity, persistence, and degradability in nature, potential for accumulation in tissue, reactivity, ignitability, corrosiveness, and other characteristics that make a substance hazardous (40 CFR part 261 subparts A through D).

(2) Section 6922: Standards Applicable to Generators of HW. Establishes standards for HW generators as necessary to protect human health and the environment. The standards cover HW labeling, containerization and accumulation time, information on the chemical composition of HW, the manifest system, establishing a HW minimization program, and reporting to authorities the quantities and types of HW generated (40 CFR part 262 subparts A through D).

(3) Section 6923: Standards Applicable to Transporters of HW. Establishes the standards applicable to transporters of HW. These include requirements for HW recordkeeping for transport of HW to be picked up from, and transported to, the proper locations according to the manifest documents; to be properly labeled and containerized for shipment; and for Hazardous Material Transportation Act (HMTA) requirements to be met, as specified by the U.S. Department of Transportation (DOT) (49 CFR Subchapter C, Hazardous Materials Regulations) (40 CFR part 263).

(4) Section 6924: Standards Applicable to Owners and Operators of HW Treatment, Storage, and Disposal Facilities (TSDFs). Covers various topics areas, which are expanded in the Hazardous and Solid Waste Amendments (HSWA), Federal Facilities Compliance Act (FFCA), and the Land Disposal Program Flexibility Act of 1996 (section 1 of Public Law 104-119, 26 March, 1996). Topics in this section that are pertinent to the Marine Corps include:

(a) Section 6924(a) requires set performance standards for new and existing TSDFs, including recordkeeping; reporting; manifests; the location, design, and construction of TSDFs; operating and maintenance practices; contingency planning; and permitting (40 CFR part 264 and 40 CFR part 265).

(b) Owners and operators of all HW facilities must have a contingency plan for their facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of HW or HW constituents to air, soil, or surface water (40 CFR part 265.50).

(c) Section 6924(c), added by the HSWA, prohibits the land disposal of bulk or non-containerized liquid HW or free liquids contained in HW (40 CFR parts 264 and 265).

(d) Sections 6924(d) - 6924(g), added by the HSWA, establish periods and procedures for EPA to prohibit the land disposal of specific HWs (40 CFR part 268).

(e) Section 6924(m), added by the HSWA, requires EPA to develop treatment standards for those HWs prohibited from land disposal (40 CFR part 268).

(f) Section 6924(n), requires EPA to establish air emissions monitoring and control regulations for TSDFs (40 CFR parts 264 and 265).

(g) Sections 6924(u) and 6924(v), establishes the RCRA Corrective Action program for the cleanup of continuing releases, even if beyond the facility property line, from solid waste management units at TSDFs, regardless of when the releases occur (40 CFR part 264, subpart F and 40 CFR part 270).

(h) Section 6924(y), added by the FFCA and requires EPA in conjunction with the Department of Defense (DOD) to develop regulations for identifying when military munitions become HW (40 CFR part 266) (see chapter 21 of this Manual).

(5) Section 6925: Permits for Treatment, Storage, or Disposal of HW. Requires all owners or operators of existing or planned HW TSDFs to apply for and receive a RCRA permit prior to continuing or beginning operations. This section includes provisions for existing facilities to continue operation under

interim status, as well as specific requirements for each type of TSDf, including landfills, surface impoundments, and waste piles (40 CFR part 270).

(6) Section 6926: Authorized State HW Programs. This provision allows states to administer and enforce their own HW management programs as long as their HW management requirements are at least as stringent as those of the Federal program. Prior to implementing a HW program, each state must obtain written authorization from the cognizant EPA region (40 CFR part 271). Irrespective of EPA-delegated obtained HW authority, State HW procedures, including the requirement to obtain State permits, are applicable to Marine Corps facilities under the FFCA.

(7) Section 6927: Inspections. Establishes EPA and State access authority to facility premises and all records regarding HW management. It requires that EPA or the authorized state inspect all permitted HW TSDf's no less than once every two years. This section also includes provisions for the public availability of all records concerning HW management, unless they are confidential in nature (as defined by 18 U.S.C. 1905) (40 CFR § 271.15) (FFCA section 107).

(8) Section 6928: Federal Enforcement. Outlines the methods, means, and tools for the EPA to enforce RCRA. It includes policies and guidelines for issuing enforcement actions such as notices of violation (NOVs), compliance orders, public hearings, criminal and civil penalties, knowing endangerment, and interim status corrective action orders (40 CFR § 271.16).

(9) Section 6930: Preliminary Notification. Requires all parties that generate, transport, or recycle HW to notify EPA of their activities. Respondents must submit the information required by following EPA requirements. Parties that have current EPA identification numbers also must file a subsequent notification for items that have changed at their facility.

(10) Section 6933: HW Site Inventory. Requires that each Federal Agency submit to EPA every two years an inventory of the areas it owns or operates, or previously owned or operated, where HW is or was stored, treated, or disposed of at any time (40 CFR 271.15).

(11) Section 6939d: Public Vessels. States that HW generated on a public vessel (owned or chartered and operated by the United States) is not subject to RCRA requirements until transferred to an installation unless the waste is stored for more than 90 days or is stored, after being transferred to another vessel, for more than 90 days(OPNAVINST 5090.1C).

(12) Section 6939e: Federally-Owned Treatment Works. It is unlawful to introduce any HW into a Federally-owned treatment works facility.

(13) Section 6961: Application of Federal, State, and Local Law to Federal Facilities. This section is a comprehensive waiver of sovereign immunity from the applicability of RCRA to Federal facilities. This waiver was broadened further by the FFCA. Therefore, the requirements of RCRA generally apply to Federal installations in the same manner as they would to any nongovernmental entity. The President may also generally exempt, for up to one year, any SW management facility of any department from compliance with a RCRA requirement if the exemption is in the paramount interest of the United States.

(14) Section 6962: Federal Procurement. States that each procuring agency must select those items made of the highest percentage of recovered materials practicable, unless such items are unreasonable, fail to meet performance standards, or are only available at an unreasonable price. This section requires EPA to issue Comprehensive Procurement Guidelines that list designated items that are, or can be, made with recovered materials. This section and the Farm Bill require Federal agencies to have "Reference Programs" to acquire recycled content and bio-based products where they are cost effective and meet technical requirements. For more information on procurement of recovered materials, see chapters 15 and 17 of this Manual.

(15) Section 6963: Cooperation with EPA. This section states that Federal agencies must make available all information required by the EPA Administrator concerning past or present waste management practices and past or presently owned, leased, or operated SW or HW facilities. This includes the information on the market potential of energy and materials recovered from SW.

(16) Section 6964: Applicability of Solid Waste Disposal Guidance to Executive Agencies. States that executive agencies must comply with SW management regulations when the agency:

(a) Has jurisdiction over the real property or the operation of a facility that is involved in SW management.

(b) Generates SW, the management of which, if conducted by a person other than the agency, would require a permit or license for disposal of the waste (see chapter 17 of this Manual).

b. Subtitle I: Regulation of Underground Storage Tanks (USTs). Directs EPA to promulgate standards for the management, control, and closure of USTs used to store petroleum products or HSS. The Subtitle objective is to prevent and clean up releases from USTs (40 CFR 280) (see chapter 18 of this Manual).

2. FFCA of 1992 (Public Law 102-386)

a. General. The FFCA amended several sections of the Solid Waste Disposal Act (SWDA) (as amended by RCRA).

b. Section 102. Amends section 6001 of the SWDA by:

(1) Waiving governmental immunity and subjecting Federal agencies to civil and administrative fines and penalties, regardless of whether the fines or penalties are punitive or coercive in nature.

(2) Requiring payment of any nondiscriminatory service charges (e.g., assessments in connection with the processing and issuance of permits; amendments to permits; review of plans, studies, and other documents; and inspecting and monitoring facilities) that are assessed in connection with a Federal, State, or local SW or HW regulatory program.

(3) Exempting agents, employees, and officers of the United States from personal liability for any civil penalty arising from acts or omissions within the scope of his or her official duties.

(4) Allowing agents, employees, and officers of the United States to be subject to any criminal sanctions under the Federal or State HW law, but no department or agency shall be subject to any such criminal sanctions.

c. Section 104. Amends section 3007 of the SWDA by requiring EPA and/or states to conduct annual inspections of each Federal facility for HW program compliance on a cost-reimbursable basis. It also requires Federal facilities to conduct comprehensive groundwater monitoring evaluations where such an evaluation has not been conducted within the one year preceding the FFCA. Groundwater monitoring initiated under the Comprehensive Environmental Response Compensation and Liability Act is specifically excluded from this requirement.

d. Section 106. Added to the SWDA as section 3022 and states that any HW generated on a public vessel is not subject to the storage, manifest, inspection, or recordkeeping requirements until the HW is transferred to an installation.

e. Section 107. Added to the SWDA as section 3004(y) and requires EPA, in consultation with the DOD, to propose and adopt regulations identifying when military munitions (both chemical and conventional) become HWS. It also requires EPA and the DOD to provide for the safe storage, transportation, and disposal of such wastes. See chapter 21 of this Manual.

f. Section 108. Added to the SWDA as section 3023, which provides Federally Owned Treatment Works (FOTW) with the same sewage exclusion from HW regulation as afforded to Publicly Owned Treatment Works. For the exclusion to apply, the wastes received by the FOTW must either meet certain Clean Water Act pretreatment conditions and must comply with land disposal restrictions, or must be generated by households or by a person generating less than 100 kilograms (kg) of HW per month.

3. HMTA of 1975 (49 U.S.C. 5101 et seq.). The HMTA is administered by the DOT and regulates the shipping, marking, labeling, placarding, and recordkeeping requirements for HMs, including HWS and military munitions. 49 CFR parts 100 - 199 describes these regulations.

4. Land Disposal Program Flexibility Act of 1996. Amended two RCRA programs, the land disposal restrictions program and the non-hazardous landfill groundwater monitoring program. This act exempts HW from RCRA requirements, if the HW is treated to a point where it no longer is characteristic of a HW and is disposed in a deep injection well under the Safe Drinking Water Act.

9104. FEDERAL REQUIREMENTS

1. HW Management

a. General. Any installation that generates, transports, treats, stores, or disposes of HW or produces, burns, distributes, or markets any HW-derived fuels, must notify the cognizant EPA office of its activities and comply with reference (a) and/or the authorized State HW program (chapter 15-4.1 in reference (f)).

(1) Upon presenting proper credentials, Federal and State agency officials with responsibility over the HW programs will be allowed reasonable access to Marine Corps installations to perform their inspection and oversight duties, but inadequately cleared personnel must not be allowed access to classified areas until a proper security clearance is obtained.

(2) The installation environmental office will maintain and forward records and reports as required to Federal, State, or local agencies with responsibility over the HW program.

(3) Military munitions are subject to the RCRA hazardous waste requirements of this chapter when they have been determined to be hazardous waste military munitions (HW military munitions) (see chapter 21 of this Manual). In conjunction with the requirements of this chapter, generators of waste military munitions shall reference chapter 21 of this Manual for policy and other matters pertaining to the use, handling, storage, and transportation of HW military munitions.

b. Hazardous Waste Management Plans (HWMP). Section F in chapter 10 of reference (g) and section 15-5.3 in reference (f), direct each installation to develop a HWMP, which includes input from the Marine Corps commands/units and tenants on the installation. This plan identifies and implements HW management actions required by reference (a) and/or by authorized State HW programs and provides the procedures and responsibilities on how to properly manage HW. The plan will be signed by the installation Commanding General/Commanding Officer (CG/CO) and distributed to all personnel (including all Marine Corps commands/units and tenants) who accumulate, generate, transport (including on-installation transportation), treat, store, or dispose of HW for their compliance. The plan must be reviewed and updated whenever installation/facility conditions or

operations affecting HW accumulation, generation, transportation, treatment, storage, or disposal change. The plan must include, at a minimum, the following:

(1) A list of EPA/State identification numbers for generating, transporting, storing, treating, or disposing of HW as applicable.

(2) Names of persons authorized by the CG/CO in writing to sign HW manifests.

(3) Procedures and responsibilities for the installation, Marine Corps commands/units and tenants, and personnel for generating, transporting, storing, treating, or disposing of HW. Such procedures include maintaining written job titles and job descriptions of each person conducting HW management activities at each HW facility.

(4) Procedures to ensure that HW remains at a 90-day accumulation area for no more than 90 days.

(5) For each activity that generates HW, the type and quantity of HW for each activity generating HW to include all Marine Corps commands/units and tenant activities.

(6) A description of waste minimization and source reduction projects, funds available for such projects, and goals to reduce the use of toxic and hazardous chemicals and materials that generate HW and to purchase lower risk chemicals and toxic materials from top priority lists (reference (h)).

(7) The location of all HW accumulation areas (including satellite areas) and TSDFs.

(8) A waste analysis plan developed in accordance with section 13(b) in reference (i), as applicable.

(9) Procedures for self-inspecting HW accumulation areas and TSDFs. Such inspections shall address all HW activities at the areas and/or facilities inspected, including, but not limited to, whether containers are closed, containers are marked to indicate content and accumulation start date, and self-inspection records are maintained.

(10) Procedures to prevent unauthorized access to HW accumulation areas (including satellite accumulation areas and

HW military munitions storage areas granted conditional exemption (CE)) and TSDFs.

(11) Procedures to temporarily treat, store, or dispose of HW if existing facilities are not available.

(12) References and installation point of contacts (POCs) for obtaining information on HW management and POCs for EPA and State officials administering the HW program.

(13) A description of the training program to ensure that all applicable personnel are instructed in Federal, State, local, and Marine Corps requirements for HW management. The description shall include provisions for ensuring that all HW management personnel have received introductory and refresher training and that all training records are properly documented and maintained.

(14) The Spill Control and Contingency Plan or Oil and Hazardous Substances Spill Control and Contingency Plans, or references to these plans.

(15) A section on the management of HW military munitions to include management of emergency responses to explosives or munitions emergencies.

(16) A section on waste stream management to include, but not limited to, universal wastes, used oil, fluorescent light tubes, asbestos, absorbents, empty HM/HW containers, and hazardous waste minimization.

(17) A closure plan for HW TSDFs, including ammunition supply points under a CE for HW military munitions storage. The closure plan should discuss how 90-day accumulation areas will meet the closure standards of sections 111 and 114 of reference (j). If the TSDF is permitted, it must include a closure plan for all HW management units. If the facility has interim status and closes before being fully permitted, 90-day accumulation areas must comply with closure requirements in section 34 of reference (k).

c. Identification of HW. Federal regulations state that a waste is considered a HW if: it is a listed HW; it exhibits at least one of four HW characteristics; it is a military munitions designated as HW by the Designated Disposition Authority (DDA); and/or it is a military munitions considered HW by regulation. Listed wastes, characteristic wastes, and HW military munitions

are categorized using applicable EPA/State HW identification numbers. When identifying HW also consult State and local regulations. States must adopt a list of HW and characteristics for identifying HW that are equivalent to EPA's list (reference (1)).

(1) Listed HWs are located in several sections within reference (m) and are categorized into the following EPA HW numbers:

(a) F Wastes (section 31 of reference (m)).

Identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations and includes non-source specific waste.

(b) K Wastes (section 32 of reference (m)).

Includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing and includes source-specific waste.

(c) P Wastes (section 33 of reference (m)).

Includes specific commercial chemical products in an unused form including acutely hazardous discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.

(d) U Wastes (section 33 of reference (m)).

Includes specific commercial chemical products in an unused form including toxic discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.

(2) Characteristic HWs are designated as EPA waste numbers beginning with the letter "D" and are described in sections 20 through 24 of reference (m). They are identified as follows:

(a) Ignitable Wastes (D001) (section 21 of reference (m)). Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 deg.C (140 deg.F) (e.g., waste oils and used solvents).

(b) Corrosive Wastes (D002) (section 22 of reference (m)). Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and

barrels (e.g., battery acid).

(c) Reactive Wastes (D003) (section 23 of reference (m)). Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors, when heated, compressed, or mixed with water and have the following properties:

1. Unstable and readily undergoes violent change without detonating.
2. Reacts violently with water.
3. Forms potentially explosive mixtures with water.
4. Generates toxic gases when mixed with water.
5. Cyanide- or sulfide-bearing and capable of generating toxic gases when exposed to pH conditions between 2 and 12.5.
6. Capable of detonation or an explosive reaction when exposed to a strong initiating force or when heated under confinement.
7. Capable of detonation or an explosive decomposition reaction in normal room conditions.
8. A forbidden explosive as defined in section 53 of reference (n) or a Class A explosive (section 53 in reference (n)) or a Class B explosive (section 88 in reference (n)).

(d) Toxic Wastes (D004 - D043) (section 24 in reference (m)) (chapter 15 in reference (f)). Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead) and when land disposed may leach into the groundwater. Toxicity is defined through the Toxicity Characteristic Leaching Procedure (Method 1311). Section 24 in reference (m) describes the list of contaminants, allowable levels, and corresponding D Waste numbers.

(3) Emission residues from air pollution control equipment and biosolids from wastewater treatment plants may display HW characteristics; therefore, these residues and biosolids must be evaluated to determine whether they are HW

and, if so, they must be managed appropriately. Toxicity is the most common characteristic of these residues and biosolids.

(4) Several pesticides exhibit toxic waste characteristics; therefore, the installations need to identify whether the waste pesticides and pesticide waste products (e.g., containers, rinsate) are HW, or meet the definition of a Universal Waste per section 9 in reference (m) and chapter 15-3.5 in reference (f). If so, these wastes must be disposed of and managed as HW.

(5) Mixtures of a non-HW and listed HW are also considered HW and must be managed appropriately. An example of such a mixture is 1,1,1-trichloroethane (TCA) mixed with used oil. Because TCA is listed at reference (m), the entire mixture becomes HW.

(6) Mixtures of a non-HW and a characteristic HW are regulated as HW only if the entire mixture exhibits one of the four hazardous characteristics.

(7) Wastes derived from the treatment, storage, or disposal of listed HW (except precipitation run-off) are HW. Examples of these "derived from" HW include biosolids, spill residue, ash, emission control dust, or leachate produced as a result of managing HW. These wastes must be managed as HW.

(8) Wastes that are either mixtures of characteristic HW and non-hazardous wastes or derived from the treatment, storage, or disposal of characteristic HW are not considered HW if they no longer exhibit one of the four HW characteristics. This exemption applies only to characteristic HW; listed HW, either mixed or derived from managing HW, are still HW.

(9) Low-Level Mixed Waste (LLMW) is a mixture of HW and low-level radioactive waste. LLMW stored and treated in approved tanks or containers is exempt from regulation as HW under RCRA authority as long as the management of such waste is regulated by the Nuclear Regulatory Commission (NRC). LLMW that is not managed under NRC authority or not treated or stored in tanks or containers is still regulated as a RCRA HW (subpart N of reference (o)).

(10) Due to the regulations summarized above, it is extremely important to segregate waste streams, both hazardous and nonhazardous, to avoid the added expense of managing HW when it can be avoided through proper segregation. Segregation of

these waste streams is beneficial, resulting in volume reduction, cost savings for disposal, and avoidance of unnecessary recordkeeping (chapter 15-5.2 in reference (f), and references (p), and (q)).

d. Generation of HW

(1) Monthly generation rates, accumulation times, and accumulation quantities for HW generators are established at references (m) and (k) and Chapter 15-3.3 in reference (f). The requirements are summarized as follows:

(a) Conditionally Exempt Small Quantity Generators (CESQGs) must generate no more than 100 kg (220.46 pounds (lb)) of HW and less than 1 kg (2.20 lb) of acute HW per month and must accumulate no more than 1,000 kg (2204.62 lb) of HW on-site at any given time. CESQGs are exempt from all of the HW management regulations, except HW identification and disposal requirements. A log book is required as part of the site's operating record to document waste generation and defend this generator status.

(b) Small Quantity Generators (SQGs) generate greater than 100 kg (220.46 lb) and less than 1,000 kg (2204.62 lb) of HW per month and accumulate no more than 6,000 kg (13,228 lb) of HW onsite at any given time. SQGs are subject to limited HW management regulations, which include obtaining an identification number from EPA or the authorized state, properly maintaining HW storage containers and tanks, using the most recent EPA form to ship wastes off site, limiting on-site accumulation to 180 days (270 days if the waste has to be shipped more than 200 miles (321.87 kilometers), and properly disposing of HW.

(c) Large Quantity Generators (LQGs) generate 1,000 kg (2204.62 lb) or more of HW per month. LQGs are subject to more stringent HW management regulations.

(2) If any of the generation quantities outlined in paragraphs 9104.1d(1)(a) and 9104.1d(1)(b) above, are exceeded, then the generator is considered to be an LQG and is subject to more stringent HW management regulations. If any of the accumulation quantities or periods outlined in paragraphs 9104.1d(1)(a) through 9104.1d(1)(c) are exceeded, then the generator is the operator of a storage facility and must apply for a RCRA part B permit to remain in operation.

(3) Before offering HW for transport off site, the HW generator must ensure that all DOT requirements for labeling, marking, placarding, and containerizing are met. The HW generator must also ensure that the transporter has obtained an EPA identification number for the transportation of HW and that a Uniform Hazardous Waste Manifest (or State equivalent) accompanies each shipment. Please refer to section 9104.k below for reporting and record keeping requirements regarding manifest and HW generation.

(4) Transportation of HW military munitions must be accompanied by DOD shipping controls applicable to the transport of military munitions in accord with reference (r) and chapter 21, paragraph 21104.3, of this Manual.

(5) Generators must send their HW to permitted TSDFs that comply with HW regulations. Generators must certify that the facility selected to receive the waste employs the most practical and current treatment, storage, or disposal methods for minimizing present and future threats to human health and the environment. The Defense Reutilization and Marketing Service (DRMS) and their local Defense Reutilization Marketing Offices (DRMOs) usually perform this function for DOD generators.

(6) The DRMS is responsible for the disposal of HW for the DOD in accordance with reference (s). Use of DRMS services is the preferred method of disposal. A decision not to use DRMS for HW disposal may be made in accordance with reference (t) for best accomplishment of the installation mission, and shall be concurred with by the component chain of command to ensure that installation contracts and disposal criteria are at least as stringent as criteria used by the DRMS. The DRMS should be first afforded the opportunity to redress any operational difficulties in providing service. The DRMS may request information from the military services, to include lists of facilities doing their own HW disposal contracting, including the type of commodities handled and prices paid (reference (g)). For the disposal of HW generated from an installation's routine operations, generators must coordinate with the DRMS or DRMO to ensure that transporters are on the approved DOD list and that these transporters are permitted for "cradle to grave" management of HW. For cleanup operations, installations should coordinate with EPA, the states (with authorized HW programs), and the Corps of Engineers to ensure transporters are in compliance with all applicable regulations. Questions on this process should be addressed to the local DRMO or DRMS (see

appendix S for procedures for disposal of hazardous waste when not using the DRMO and/or DRMS).

(7) For HW military munitions, the DDA will provide disposition instructions, which will include the appropriate disposal facility. See chapter 21 of this Manual.

(8) Generators must certify that they have developed and implemented waste minimization programs at their areas as part of the HW manifest requirements. Additionally, the generator must certify that these programs are capable of reducing the volume, quantity, and toxicity of the generator's waste as a part of their biennial report. Waste minimization reporting is also required by section 6607 of reference (u), as it amended section 313 of reference (v). For HW military munitions, the goals of HW minimization have been incorporated into the Marine Corps military munitions disposition process, chapter 21, paragraph 21201.

(9) EPA has promulgated land disposal restrictions (LDRs) limiting or prohibiting the land disposal of certain HWs by specific dates. Treatment standards for each waste were also set to substantially reduce the toxicity or likelihood of HW migration. Wastes that meet the treatment standards, or for which there will be no migration of hazardous constituents for as long as the wastes remain hazardous, may be land disposed. reference (w) lists the specific HWs prohibited from land disposal and the effective dates of the prohibitions. Generators of HW must take the following steps to ensure that the requirements of the LDRs are met:

(a) Determine if the waste is a solvent containing HW or a dioxin-containing waste, listed on the California Waste List, or identified as a Third Third waste (reference (x)). Third Third wastes may continue to be disposed of if LDR treatment standards have been met.

(b) If the HW is restricted and does not meet the established treatment standard, a written notice must accompany each shipment of the waste, notifying the TSDF of the appropriate treatment standards that must be met before land disposal of the HW can take place.

(c) If the HW is restricted and meets the established treatment standards, a written certification of this fact must accompany each shipment of the waste to the TSDF. In

this case, further treatment of the HW is not required prior to land disposal.

(d) If restricted HWs are being treated onsite to meet the established treatment standards, a written waste analysis plan must be developed describing the procedures used to comply with the treatment standards. The plan must be filed with EPA or authorized state at least 30 days prior to commencing the on-site treatment process.

(e) Records of all notices, certifications, demonstrations, waste analysis data, and other documentation produced to satisfy the LDR requirements must be kept on-site for three years after the date the HW was sent to a TSDF. (section 7(a)(8) of reference (w)). These records must be retained per reference (y), Standard Subject Identification Code (SSIC) 5090.2b.

e. Transportation of HW

(1) The Marine Corps normally contracts, via the DRMS, with private transporters to ship HW off site for recycling, treatment, storage, or disposal. The Marine Corps generator and DRMS are responsible for ensuring that the transporter meets all Federal, State, and/or local HW transportation regulations and all explosives safety requirements, as applicable.

(2) Reference (q) provides policies, procedures, and responsibilities for receipt, storage, transportation, and handling of HMs and HWs. This document is published by the Marine Corps, Defense Logistics Agency (DLA), and the other military services. The provisions in reference (q) are applicable to all installations under the command and control of the Secretary of Defense.

(3) Transport of HW on a public or private right-of-way that is within or alongside the boundary of an installation does not require a RCRA hazardous waste manifest. State and local regulations concerning the transportation of HW on a public roadway within or adjacent to an installation boundary may be more stringent than reference (k) and may require the use of a manifest. In the event of release of HW on a public or private right-of-way, then the transporters must meet the requirements of sections 30 and 31 of reference (z) for immediate action and cleanup.

f. Treatment, Storage, and Disposal Facilities

(1) TSDFs are facilities on installations that conduct HW treatment, storage, or disposal operations. TSDFs require a permit to continue existing operations or to initiate new operations. EPA developed a two-part permitting procedure for TSDFs as outlined in the following two paragraphs (subpart B of reference (aa)).

(2) The part A permit confers interim status on an existing TSDF, allowing the installation to continue operations. Interim status can only be conferred on TSDFs for which construction commenced on or before 19 November 1980. Because the last part A application deadline was 8 November 1988, any TSDFs that do not already have a part A permit must obtain a part B permit before commencing operations.

(3) The part B permit confers final approval to operate TSDFs. The application for the part B permit is detailed, requiring location maps, engineering drawings, operating procedures, waste analysis plans, contingency and emergency response plans, and other items. The part B application is reviewed and approved by the cognizant regulatory agency (usually the state). After approval, the part B permit must be maintained to reflect accurately the latest operations at the TSDF. Prior to implementing major changes in operations (e.g., new or modified treatment process, the generation of a new type of waste, new or modified storage site), the part B permit must be updated subject to the review and approval of the cognizant regulatory agency (section 14 of reference (aa)).

g. HW Manifest System

(1) The Uniform Hazardous Waste Manifest (EPA Form 8700-22 Rev.3-05) is the document used to track HW from its generation point to its final disposal destination. Almost all HW transported from an installation over public roads must be accompanied by a manifest prepared and signed by the HW generator. Each transporter and the owner or operator of the facility designated to receive the HW must sign the manifest and keep a record copy. A copy of the signed manifest must then be returned to the HW generator. Please refer to section 9104.k for reporting and record keeping requirements regarding manifest and HW generation (per subparts A through D of reference (k), reference (z), and reference (y), Standard Subject Identification Code (SSIC) 5090.2a through 2d.

(2) If the DRMO is managing the disposal of HW for the installation, the HW must be accompanied by the most recent DRMO Disposal Turn-in Document and DRMO HW Profile Sheet, unless a current profile sheet is already on file with the DRMO when the DRMO accepts custody of the HW. The DRMO will then prepare the manifest. The HW generator must review the manifest for accuracy of each entry and sign as the generator. Each person must be authorized in writing to do so by the installation CG/CO.

(3) In addition to fulfilling EPA requirements, installations must include a 24-hour manned duty telephone number in block 15 on each manifest.

(4) Waste military munitions being transported under CE (section 203 of reference (o)), must be accompanied by DOD shipping and tracking controls applicable to transportation of military munitions.

h. Accumulation and Storage of HW by LQGs. As stated in paragraphs 9104.1d(1) through (6), the applicability of specific RCRA accumulation and storage requirements depends on the amount of waste that is generated in a calendar month. For LQGs, there are three types of HW accumulation/storage areas: satellite, 90-day, and permitted. The regulatory requirements differ for each type. It is not a requirement to use all three types of areas. For example, HW can be accumulated at a satellite area and later transferred to a permitted storage area. Each installation should set up the appropriate number and type of accumulation and storage areas necessary to manage its HW properly. Paragraphs 9104.1.h(1) through (3) provide a description of the three types of HW accumulation or storage areas and the corresponding regulatory requirements.

(1) Satellite Accumulation Areas. These are areas where HW is at or near the point of generation and under the control of the operator. In order to manage satellite areas effectively and to prevent waste stream contamination, HW container access must be restricted to authorized personnel only. Although not required, it is good practice to place spill control and emergency equipment (e.g., eyewash, fire extinguisher) near a satellite accumulation area. The other requirements for operating a satellite accumulation area are:

(a) Each container must be in good condition, compatible with the HW, and marked with the words "Hazardous

Waste" or other words that identify the contents of the container.

(b) Each container must be kept closed at all times except when adding or removing HW.

(c) Generators may accumulate up to 55 gallons (208.20 liters) of HW or one quart (0.94 liter) of acute HW at a satellite area for an indefinite amount of time. These quantity limits are for the total amount of HW or acute HW at the site, not for each waste stream at the site. For example, 55 gallons (208.20 liters) of one waste stream is allowed. Thirty gallons (136.38 liters) of one waste stream and 25 gallons (113.65 liters) of another waste stream are also allowed. However, 55 gallons (208.20 liters) of one waste stream and 55 gallons (208.20 liters) of another are not allowed.

(d) When 55 gallons of HW (or 1 quart of acute HW) is exceeded, the generator needs to date the container and move the excess waste to a 90-day or 180-day area within three consecutive days of filling the container (section 34(c)(2) of reference (k)). Once the container is moved, the generator needs to date the container again, so that it can be moved off site within 90 or 180 days (sections 34(a)(2) and 34(d)(4) of reference (k)), respectively. However, if the container is moved directly to a permitted or interim status unit it does not need to be redated. This means that an LQG has up to 93 days and an SQG has up to 183 days for on-site accumulation time once 55 gallons of HW (or 1 quart of acute HW) has been exceeded at the satellite accumulation area.

(2) 90-day Accumulation. These areas are used to store HW temporarily until it is either manifested and shipped off site for disposal or transferred to a permitted storage facility on-site. HWs at these areas may be accumulated for up to 90 days. (Note: For waste military munitions, storage must also meet the requirements of reference (ab), DOD Ammunition and Explosives Safety Standards, as specified in reference (o) and chapter 21 of this Manual.)

(a) Each container must be in good condition, compatible with the HW, and marked with the words "Hazardous Waste" and the accumulation start date.

(b) Each container must be closed at all times except when adding or removing HW.

(c) The site must be inspected at least weekly for container leaks, deterioration of containers, open containers, and condition of emergency response and spill control equipment.

(d) Containers holding ignitable or reactive waste must be located at least 50 feet (15 meters) from the accumulation site's boundary.

(e) Incompatible wastes must not be placed in the same container, and must meet the requirements of section 17 in reference (j).

(f) Containers holding HW incompatible with other HW or materials accumulated nearby must be separated by a berm, dike, wall, or other device.

(g) Containers with a capacity greater than 26.4 gallons (0.1 cubic meter) and used to store, treat, or dispose of HW must meet the air emission standards of subpart CC of references (i) and (j).

(h) Areas must be maintained, operated, and equipped to meet preparedness and prevention requirements outlined in subpart C of references (i) and (j).

(i) A contingency plan and emergency procedures must be developed for each site as outlined in subpart D of references (i) and (j).

(j) Personnel responsible for the site must be trained in the proper handling of HW (subpart B of references (i) and (j)).

(k) As part of the effort to minimize the possibility of releases to the environment, secondary containment should be provided for liquid HW stored at these areas.

(l) If the site uses tanks to store HW, then the requirements of subpart J of references (i) and (j) must be met.

(m) If the site uses tanks with a capacity greater than 26.4 gallons (0.1 cubic meter) to store, treat, or dispose of hazardous waste, then the air emission standards of subpart CC of references (i) or (j) must be met.

(3) Permitted Storage. This type of storage facility requires a RCRA part B permit. The permitting process is outlined in paragraph 9104.1f. Storage requirements will be specified in the facility's permit.

(4) Disposal of Offsite HW Military Munitions. Some Marine Corps facilities may possess HW disposal permits that do not allow the acceptance of HW generated from off-site facilities (references (i) and (j)). Existing regulations require the submittal and approval of a Class 3 permit modification request before such HW military munitions can be accepted (reference (i), subpart X, Miscellaneous Units).

(5) Storage of HW Military Munitions. Waste military munitions being stored under CE (section 205 in reference (o)) must be stored in accordance with reference (ab).

(6) Storage of Cathode Ray Tubes (CRTs). The storage of electronic equipment with used or broken CRTs is conditionally excluded from HW requirements per section 39 in reference (m), if they are undergoing recycling. CRTs from the installations are handled through the DRMS and DRMO. (See chapter 17 of this Manual).

i. Accumulation and Storage of HW by SQGs. As previously stated, SQGs generate greater than 100 kg (220.46 lb) and less than 1,000 kg (2204.62 lb) of HW per month and accumulate no more than 6,000 kg (13,228 lb) of HW onsite at any time. These criteria apply to the installation as a whole, not to individual accumulation or generation areas. Accumulation and storage requirements for SQGs are comparable to, but not as stringent as, 90-day accumulation areas. Key requirements are:

(1) The accumulation time limit is 180 days, unless the TSDF to which HW will be transported for disposal is greater than 200 miles, in which case the accumulation time is 270 days.

(2) Requirements identified above in paragraph 9104.1h.3(a) through (e) for 90-day accumulation areas must be met.

(3) An emergency coordinator must be onsite or on call at all times.

(4) Preparations for responses to spills and other emergencies must be made, including posting emergency response

telephone numbers, providing and identifying locations of fire extinguishers and spill control equipment, and familiarizing all employees with proper waste handling and emergency response procedures appropriate to the site.

j. Accumulation and Storage of HW by CESQGs. CESQGs are not subject to the accumulation and storage requirements of Federal regulations. State requirements, reasonable safety precautions, and requirements for satellite accumulation areas should be considered when establishing accumulation and storage practices on installations that qualify as CESQGs. While there are no labeling requirements for CESQGs, reference (ac) requires that you have labels on all containers. Storage containers should not be leaking, bulging, rusted, or incompatible with the waste stored in them. If a CESQG should treat or dispose of HW onsite, the installation's TSDf must be fully permitted to handle HW; be a facility that uses, reuses, or legitimately recycles the waste (or treats the waste prior to use, reuse, or recycling); and should be a universal waste handler or destination facility subject to the universal waste requirements of reference (ad). However, when the CESQGs has reached the 1,000 kg threshold the time requirements for the SQG become applicable.

k. Reporting and Recordkeeping

(1) LQGs and TSDf owners/operators must submit annual or biennial reports (EPA Form 8700.13 A/B) to the appropriate regional EPA office or cognizant State agency by March 1 of each even-numbered year or at such time as required by the State agency. Report Control Symbol DD-5090-03 has been assigned to this reporting requirement. A copy of each of these reports must be kept for 3 years per reference (y), SSIC 5090.2a. LQG and TSDf owners/operators should check State reporting requirements, which may be more stringent.

(2) If an LQG has not received a return copy of the HW manifest within 35 days after the date the HW was accepted by the initial transporter, the transporter and/or the owner/operator of the TSDf must be contacted to determine the location of the HW and its status. An LQG must provide an immediate exception report to the EPA regional or State regulatory authorities if the TSDf designated to receive the HW has not returned a copy of the manifest with the handwritten signature of the TSDf owner/operator within 45 days after the date the HW was accepted by the initial transporter. A copy of each exception report filed with the EPA or the State authority

must be kept at least 3 years after the date of the report (chapter 15-4 in reference (f).) These records must be retained per reference (y), SSIC 5090.2a.

(3) Generators must maintain the following records:

(a) Waste manifests from offsite disposal (signed copies).

(b) Biennial reports to the EPA (LQGs only).

(c) LDR certificates for offsite disposal.

(d) Exception reports for non-receipt of manifest signed by the offsite TSDF.

(e) Lab analyses or other records used to conduct waste determination (profiles).

(f) HW training documentation.

(g) Storage site inspection reports (LQGs only).

(h) Hazardous waste contingency plan (LQGs only).

(4) Additional reports required by state or agency. Generators must maintain an operator record or log to include but not limited to (section 73 in reference (i)):

(a) Description and the quantity of each HW received, and the method and date of treatment, storage, or disposal.

(b) Location of each HW and the quantity at each location.

(c) Monitoring, testing, or analytical data, and corrective action.

(d) Records and results of waste analyses and waste determinations.

(e) Summary reports and details of all incidents

(f) Records and results of inspections.

(5) Records of test results or waste analyses must be kept for 3 years after the date the HW was last manifested off-site per reference (y), SSIC 5090.2b.

(6) Generators and transporters must maintain a log of all HW manifests including type of waste, quantity, shipped to, ship date, received date and who signed the manifest. They must also retain a copy of the signed manifest for 3 years after the date the HW was accepted by the initial transporter per reference (y), SSIC 5090.2c.

(7) Records of all required inspections, including emergency equipment tests, at HW accumulation and storage areas must be kept on-site and maintained for 3 years per reference (y), SSIC 5090.2b.

(8) SQGs are exempt from the requirements listed above in paragraph 9104.1k(1). With regard to exception reporting (paragraph 9104.1k(2)), SQGs have 60 days after the date the HW was accepted by the initial transporter to notify the appropriate regulatory authority. SQGs are encouraged to expend efforts to determine the location of the HW and its status.

(9) CESQGs are exempt from the requirements listed above in paragraph 9104.1k(1) through (6), provided they do not exceed the HW generation quantities outlined in paragraph 9104.1d(1)(a).

(10) Recordkeeping requirements for HW military munitions are outlined in chapter 21, section 21104, of this Manual.

(11) Copies of all records should be sent to and maintained by the installation environmental office. Such records shall be maintained for a period of 3 years (section 40(c) of reference (k)) and per reference (y), SSIC Code 5090.2a-c.

1. Management of Used Oil

(1) In some states, used oil is considered a HW and must be managed as directed in state regulations.

(2) Non-hazardous used oil that is mixed with polychlorinated biphenyls (PCBs) and exhibit less than 50 parts per million (ppm) PCBs may be managed as RCRA used oil under reference (ae). However, used oil that contains more than 50

ppm PCBs must be managed as a Toxic Substances Control Act waste under reference (af) (see chapter 19 of this Manual) and cannot be diluted to reduce the PCB concentration.

(3) Used oil contaminated with HW shall be managed as a HW, unless the generator is a CESQG under reference (m). CESQG HW that has been mixed with used oil in the intent of being recycled (either by burning for energy recovery or other processes) can still be managed as used oil under reference (ae).

(4) Records containing the initial shipment of the oil from the installation must be kept by the personnel who determined that the used oil met the fuel specification. Records must be maintained for 3 years after the shipment per reference (y), SSIC 5090.2c.

2. RCRA Corrective Action

a. A Corrective Action is a Federal program under reference (a) that was issued to address the cleanup at facilities where a release of HW or hazardous constituents into soil, ground water, surface water, or air has occurred. TSDFs are responsible for investigating and, as necessary, cleaning up releases at or from their facilities, regardless of when the releases occurred. EPA or the state will issue a Corrective Action Order to the TSDF if a Corrective Action needs to be conducted. This order contains a schedule, milestones, and cleanup levels and has been either negotiated by the regulators and the facility or imposed by the court.

b. The regulatory authorities for Corrective Action at TSDFs are found in subpart F of reference (i). Corrective Actions at interim status facilities are accomplished under RCRA statutory authorities, not regulatory authorities.

3. Marine Corps/DLA HW Management Interface. Within the DOD, the responsibility for the disposal of HM and HW is split between the military services and the DLA. Reference (g) promulgates consolidated guidance regarding HM and HW disposal. The DLA has been designated the responsible agency for the worldwide disposal of all HM and HW, with the exception of the nine categories of materials described below:

a. Toxicological, biological, radiological, and lethal chemical warfare materials, if required by United States law to be destroyed. Disposal of the byproducts of such materials is

the responsibility of the DOD installation with assistance from the DLA.

b. Material that cannot be disposed of in its present form because of military regulations (e.g., controlled medical items and military munitions items requiring demilitarization). This category would include instances when military regulations require the obliteration of all markings that could relate excess material to its operational program. Once the appropriate actions are taken to meet the military regulation, the resulting material could then be disposed of through the DLA.

c. Municipal-type garbage, trash, and refuse, resulting from residential, institutional, commercial, agricultural, and community activities. This material can be disposed of in a State or local permitted municipal SW landfill.

d. Contractor-generated materials that are the contractor's responsibility for disposal under the terms of the contract. The HW identification number holder (normally the installation commander) must maintain appropriate control of these materials or wastes and assure that they are transported and disposed of in compliance with Federal and State requirements.

e. Biosolids resulting from municipal-type wastewater treatment facilities.

f. Biosolids and residues generated as a result of industrial plant processes or operations. Properly identified industrial process biosolids and residues, that are not commingled or a product of an industrial waste treatment facility, are the responsibility of the DLA. The DLA does not accept biosolids and residues from wastewater treatment facilities. The DLA does take biosolids and residues from industrial processes that have not been commingled. For example, biosolids and residues from industrial process "A" must be collected and stored separately from biosolids and residues resulting from industrial process "B." Each process may result in biosolids and residue contamination, but the biosolids and residues from each process must be collected and stored separately.

g. Refuse and other discarded materials that result from mining, dredging, construction, and demolition operations.

h. Unique wastes and residues of a nonrecurring nature generated by research and development experimental programs.

i. Wastes and residues (including contaminated soil) resulting from site cleanups associated with long-term, widespread contamination of the environment. This category includes wastes and residues from installation restoration efforts.

j. On a case-specific basis, the local DRMO may be able to arrange disposal of the above categories of HW. For cleanup operations, installations should coordinate with EPA, the states (with authorized HW programs) and the Corps of Engineers to ensure transporters are in compliance with all applicable regulations. Contact the local DRMO for more information on the availability of this service.

4. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable Executive Orders, and with Federal, State, interstate, and regional statutory and regulatory environmental requirements.

9105. TERMS AND DEFINITIONS

1. Disposal (per reference (ag)). The discharge, deposit, injection, dumping, spilling, leaking, or placing of any SW or HW into or on any land or water so that such SW or HW, or any constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

2. Disposal Facility (per reference (ag)). A facility or part of a facility at which HW is intentionally placed into or on any land or water, and at which waste will remain after closure.

3. EPA HW Number (per reference (ag)). The number assigned by EPA to each HW listed in subpart D of reference (m), and to each characteristic identified in subpart C of reference (m).

4. EPA Identification Number (per reference (ag)). The number assigned by EPA to each generator, transporter, and TSDF.

5. Generator (per reference (ag)). Any person, by site, whose act or process produces HW identified or listed in reference (m), or whose act first causes a HW to become subject to regulation.

6. HW. Any discarded material (liquid, solid, or gaseous) that because of quantity, concentration, or physical or chemical characteristics may:

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

b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed, excluding infectious and radioactive waste; if infectious or radioactive wastes are mixed with EPA/State regulated HW, then the mixture remains regulated as a HW. HW does not include HM with an expired shelf life, unless designated as such by a DRMO.

7. HW Management. The systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of HW. The term also includes the reduction of the HW effect on the environment and processes to recover resources from them.

8. Military munitions (Reference (ag)). All ammunition products and components produced or used by, or for, DOD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants; explosives; pyrotechnics; chemical and riot control agents; smokes; and incendiaries used by DOD components, 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. Military munitions do not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under the DOE nuclear weapons program after all required sanitization operations under reference (ah), as amended, have been completed.

9. Treatment (Reference (ag)). Treatment is any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or

composition of any HW so as to neutralize such waste; or so as to recover energy or material resources from the waste; or so as to render such waste nonhazardous or less hazardous, safer to transport, store, or dispose of, or amenable for recovery or storage, or reduced in volume.

CHAPTER 9

HAZARDOUS WASTE MANAGEMENT

SECTION 2: MARINE CORPS POLICY

9200. GENERAL. Marine Corps installations and Marine Corps commands/units and tenants in the United States must comply with all applicable Federal, State, and/or local regulatory requirements relating to HW. Compliance with all aspects of an EPA approved State HW management program is deemed to be in compliance with all Federal requirements. If a state has a program that is not approved by EPA, Marine Corps installations and commands/units and tenants in the given state must comply with the most stringent State and Federal program requirements. Overseas Marine Corps bases must comply with HW requirements in reference (ai) or, if they exist, the applicable Final Governing Standards (e.g., the Japan Environmental Governing Standards (JEGS)).

9201. MARINE CORPS HW ANNUAL REPORT. The HW data is now collected as part of the Environmental Portal (EPR Portal) HW Annual Data Call that replaced the Pollution Prevention Annual Data Summary (P2ADS). HW data for the previous calendar year is to be submitted via the EPR Portal each year in March to the Naval Facilities Engineering Service Center (NFESC) and to CMC (LFL-6) and CMC (LFF). The HW Annual Data Call tracks the progress in meeting the DOD Measures of Merit SW and HW goals. Specific guidance on the data call is provided annually by NFESC.

9202. HW MINIMIZATION

1. Marine Corps policy is to reduce the quantity of HW disposed of by using the environmental management hierarchy of source reduction, recycling, treatment, and disposal. The highest priority should be placed on reduction of HW generation and recycling. Reduction of HW disposal costs should be considered.

2. Federal and State regulations require all HW generators to certify (on each Uniform HW Manifest) that a program exists to minimize the volume and toxicity of HWS generated, insofar as economically feasible. Marine Corps activities must implement such programs so that they may make such a certification.

3. The Marine Corps achieved our previous goal of 50 percent reduction of HW (by weight) for the five-year period extending

from 1988 through 1992, an additional 50 percent reduction for the seven-year period of 1992 through 1998 and an additional 25 percent for the period 1999 through 2006. The long-term Marine Corps goal is to achieve continuous reduction of HW generation through pollution prevention initiatives, Best Management Practices, and Best Demonstrated Available Technology. Employing pollution prevention concepts in addressing HW compliance will help Marine Corps installations achieve these HW reduction goals.

4. In addition to installation efforts, COMMARCORSYSCOM, via the DDA process, is coordinating with CMC (LF) to actively pursue waste minimization of HW military munitions. See chapter 21 of this Manual.

9203. MARINE CORPS AND DLA INTERFACE

1. Installation Management. See appendix S, Waiver of Requirements to Use DRMS, for information on the use of outside sources other than the DLA for HW disposal, if doing so will best accomplish the mission. Marine Corps policy is to use DLA HW disposal services insofar as possible. However, Marine Corps CGs/COs have authority to contract directly for HW disposal if necessary to:

- a. Comply with HW regulations.
- b. Improve efficiency.
- c. Produce economic benefits.
- d. Allow successful accomplishment of the Marine Corps official mission as set forth in reference (aj), as amended by reference (ak).

2. When using DLA HW disposal services, the Marine Corps must reimburse the DLA per procedures established by the DLA and the Comptroller of the Navy (reference (g)).

3. If a Marine Corps activity chooses to pursue an independent contract for HW disposal using non-DLA services, all aspects of the procurement (e.g., contract, technical specification, disposal criteria, quality assurance, and quality control plan) must be at least as stringent as those used by the DLA.

9204. STORAGE OR DISPOSAL OF NON-DOD HW ON MARINE CORPS PROPERTY. Marine Corps activities, with few exceptions, are

prohibited by law (references (al) and (g)) from storing, treating, or disposing of non-DOD HW on site. In addition, Marine Corps policy prohibits HW generators and TSDFs from accepting non-DOD HW from off site. Subject to reference (al) specific requirements, some general exceptions to this rule are the following:

1. Storage, treatment, or disposal of materials that will be, or have been, used in connection with a DOD activity or in connection with a service to be performed on a Marine Corps installation or for the benefit of the Marine Corps (e.g., foreign military munitions that are not returned to the country of origin).
2. Storage of strategic and critical materials in the national defense stockpile.
3. Temporary storage or disposal of explosives to protect the public or to assist Federal, State, or local law enforcement agencies in storing or disposing of explosives when no alternative solution is available.
4. Temporary storage or disposal of explosives in order to provide emergency lifesaving assistance to civil authorities.
5. Disposal of excess explosives produced under a DOD contract after determining that feasible alternatives are not available.
6. Temporary storage of nuclear materials or nonnuclear classified materials under agreement with the DOE.
7. Storage of military resources for use in peacetime civil emergencies.
8. Temporary storage of materials of other Federal agencies during transportation emergencies.
9. Storage of material that is not owned by the DOD if the material is required or generated in connection with the authorized and compatible use by that person of a DOD industrial-type facility, including for testing material and personnel training.
10. Storage of hazardous waste by a non-DOD tenant organization, if there is an approved, written agreement between the host and the non-DOD organization that addresses the storage, treatment, and disposal of the non-DOD organization's

hazardous waste such as in an emergency lifesaving assistance to civil authorities or the temporary storage or disposal of munitions that otherwise would pose a risk to national security.

9205. HOST INSTALLATION AND MARINE CORPS COMMANDS/UNITS AND TENANTS ACTIVITY HW INTERFACE

1. Marine Corps installations are responsible for obtaining EPA HW generation numbers and TSDf permits. However, much of the HW generated at installations is the result of Marine Corps commands/units and tenants, including training exercises. Therefore, it is important for host installations and Marine Corps commands/units and tenants to agree upon their individual responsibilities with respect to the overall base HW management program. The following paragraph discusses Marine Corps policy regarding HW management responsibilities of host and Marine Corps commands/units and tenants. (See chapter 2 of this Manual.)

2. Marine Corps policy requires that Inter-Service Support Agreements or equivalent agreements include responsibilities of both parties (host and commands/units and tenants) for the HW management program. Minimum topics to include in these agreements are funding for HW management and disposal, accumulation and storage, HW generation, HW coordinator designation, HW training, and HW minimization (use of pollution prevention techniques).

3. Contractors working on base must comply with paragraphs 9205.1 and 9205.2.

9206. PLANS AND PROCEDURES TO PROTECT HM INVENTORIES AND HW INVENTORIES AND RECORDS DURING NATURAL DISASTERS. All commands will establish policies and procedures to protect HM inventories and HW inventories/records during natural disasters. These documents will be presented in each command's natural disaster plan(s). This process serves to identify and quantify any losses caused by a natural disaster.

CHAPTER 9

HAZARDOUS WASTE MANAGEMENT

SECTION 3: RESPONSIBILITIES

9300 CMC (LF)

1. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, State, local, and overseas HW regulatory requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies as required.
3. Represent the interests of Marine Corps installations in liaison with the DRMS and DLA to ensure adequate support in the disposal of HW.
4. Conduct special environmental compliance and protection studies with regard to HW management to assist in establishing policies or initiating actions.
5. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to HW regulations.
6. Track Marine Corps progress toward meeting HW minimization goals, using the Hazardous Waste Annual Data Call.

9301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for HW project requirements necessary to maintain compliance with applicable existing and emerging regulations and permits. Program, budget, and fund personnel, equipment, materials, training, monitoring, and other requirements necessary for installation operations to comply with HW management to include transportation and disposal requirements to the extent permitted by law. Pay appropriate Federal, State, and local/or fees to the extent permitted by law. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-

cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

2. To the extent permitted by law, ensure that all required Federal, State, and/or local HW management permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all HW management projects.
3. Designate a focal point to coordinate the installation HW management program.
4. Determine, evaluate, and comply with Federal, State, and local HW management requirements, to the extent permitted by law, applicable to HW management at a Marine Corps installation within the continental United States, or reference (ai) and Final Governing Standards (FGS)/JEGS requirements applicable to HW management at a Marine Corps installation outside the continental United States.
5. Develop an installation HWMP as described in this chapter.
6. Designate, in writing, personnel authorized to sign HW manifests for the installation.
7. Develop training programs and train personnel involved in HW operations. Such training must meet applicable Federal, State, and/or local HW management requirements (see chapter 5 of this Manual).
8. Provide technical assistance and support to commands/units and DOD tenants as needed.
9. Submit the HW data annually to NFESC and CMC (LF) via the EPR Portal.
10. Submit, as required, the biennial HW report to the EPA or authorized state.
11. Ensure that coordination occurs with the Safety Office on HW management guidelines and practices that impact risks to the health and safety of operators and response personnel.
12. Budget and fund personnel, facilities, and equipment, necessary to handle, store, transport, treat and dispose of HW generated by installations as outlined in chapter 3 of this Manual.

13. Budget and fund personnel, facilities, equipment, and other costs necessary to transport and dispose of Marine Corps command/unit and tenant generated HW as outlined in chapter 3 of this Manual.

14. In addition, CGs/COs of overseas Marine Corps installations must:

a. Ensure that HW (by United States or host nation definition) generated by Marine Corps actions is not disposed of overseas unless it is done in compliance with reference (ai), FGS/JEGS, and any applicable international agreement, or with the concurrence of the appropriate host nation authority if no applicable international agreement exists.

b. Coordinate with the DOD Environmental Executive Agent or appropriate command for the disposal of HW in the United States or another foreign nation if disposal is not possible in the host nation.

c. Comply with the Status of Forces Agreement and other applicable international agreements on the shipping and storage of HWs.

15. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished by writing an environmental compliance and protection standard operating procedures (SOPs) document to implement all environmental requirements.

9302. CG/CO OF MARINE CORPS COMMANDS/UNITS AND TENANTS

1. Comply with all host installation/Commander in Chief orders and plans that govern the management of HW. Participate in the updating of orders and plans to ensure that the needs of the Marine Corps commands/units and tenants are addressed.

2. Develop command/unit and tenant orders, directives, and/or SOPs as needed to implement host installation orders and a plan that governs HW management.

3. Designate HW management personnel for each HW generation, accumulation, and storage site under the cognizance of the Marine Corps commands/units and tenants.

4. To the extent permitted by law, comply with all Federal, State, and/or local requirements applicable to HW management at

the Marine Corps commands/units and tenants. Or, if overseas, comply with reference (ai) or FGS/JEGS requirements related to HW management.

5. To the extent permitted by law, comply with State and local requirements applicable to medical waste management at the command/unit and tenant command.

6. Assist the host installation HW management focal point in filling out all required regulatory reports and the Marine Corps P2ADS.

7. Direct HW management personnel to timely respond to all required data calls for HW information.

8. Budget and fund personnel, facilities, and equipment and other costs associated with the generation and preparation for transport of HW as outlined in chapter 3 of this Manual.

9. In the event of a HM or HW spill due to command or unit activity, fund cost associated with cleanup of spills and disposal of spill debris as outlined in chapter 3 of this Manual.

10. Ensure that designated HW coordinators and other personnel involved in HW management receive the appropriate HW training. Participate in the host installation's HW training program to take advantage of Marine Corps in-house expertise and economy of scale for contractor-provided training.

11. Request technical assistance from the host installation HW management focal point as needed.

REFERENCES

- (a) 42 U.S.C. 6901-6992k
- (b) Public Law 89-272, "Solid Waste Disposal Act of 1965,"
October 20, 1965
- (c) Public Law 98-616, "Hazardous and Solid Waste Amendments
(HSWA) of 1984," November 8, 1984
- (d) Public Law 102-386, "Federal Facility Compliance Act of 1992
(FFCA)," October 6, 1992
- (e) Section 1 of Public Law 104-119, "Land Disposal Program
Flexibility Act of 1996," March 26, 1996
- (f) OPNAVINST 5090.1C
- (g) DOD Directive 4160.21-M, "Defense Materiel Disposition
Manual," August 18, 1997
- (h) Instructions for Implementing Executive Order 13423,
"Strengthening Federal Environmental, Energy, and Transportation
Management," March 29, 2007
- (i) 40 CFR 264
- (j) 40 CFR 265
- (k) 40 CFR 262
- (l) 40 CFR 271
- (m) 40 CFR 261
- (n) 49 CFR 100 to 185
- (o) 40 CFR 266
- (p) DOD Directive 4145.19-R-1, "Storage and Materials Handling,"
September 15, 1979
- (q) MCO 4450.12A
- (r) NAVSEA SW020-AG-SAF-010

- (s) DOD Instruction 4715.6, "Environmental Compliance," April 24, 1996
- (t) DOD Directive 4001.1, "Installation Management," September 4, 1986
- (u) 42 U.S.C. 13101
- (v) Public Law 99-499, "Superfund Amendments and Reauthorization Act (SARA)," October 17, 1986
- (w) 40 CFR 268
- (x) Federal Register, Volume 55, page 22520, June 1, 1990
- (y) SECNAV M-5210.1
- (z) 40 CFR 263
- (aa) 40 CFR 270
- (ab) DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards," February 29, 2008
- (ac) 29 U.S.C. 651 et seq.
- (ad) 40 CFR 273
- (ae) 40 CFR 279
- (af) 40 CFR 761
- (ag) 40 CFR 260
- (ah) 42 U.S.C. 2011
- (ai) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (aj) Public Law 80-235, "National Security Act of 1947," July 26, 1947
- (ak) Public Law 81-216, "National Security Act Amendment of 1949," August 10, 1949
- (al) 10 U.S.C. 2692

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CHAPTER 10

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ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

CHAPTER 10

INSTALLATION RESTORATION PROGRAM

SECTION 1: INTRODUCTION

10100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with procedural and statutory requirements under the DON IR program.

10101. APPLICABILITY. See paragraph 1101.

10102. BACKGROUND. The IR program identifies, investigates, and cleans up or controls hazardous substance (HS) releases from past waste disposal operations and spills at Marine Corps installations. The IR program is designed to comply with procedural and substantive requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA), and with regulations promulgated under these Acts and relevant state laws. Although the IR program is intended primarily to clean up past HS releases, it may address the cleanup of past releases of any pollutant and/or contaminant that endangers public health, welfare, or the environment, including petroleum, oil, and lubricants. For additional information and guidance, refer to the most current version of the Navy/Marine Corps IR Manual.

10103. FEDERAL STATUTES

1. CERCLA of 1980, as Amended (42 U.S.C. 9601 et seq.). This Act, commonly referred to as "Superfund," authorizes Federal action to respond to the release or threatened release of HS from any source into the environment. CERCLA also authorized the creation of a trust fund to be used by the Environmental Protection Agency (EPA) to clean up emergency and long-term Hazardous Waste (HW) problems. The DoD is not covered by the trust fund; however, Congress set up special funding outside CERCLA, the Defense Environmental Restoration Account (DERA), to pay the cost of DoD responses to HW site remediation. In a memorandum issued on 3 May 1995, the Deputy Secretary of Defense devolved DERA to the Military Departments and defense agencies.

The account that funds Marine Corps requirements is now referred to as the Environmental Restoration, Navy (ER,N) account.

a. SARA of 1986 (Public Law 99-499). This Act reauthorized and amended the authorities and requirements of CERCLA. SARA provisions that are of primary importance to the IR program are set forth in section 120, which addresses response actions at Federal Facilities, and in section 211, which codifies the Defense Environmental Restoration Program (DERP) into law.

b. Community Environmental Response Facilitation Act (CERFA) of 1992 (Public Law 102-426). CERFA amends CERCLA, section 120(h), Property Transferred by Federal Agencies. CERFA requires the Federal Government, before the termination of Federal activities on any real property owned by the Government to identify real property where no HS or petroleum was released, or disposed of. CERFA further clarifies the meaning of "remedial action taken" in CERCLA, section 120(h)(3).

c. National Oil and Hazardous Substances Pollution Contingency Plan (NCP). NCP is the regulation that implements the statutory requirements of CERCLA, SARA, and section 311 of the Clean Water Act. The NCP defines responses to HS releases or threatened releases. When addressing the cleanup of HS releases, CERCLA requires each Federal agency to comply with the Act in the same manner and to the same extent as any nongovernmental entity.

2. Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901 et seq.). Amended by the Hazardous and Solid Waste Amendments (HSWA), RCRA and CERCLA are closely associated with each other. Of particular note is section 3004(u) of RCRA (i.e., corrective action) by which the EPA or a state may require the cleanup or a schedule for investigation and cleanup of all inactive solid waste management units (SWMU) on an installation before issuing a RCRA Part B permit for current HW operations at the installation. Cleanup standards may be different under RCRA (e.g., timetables) than under CERCLA. Therefore, in instances in which an installation is required to comply with RCRA, both IR program cleanup schedules and standards may be impacted.

3. NEPA of 1969 (42 U.S.C. 4321 et seq.). The primary requirement of NEPA is to incorporate environmental considerations into decisionmaking processes of major Federal actions that significantly impact the quality of human health and the environment. NEPA is a procedural statute that requires a Federal decision maker to consider the environmental impacts of a proposed action, while also ensuring that the public is fully

informed of the proposal and its impacts and given adequate opportunity to comment. IR program actions that follow the NCP and fulfill public participation requirements are deemed to be in compliance with NEPA.

4. Base Realignment and Closure Act (BRAC) of 1988 (Public Law 100-526).

BRAC was enacted by Congress to select bases for realignment and closure as a part of overall military downsizing. BRAC selections were conducted in 1988, 1991, 1993, and 1995. Installations designated as realignments, receiving sites, or closing bases have special environmental considerations. These requirements form what is known as the BRAC Environmental Restoration program, which is discussed in this chapter. Although base closure legislation requires closing bases to cease operations and transfer property within a 6-year period following the enactment of legislation, environmental characterization and cleanups may continue for several years beyond this 6-year window. Ultimately, this cleanup process may prevent the transfer of cleaned parcels of land to the community in the 6-year time frame. However, the Marine Corps may initiate and execute lease agreements with interested parties before cleanup is complete. Upon completion of cleanup, transfer of land can occur.

5. Executive Orders (EO)

a. EO 12088, October 13, 1978, Federal Compliance with Pollution Control Standards, requires each Executive Agency to comply with applicable pollution control standards. Compliance with applicable pollution control standards means conforming to the same substantive, procedural, and other requirements that apply to private citizens.

b. EO 12580, January 23, 1987, Superfund Implementation, delegates the President's authority under CERCLA, as amended by SARA, to Federal agencies, including the DoD. Accordingly, DoD, not the EPA, has the lead agency authority to respond at DoD installations. The lead agency authority has been re-delegated by DoD to its individual departments.

6. State Laws. Many states have laws analogous to CERCLA. CERCLA does not enable delegation of the Superfund Program to states; however, under CERCLA, section 120(a)(4), state laws concerning removals, remedial action, and enforcement apply to Federal facilities not listed on the National Priorities List (NPL).

10104. REQUIREMENTS1. IR Program Outline

a. The EPA is responsible for implementing CERCLA by developing and enforcing appropriate regulations. Regulations issued for CERCLA compliance are found in the NCP. General procedures are set forth under the NCP for initiating and carrying out the remedial action process at CERCLA sites (additional details can be found in the Navy/Marine Corps IR Manual) as follows:

- (1) Site Discovery and Notification;
- (2) PA/SI;
- (3) HRS;
- (4) RI/FS;
- (5) ROD;
- (6) RD/RA;
- (7) LTO or Remedial Action Operations (RAO);
- (8) LTM; and
- (9) Site Close-out, NFRAP, or Delisting.

b. Provisions throughout this process ensure close coordination with regulatory agencies and the public. The EPA and appropriate state and local officials must have adequate opportunity to review and comment on assessments/studies and proposals regarding RA. Figure 10-1 at the end of this chapter outlines the IR program and DON-responsible offices.

2. Site Discovery and Notification

a. Site discovery and notification is the first step in addressing uncontrolled or abandoned HS sites at Marine Corps installations. Other than a Federally permitted release, any HS release or threatened release, as defined in CERCLA section 101(22), from a facility in quantities equal to or greater than the reportable quantity established pursuant to CERCLA section 102 must be reported to the National Response Center (NRC). The NRC will convey the notification to all appropriate Government

agencies (e.g., state governor, the EPA, the appropriate state agency, and/or relevant local authorities) (CERCLA, section 103). Additionally, releases or threatened releases must be reported through the chain of command using the reporting format contained in appendix E, which is further described in chapter 7 of this Manual. Although notification duties may be delegated, the installation CG/CO ultimately is responsible to ensure proper and prompt notification. Upon request from the installation, the cognizant Naval Facilities Engineering Command (NAVFACENGCOM) Engineering Field Division/Activity (EFD/EFA) will take the lead to investigate the release. CERCLA makes no distinction between current or past releases under the reporting requirement. The requirement goes into effect upon discovery (i.e., as soon as the person in charge has knowledge of the release), which means that the installation must give prompt notice (CERCLA, sections 103(a) and (c)) of such information to the NRC by telephone. It is imperative that a follow-up confirming letter be sent to the appropriate agency in addition to the verbal telephone notice. An owner or operator who fails to notify the appropriate agency immediately upon discovery of such release, or who submits any information that is known to be false or misleading, can be prosecuted, fined, or imprisoned (up to \$10,000 and 3 years in jail) upon conviction (CERCLA, section 103(b)).

b. Under the IR program, notification of an unconfirmed past release is accomplished when the CG/CO forwards a PA/SI report to the EPA and state regulatory agencies. If an installation, in reviewing its records, discovers that a potential disposal site exists that was not previously investigated, the installation will report this information to the EFD/EFA for further review. The potential site does not need to be reported to the NRC at this time since it is only a potential site.

3. Federal Agency HW Compliance Docket

a. Congress has created measures to ensure that Federal agencies accomplish PA's at certain installations. It requires the EPA to establish a Federal Agency HW Compliance Docket, which lists those Federal facilities that have submitted the following:

(1) RCRA, section 3005: Permits for Treatment, Storage, and Disposal of HW's;

(2) RCRA, section 3010: Notification of HW Generation, Transport, Treatment, Storage, or Disposal Activities;

(3) RCRA, section 3016: Biennial Inventory of Federal HW Facilities;and

(4) CERCLA, section 103: Notice of HS Release.

b. The docket also lists any installation that has reported a release of an HS, has applied for a RCRA Part A or Part B permit, or has submitted IR program information to the EPA. A PA must be prepared for every site on the docket (CERCLA, section 120(d)). The EPA must make the docket available for public inspection by establishing repositories of docket information at EPA regional offices (CERCLA, section 120(c)(3)). In conjunction with the installations, the NAVFACENCOM EFD/EFA's will review and update the repository information and ensure that all sites are being addressed. The EPA may not remove sites from the docket, but must indicate as appropriate "No Further Action Required," "Site Evaluation Accomplished," or other status.

4. Removal Actions. Removal actions are part of the response process and follow the first response to a release or threatened release. Removals can be undertaken at any time during the remedial process. If a removal action does not fully address the threat posed by the release, then an orderly transition should be made from removal to another response. CERCLA, section 104, and EO 12580, January 23, 1987, grant the DoD the authority to carry out removal actions when the release is on a DoD installation, or when the sole source of the release is from a DoD installation. However, notice of removal actions must be given to the EPA and/or the state pursuant to SARA section 211.

5. PA/SI

a. After site discovery and notification by an installation, within 12 months after an installation has been listed in the Federal Agency HW Compliance Docket or within 12 months of receiving a petition (unless the assessment is deemed inappropriate), a PA must be conducted (CERCLA, section 120(a)). A follow-up SI is accomplished where appropriate. The PA is developed from readily available existing information and includes the following:

(1) A description of the release;

(2) A description of the probable nature of the release; and

(3) A recommendation of whether further action is warranted and whether an SI or removal action or both should be undertaken.

b. The PA determines whether additional investigation of a site is required. The installation CG/CO reviews, signs, and forwards the PA to the EPA and cognizant state agency. If additional investigation is required, actual samples are collected and analyzed in an SI. At the conclusion of an SI, the CG/CO approves the total PA/SI package and sends it to the EPA and cognizant state agency.

c. An SI is required if the PA reveals that additional investigation is needed. An SI should:

(1) Eliminate from further consideration those releases that pose no threat or potential threat to public health or the environment;

(2) Determine the need for removal actions; and

(3) Collect data to characterize the release for the effective and rapid initiation of an RI/FS.

d. CERCLA also authorizes the public to petition installations directly to conduct a PA, if any person or organization believes that an HS release or threat of a release exists.

6. HRS and National Priorities List (NPL). Information from the PA/SI is used to score HS releases. Using the HRS, the EPA evaluates HS releases to determine their potential to affect human health, welfare, and the environment. Historically, a site is proposed for the NPL if the HRS score is 28.5 or higher. The NPL is a list of sites which have been identified as posing the greatest or most immediate threat to human health, thus warranting a priority response. (See appendix A of 40 CFR 300.)

7. RI/FS

a. Sites identified in the PA/SI as potential threats to human health or the environment receive a comprehensive investigation called an RI/FS. Investigators will define all contaminants and their migration pathways, assess potential risks to public health and the environment, and carry out a comprehensive, quantitative risk assessment. The RI serves as the mechanism to collect data for site and waste characterization

that is necessary to evaluate the performance and cost of possible treatment technologies and to support the evaluation, selection, and design of remedies. The FS serves as the mechanism to develop, screen, and provide detailed evaluations of potential remedial alternatives. The RI/FS evaluates the threat to public health posed by the HS release, develops cleanup performance goals to compare the health risks of the remedial alternatives, and considers the cost of remedial alternatives.

b. CERCLA requires that an RI/FS be initiated no later than 6 months after a site is listed on the NPL. The RI/FS (at both NPL sites and non-NPL sites) is conducted in compliance with EPA guidelines.

8. Administrative Record/Retention of Records

a. NCP, 40 CFR 300.800. The NCP requires that an Administrative Record, or Information Repository, be established for all CERCLA sites. The Administrative Record must be established and made available to the public at or near the installation at the start of the RI or at the time the Engineering Evaluation/Cost Analysis for removal actions is approved. In any judicial action under CERCLA, a court will look to the administrative record to determine whether the agency's decision in selecting a response action was made properly. The NAVFACENGC COM EFD/EFA will establish and maintain the Administrative Record and send copies and updates to the installation, state, and EPA. The CG/CO must ensure that any new or additional information, such as correspondence with regulatory agencies and the public, is provided to the EFD/EFA for inclusion in the Administrative Record. Installations must ensure that the Administrative Record is available to the public. Therefore, an up-to-date duplicate of each item in the official EFD/EFA file must be established and maintained at the installation and at locations accessible for public review.

b. CERCLA, Section 103(d)(2). Any person responsible for providing notification of known, suspected, or likely releases should also retain records of the facility and HS releases for 50 years after the act was enacted (i.e., the year 2030), or for 50 years after the record was established, whichever is later (CERCLA, section 103(d)(2)). The records include information on the location, title, and condition of the facility and the identifying 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. The EPA may

promulgate rules and regulations covering records that should be retained, but it has not done so to date. Pending any such guidance, each installation should retain the appropriate records for at least the statutory time period or apply to the EPA for appropriate waivers.

9. Coordination with Regulatory Agencies and the Public

a. At this point in the IR program, initial investigation of a number of sites has been accomplished. CERCLA and EPA guidance require that regulatory agencies and the public be informed of these results and other studies and investigations as they occur. The installation CG/CO must, therefore, ensure that the EPA and appropriate state and local officials have adequate opportunity to review and comment on assessments, studies, and proposals for responses/RA's (SARA, section 211). Although assessments, studies, and recommendations for RA's normally are conducted for the Marine Corps installations by the cognizant NAVFACENCOM EFD/EFA, the CG/CO remains ultimately responsible to ensure compliance by approving and forwarding documents to the appropriate regulatory agencies.

b. A proactive public information program must be implemented at each installation per SECNAVINST 5720.44 for all IR program sites, and a formal written Community Relations Plan (CRP) must be prepared by each installation that has a site listed on the NPL. The public information program must continue throughout the life of the IR program at the installation as follows:

(1) Inform the public (both on- and off-base) of investigations and cleanup alternatives. Team-building is an important element in IR program community relations implementation. Cleanup functions cannot be conducted separately from the CRP. Installation IR program Managers, Public Affairs Officers (PAO), and attorneys must work together to develop a cohesive CRP strategy. Conduct regular team meetings so that PAO's are well informed and project personnel do not face the public unprepared.

(2) Conduct community interviews both on and off the installation to identify the concerns of the local community and whether the community desires to participate in the site remediation process. These interviews should include the PAO and the IR program project managers. Training to conduct these interviews must be a priority. An installation representative should lead the interview team.

(3) If assistance is required in the CRP, contact the IR program manager at the CMC (LF).

10. TRC/RAB. SARA, section 211, requires that whenever possible and practical a TRC be established to review and comment on actions and proposed actions for releases or potential releases at the installation. TRC's should be converted to RAB's if there is sufficient, sustained community interest. Installation commanders will expand the function of the current TRC's and establish RAB's if 1) a local government requests that a RAB be formed, 2) 50 local residents sign a petition requesting that a RAB be formed, 3) an installation determines that a RAB is required, or 4) the installation is scheduled for base closure.

11. Public Health Assessment. The Agency for Toxic Substances and Disease Registry (ATSDR) must perform a health assessment for each facility listed or proposed for the NPL. A Public Health Assessment is the evaluation of data and information on HS releases into the environment to assess any current or future impact on public health, to develop health advisories or other recommendations, and to identify studies or actions needed to evaluate and mitigate or prevent human health effects. To the maximum extent possible, the ATSDR must complete a health assessment before completion of the RI/FS. ATSDR will perform the assessment using available information from IR program studies. The results of the ATSDR analysis will be used in the RI/FS, as appropriate.

12. ROD/Decision Document. The installation CG/CO must prepare a ROD or decision document to record the decisionmaking process whenever an RA or no-action alternative is selected at both NPL and non-NPL sites. The cognizant NAVFACENCOM EFD/EFA will prepare the ROD or decision document in coordination with the installation and forward the recommended ROD to the installation CG/CO. The CG/CO must review the proposed ROD and the Administrative Record carefully. Approval is indicated by the CG/CO's signature. As required by ERCLA, section 117(b), notice of the final ROD must be published, and the ROD must be made available to the public in the Administrative Record before adopting any RA. Any significant comments, criticisms, and new data submitted by the public requires a response and must be made available to the public before the commencement of any RA. For NPL sites, the ROD is forwarded to the EPA for concurrence. If agreement is not reached on the selection of an RA for NPL sites, then the EPA makes the selection. The Marine Corps has final decision authority for non-NPL sites per EO 12580, January 23, 1987, as long as all "applicable or relevant and appropriate

requirements (ARAR)," such as Federal, state, and local standards, are taken into account.

13. IAG

a. As required by CERCLA, section 120(e), Federal Agencies must enter into an IAG with the EPA for expeditious completion of all necessary RA's within 180 days after completion of each RI/FS for an NPL site. IAG's must be signed by the Assistant Secretary of the Navy for Installations and Environment (ASN(I&E)).

b. To expedite the cleanup process, where possible, the EPA and/or the state develop and sign an FFA as soon as possible after an installation is proposed for NPL listing. An FFA becomes an IAG for an Operable Unit (OU) or site cleanup at an installation once the ROD is signed and new schedules are negotiated for the actual remedial action. FFA's are not required by law; however, DoD and DON policy requires FFA's unless they are not advantageous to the Marine Corps.

c. There are also IAG's with states for cleanup at non-NPL installations related to the RCRA corrective action permit and section 3008(h) order process, Underground Storage Tank cleanup agreements, and RCRA closure.

14. RD/RA. Following the RI/FS and the ROD, a site enters the RD/RA phase. During the RD, detailed designs, plans, specifications, and bid documents are developed for implementation of the cleanup or RA phase. The RA phase cleanup is implemented with the award of a contract to begin construction of the selected alternative(s). After the ROD has been completed, the RD/RA will commence. For NPL sites, "substantial continuous physical on-site remedial action" must commence no later than 15 months after completion of the RI/FS (CERCLA, section 120(e)).

15. LTO also Referred to as RAO. Many remedial technologies will require the operation and maintenance (O&M) of equipment after the RA is installed. Plans for O&M, including long-term monitoring, are identified in the FS, ROD, or decision document. Long-term O&M of the remedy begins with the initiation of the RA and continues until the remedy is no longer needed.

16. LTM. LTM is conducted by NAVFACENGCOM using ER,N funds for the first 5 years after the Response Complete (RC) is achieved. After that, the installation CG/CO funds and conducts the LTM.

17. Citizen Suits. CERCLA allows any citizen to sue any person or Government agency "who is alleged to be in violation of any standard, regulation, condition, requirement, or order that becomes effective pursuant to this Act (including any provision of an agreement under CERCLA, section 120, relating to Federal Facilities)." This process allows private citizens to ensure that Marine Corps installations are complying with CERCLA and with the terms of IAG's. To sue a Federal agency under these provisions, a citizen must give a Notice of Violation (NOV) to the President, to the state in which the violation occurs, and to the agency being sued. If diligent actions are taken within 60 days after receiving an NOV to comply with a CERCLA requirement, then the lawsuit can be prevented. To avoid lawsuits and potential court orders, Marine Corps installations, with assistance from their cognizant EFD/EFA, must comply with CERCLA and the terms of IAG's. Installation CG's/CO's and their staffs should be alert to citizen and citizen group correspondence that purports to be an NOV and would commence the 60-day time limitation. The CMC (LF) and the CMC (CL) must be consulted immediately if a Marine Corps installation receives a citizen suit letter.

18. PRP

a. The Marine Corps may be a PRP when there is an HW release or threat of a release generated by the Marine Corps. In the typical situation, it is a former HW disposal site that through mismanagement, bankruptcy, poor planning, or mere cessation of business operations on the part of the owner/operator requires a removal action or an RA under CERCLA. The EPA or state authorities may unilaterally or jointly undertake cleanup action with Superfund moneys (or similar state resources) and assess costs against all PRP's. Alternatively, the EPA and the state may arrange for cleanup by the PRP's. In either case, when Marine Corps HW is subject to corrective action at a disposal site, the Marine Corps is responsible for a portion of the cleanup costs.

b. Marine Corps involvement as a PRP begins when the EPA or state issues a general or special notice. A general notice is one announcing that the EPA is investigating a site and that the Marine Corps may be a PRP. A request for information about use of the site for HW disposal may precede or accompany the general notice. A special notice is one in which the EPA advises all known PRP's that it will initiate work at the site unless the PRP's commit to work within 60 days.

c. To capitalize on NAVFACENGCOM expertise and to have execution and funding uniformity throughout the DON, CMC (LF), and Headquarters (HQ) NAVFACENGCOM, these offices have agreed that the latter, through its EFD/EFA offices, will represent Marine Corps interests regarding PRP responsibilities. This arrangement authorizes the NAVFACENGCOM to act on behalf of the Marine Corps; it does not relieve Marine Corps commands of their legal obligations and responsibilities under CERCLA.

19. Site Close-Out. Conduct a site close-out when no further response actions under the IR program are considered appropriate for the site and when the site cleanup confirms that no significant threat to public health or the environment exists. When possible, seek EPA and state concurrence.

a. Pursuant to the NCP requirements, sites may be deleted from, or re-categorized on, the NPL provided that 1) all appropriate response actions have been implemented, 2) no further response action is appropriate, or 3) the RI shows no significant threat from the release to public health or the environment. The EPA, in consultation with the state/commonwealth, will determine whether any of these requirements have been met and, if so, will prepare a notice of intent to delete. The EPA will obtain state/commonwealth concurrence with the deletion notice prior to making the notice available to the public. The final deletion package will also be made available to the public and will contain the response to public comments received. To delist a Federal NPL installation, all individual sites on the installation must be closed out.

b. For non-NPL sites, the EPA and the state must be notified that appropriate response actions have been completed and that no further response actions are appropriate. The site(s) will be designated as NFRAP, with the supporting documentation placed in the information repository, and the public will be notified of these actions.

20. RCRA Corrective Action. Installations seeking or renewing a permit for a treatment, storage, and disposal facility (TSDF) are required by RCRA, section 3004(u), to take corrective action for past releases of HW constituents from any SWMU at the installation. Permits issued by the EPA or a state with RCRA authority will contain schedules of compliance for such correction (where such action cannot be completed before the permit is issued). ER,N funds can be used for corrective action for past releases of HW at TSDF's if the releases are associated

with past disposal practices. Additional RCRA corrective action requirements include:

a. Per section 3004(v) of RCRA, corrective action must be taken for releases of HW that have migrated beyond the installation's boundary.

b. Per section 3008(h) of RCRA, the EPA may issue an order requiring corrective action to address HW releases (constituents omitted), whether or not from a SWMU, at facilities authorized to operate under interim status.

21. Property Transfer. CERCLA, section 120(h), outlines procedures for property transfer by Federal agencies. Facilities must include in the transfer contract information regarding the type and quantity of an HS stored for 1 year or more, or an HS known to have been released or disposed of on site. The contract must include notice of the time at which such storage, release, or source disposal took place. The report must be based on available data from agency files. CERFA amended CERCLA, section 120(h), by requiring the Federal Government, before termination of Federal activities on any real property owned by the Government, to identify real property where no HS and/or no petroleum products or their derivatives were released or disposed of. CERFA further clarifies the meaning of "remedial action taken" in CERCLA, section 120(h)(3). For bases subject to closure or realignment under a base closure law, the CERFA identification must be made, and concurrence must be obtained within either: 18 months of the CERFA enactment (October 19, 1992); 18 months of the date by which a joint resolution disapproving the closure or realignment must be enacted, when such a joint resolution has not been enacted; or 18 months of the date on which the real property is selected for closure or realignment.

22. Environmental Compliance. See chapter 4 of this Manual for more information on policy, responsibility, and procedures for achieving compliance with applicable EO's, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

10105. TERMS AND DEFINITIONS

1. Administrative Record. Required by CERCLA, section 113(k), an Administrative Record is the documentation, formed by the combination of documents and other material, that provides the

basis for the Marine Corps installation's selection of a response action.

2. ARAR. Used for establishing the standards for cleanup based on the chemicals involved, the location, the suspected health impacts, or the response action technologies proposed at the site. ARAR's are required by CERCLA, section 121(d), which states that a requirement under other environmental laws may be either "applicable" or "relevant and appropriate" to an RA, but not both. The two-tier test first determines whether a given requirement is applicable; then, if it is not applicable, it determines whether it is nevertheless relevant and appropriate.

3. Applicable Requirements. The cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal and state laws that specifically address an HS, pollutant, contaminant, RA, location, or other circumstances at a CERCLA site. "Applicability" implies that the RA and the circumstances at the site satisfy all of the jurisdictional prerequisites of a requirement.

4. BRAC Environmental Restoration Program. Environmental restoration activities at closing and realigning installations affected by BRAC, and funded by Marine Corps BRAC accounts. This program is analogous to DERP or IR and funds the same activities that are eligible under IR. It does not include building demolition/debris removal or ordnance and explosive waste activities. Closure-related environmental compliance requirements are not included in this program.

5. CRP. A formal written proactive public information program developed by each installation, whether listed on the NPL or not. The plan must take into account the public comment period that precedes final selection of remedial or corrective action. The plan will consist of background and history of community involvement at the site, IR program objectives, community relations activities to be used to reach the objectives, and a mailing list of involved persons. The plan must be based on discussions with state and local authorities, civic and community organizations, interested residents, and local news media representatives.

6. Defense and State Memorandum of Agreement (DSMOA). An agreement between the DoD and a state or territory whereby the state or territory can be compensated for providing technical support for environmental restoration activities at operational

installations, closing and realigning installations, and Formerly Used Defense Sites (FUDS).

7. DERA. A funding account established by SARA, section 211, to pay the cleanup costs of DoD HW sites. Funds from DERA are transferred to the services for uses consistent with DERP. Beginning in FY97, DERA was devolved to the military departments. The DON account is called the ER,N account.

8. ER,N Account. Department of the Navy account used to pay for cleanup of HW sites.

9. Facility. Any building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, aircraft, or any site where an HS has been deposited, stored, disposed of, placed, or otherwise come to be located.

10. Fast-Track Cleanup (FTC). The program established under the President's five-point reinvestment plan to expedite the restoration and transfer of property at closing and realigning installations.

11. FFA. A formal, negotiated, legal agreement between the EPA and/or the state, and the DON that establishes objectives, responsibilities, procedures, and schedules for the RI/FS phases at NPL installations. FFA's are intended to outline the working relationship and to improve communications between all parties by allowing the EPA and state to review all work and ultimately to make the selection process of any RA's less argumentative.

12. HRS. The EPA must score HS releases by their potential to affect human health, welfare, and the environment. The HRS is a means of applying uniform technical judgment regarding the potential hazards presented by the feasibility, desirability, or degree of cleanup required. The HRS ranks sites by a mathematical rating scheme. Historically, the EPA has proposed sites with scores above 28.5 for the NPL.

13. HS. Any material which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment when released or spilled. In the IR program, an HS is defined in CERCLA, section 101(14), and designated under 40 CFR 302.

14. Health Assessment. Required of any facility proposed for the NPL and accomplished by the ATSDR using information obtained from IR program studies and site visits before the completion of the RI/FS. A health assessment is an analysis of information conducted to determine whether the HS present at a site poses a risk to human health, whether steps should be taken to reduce human exposure to the HS, and whether surveillance of the exposed population is warranted.

15. IAG. Necessary for any installation listed on the NPL. CERCLA, section 120(e), requires the EPA to review the results of the RI/FS, and it requires the Marine Corps to enter into an IAG with the EPA for the expeditious completion of all necessary RA's at the facility within 180 days after the EPA's review of the RI/FS. The IAG must include a review of alternative RA's, the selection of an RA by the Marine Corps and the EPA, a schedule for the completion of each RA, and arrangements for long-term operation and maintenance of the facility.

16. Interim Remedial Action (IRA). An IRA is a near-term action taken to address HS releases that require an expeditious response. IRA's are often the first response to a release or threatened release.

17. Lead Agency. The agency that provides the on-scene coordinator or Remedial Project Manager (RPM) to plan and implement response actions under the NCP. The DON is always the lead agency for response actions on DON real property.

18. LTM. LTM is the maintenance and monitoring initiated after the RA objectives have been met. LTM can only be programmed for sites that have achieved RC.

19. NPL. The EPA's list of priority sites located throughout the United States with known releases or threatened releases of HS's, pollutants, or contaminants. Historically, sites that have scored above 28.5 on the HRS have been proposed for the NPL. The list is revised at least annually.

20. NFRAP. Sites which do not warrant moving further in the site evaluation process are designated as NFRAP. The primary criterion for NFRAP is a determination that the site does not pose a significant threat to public health or the environment. A NFRAP decision can be made at several points in the IR process, but must be documented and may be reversed if future information reveals that additional remedial activities are warranted.

21. OU. A discrete action that comprises an incremental step toward addressing site problems comprehensively. This discrete portion of a remedial response manages migration or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of OU's, depending on the complexity of the problems associated with the site. OU's may address geographical portions of a site, specific site problems, or initial phases of an action, or it may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.

22. PRP. A generator, transporter, or site owner or operator who may be responsible for an HW site. This term is usually used in connection with off-installation sites.

23. PA/SI. Identifies potentially contaminated sites. The PA consists of a review of available historic information (records search) concerning installation activities and land use. The SI is an on-site visit consisting of limited sampling and analysis designed to verify the preliminary findings of the PA. Results of the PA/SI will determine the need for further investigation and whether the sites merit placement on the NPL by the EPA.

24. ROD. A written record on the appropriate remedy selected for the cleanup at a site.

25. Release. As defined by CERCLA, section 101(22): 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, pollutant, or contaminant). Excludes the following: any release that results in exposure to persons solely within a workplace, specifically a claim that such persons made; 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 that meets the conditions specified in CERCLA; and the normal application of fertilizer. In the NCP, release also means threat of release.

26. Relative Risk. The evaluation of individual sites to determine high, medium, or low relative risk to human health and the environment, based on contaminant hazards, migration pathways, and receptors, in accordance with DoD's Risk-Based Site Evaluation Primer (1994). Risk reduction is the movement of any site from a higher to a lower risk category because of natural

attenuation or interim remedial, remedial, or removal actions taken.

27. Relevant and Appropriate Requirements. Those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or state law. While not specifically "applicable" to an HS, pollutant, contaminant, RA, location, or other circumstance at a CERCLA site, relevant and appropriate requirements may address problems and situations sufficiently similar to those encountered at the CERCLA site, demonstrating that their use is well suited to the particular site.

28. Remedial Action Construction (RAC). RAC is the construction of the final remedy. RAC's may include final remedies such as a soil removal or landfill cap, in which case the site would be considered an RC at the end of the RAC phase, or the RAC may be the construction of an active remediation system (pump and treat, soil vapor, extraction, etc.), which will have to be operated for an extended period prior to meeting the remedial objectives. In the latter case, once construction of the system is complete, it is considered a Remedy in Place (RIP).

29. RAO. RAO's are O&M activities required after the RAC is completed and before RAC objectives have been met (i.e. before RC has been achieved).

30. RD/RA. Begins following the completion of the ROD. The RD is the translation of the selected RA of the FS into designs and specifications for site remediation. The RA is the physical implementation of site remediation including full-scale drilling, excavation, and construction. For NPL sites, the RD/RA must commence no later than 15 months after completion of the RI/FS. An RA should commence and be completed as expeditiously as possible whether at an NPL site or non-NPL site.

31. RI/FS. A comprehensive investigation required for sites identified in the SI that pose potential threats to human health or the environment. The RI/FS is an extensive technical study conducted to determine the nature and extent of the threat posed by the release and to determine what action, if any, should be taken to remediate the site.

32. RIP. RIP is that point in time when the RAC of a system is complete, but the remedial objectives have not been met. This term is only used when there is a period of RAO following the RAC.

33. Removal Action. A Removal Action (also known as an IRA) is a near-term action taken to address HS releases that require an expeditious response. Removal actions are often the first response to a release or threatened release.

34. Reportable Quantity. The threshold quantity of an HS that must be reported if released. CERCLA, section 102, requires that the EPA establish and revise a list of HS's and their associated reportable quantities; this list is contained in 40 CFR 302.4.

35. RC. RC is achieved when the remedial action objectives have been met. The CG/CO makes this decision with regulatory concurrence when required under a cleanup agreement (FFA for NPL sites, FFSRA for some non-NPL sites).

36. RAB. A group established, wherever possible and practical, to act as a forum for discussion, information exchange, and decision making on actions and proposed actions with respect to releases or threatened releases at installation restoration sites. Committee participants may include representation from the EPA, appropriate state and local authorities, community members, and Marine Corps participants from the involved command and the cognizant NAVFACENGCOM EFD/EFA. The RAB is intended to enhance public involvement by bringing into the resolution process community members who reflect the diverse interests within the local community, enabling the early and continued two-way flow of information, concerns, values, and needs between the community and the installation. RAB's will not make decisions on environmental restoration activities, but will provide information, suggestions, and community input to be used by the Marine Corps in making decisions on actions and proposed actions regarding releases or threatened releases. RAB's will not take the place of community outreach and participation activities required by law, regulation, or policy. All community relations requirements must still be met.

37. Site. A location on an installation's property where an HS has been deposited, stored, disposed, placed, or otherwise located. Such areas may include multiple sources and may include the area between sources. This condition should not be confused with the EPA listing an entire installation on the NPL. An NPL installation will generally have several discrete sites.

38. SWMU. In RCRA corrective action, any unit in which wastes have been placed at any time, regardless of whether the unit was designed to accept SW or HW. Such units could include old

landfills, wastewater treatment tanks, and leaking process or waste collection sewers.

39. TRC. SARA, section 211, requires that a TRC be established to facilitate review and comment on technical aspects of response actions and proposed actions that pertain to releases or threatened releases at DoD installations. Members of the TRC include the Marine Corps, EPA officials, appropriate state and local authorities, Federal and state natural resource trustees, and community representatives.

40. Third-Party Site. An off-station or third-party site is a contractor-owned and contractor-operated HS release site that received Marine Corps HW and now requires corrective action under CERCLA.

CHAPTER 10

INSTALLATION RESTORATION PROGRAM

SECTION 2: MARINE CORPS POLICY

10200. GENERAL

1. All actions carried out under the Marine Corps IR program must be accomplished in compliance with all applicable requirements of CERCLA/SARA, and all terminology used by the Marine Corps must be consistent with that used in CERCLA/SARA and RCRA/HSWA. The Marine Corps must not adopt any guidelines or rules that are inconsistent with EPA guidelines and rules. Congress provides IR program funding to the DON through the ER,N account.

2. The Marine Corps IR program goal is to clean up or control HS releases from past HW disposal operations and spills in an expedient and cost-effective manner. The Marine Corps requires full, continuous dialogue and open cooperation with regulatory agencies and the public.

3. The COMNAVFACENGCOM manages the fiscal and technical aspects of the IR program at Marine Corps Installations. However, the installation CG/CO is responsible for approving IR program actions. Installations will provide the lead on critical procedural aspects of the program with support from the NAVFACENGCOM EFD/EFA. Success requires close cooperation and teamwork between the NAVFACENGCOM EFD/EFA and each installation.

4. CERCLA, Sections 120 and 121, and SARA, Section 211. The DoD must provide the opportunity for appropriate state authorities to be involved in the IR program. The DSMOA process provides funds to state regulatory agencies for oversight costs. The United States Army Corps of Engineers (COE) has been designated by the DoD to be the executive agent of the DSMOA program. All fund transfers will occur between the COE and the individual state.

10201. SITE DISCOVERY AND NOTIFICATION. If a release is discovered and that release has not previously been reported, report it immediately to the appropriate agencies. If a potential disposal site exists, conduct a PA to determine whether

a release has occurred. If a release has occurred, forward the PA to the appropriate agencies as notification.

10202. REMOVAL ACTIONS. At any site (even if the site is included on the NPL) where the Marine Corps determines that there is a threat to human health or the environment, the Marine Corps must use any appropriate means to abate, minimize, stabilize, mitigate, or eliminate the release or threat of release. Alternatives that attain or exceed applicable, or relevant, and appropriate Federal public health and environmental requirements; Federal criteria, advisories, and guidance; and state standards must be considered in selecting the type of removal action. The cognizant NAVFACENGCOCM EFD/EFA, in coordination with the installation, must prepare an analysis of the removal alternatives for the site, make the analysis available to the public, and provide at least a 30-day comment period. A decision document developed in coordination with the installation also must be prepared to substantiate the need for the removal action, identify the selected action, explain the rationale for the removal, and respond to significant public comments. Removal action will then begin. If the Marine Corps determines that the removal action does not fully address the threat or potential threat posed by the release, the Marine Corps will ensure an orderly transition from removal to remedial response action.

10203. EMERGENCY RESPONSE. Under CERCLA (section 104), EO 12580, January 23, 1987, and the NCP, the DoD has the authority to respond to "emergency" situations (i.e., those circumstances that endanger human life, health, or the environment) in which the release or threatened release is on, or the sole source of the release is from, a Marine Corps installation. If an IR site appears to be causing an emergency situation, the Marine Corps is responsible for taking appropriate action to protect the public and the environment from the threat. The installation, in consultation with the cognizant NAVFACENGCOCM EFD/EFA, is responsible for responding to emergency situations using ER,N funds.

10204. HAZARD RANKING SYSTEM (HRS). Following completion of a PA, the cognizant NAVFACENGCOCM EFD/EFA, in coordination with the installation, should develop and forward a draft HRS scoring package to the EPA.

10205. PRELIMINARY ASSESSMENT/SITE INSPECTION (PA/SI)

1. The NAVFACENGCOM EFD/EFA (or the Naval Facilities Engineering Service Center) will conduct all PA's within 12 months of site discovery or as required in an IAG or other regulatory agreement. The NAVFACENGCOM EFD/EFA will conduct the PA in coordination with the installation after site discovery or listing on the Federal Agency HW Compliance Docket. Upon completion, NAVFACENGCOM EFD/EFA will provide the PA information to the installation for review and then forward it to the cognizant EPA region and the state.

2. An SI is required if the PA reveals the need for additional investigation. An SI will eliminate those sites that prove no threat or determine the need for additional actions. The cognizant NAVFACENGCOM EFD/EFA, in coordination with the installation, will conduct SI's at sites recommended by the PA for further investigation. The SI should be completed as expeditiously as possible.

10206. REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)

1. Sites identified in the SI that pose potential threats to human health or the environment require a comprehensive investigation specified as an RI/FS. The RI/FS determines the nature and extent of the threat and what actions, if any, should be taken to remediate the site.

2. An RI/FS must be started within 6 months of a site being listed on the NPL. If the site is not listed, there is no regulatory time limit on initiating the RI/FS.

3. The NAVFACENGCOM EFD/EFA or designee conducts the RI/FS in close coordination with the installation. The RI/FS should be accomplished as expeditiously as possible.

10207. NO FURTHER RESPONSE ACTION PLANNED (NFRAP). The Marine Corps should not expend resources on sites that pose little or no threat to human health or the environment. A no further action decision can be made at several points within the remedial process, but must be based on a defensible and properly documented "assessment of risk to human health and the environment." The Marine Corps may apply this procedure at both NPL and non-NPL installations to describe those locations where it has been determined that no further action is required, based

upon appropriate investigation. NFRAP decision documents must be prepared by COMNAVFACENGCOM or its designee and signed by the installation CG/CO. Upon signature, the installation must forward the NFRAP decision documentation to appropriate regulatory agencies for information and/or concurrence and must ensure that the public receives notification via RAB's, public meetings, or other appropriate methods. Remedial project managers must be alert to document opportunities for a NFRAP decision.

10208. ADMINISTRATIVE RECORD. The NAVFACENGCOM initiates the Administrative Record as soon as the SI shows that the program will move into the RI/FS phase. The cognizant NAVFACENGCOM EFD/EFA establishes and maintains the Administrative Record and sends copies to the installation, the state, and the EPA as appropriate. Installations must ensure that a copy of the Administrative Record is available in an information repository. The repository must be available to the public at or near the site; notice of availability is part of the record. This record is the basis for actions taken by the Marine Corps and any future legal action concerning the site.

10209. TECHNICAL REVIEW COMMITTEE/RESTORATION ADVISORY BOARD
(TRC/RAB)

1. Installations must establish a TRC as soon as the SI shows that the program will move into the RI/FS.
2. RAB's will be established at installations where there is sufficient, sustained community interest. Installation commanders will expand the function of TRC's and establish RAB's (or establish RAB's at non-TRC installations) if:
 - a. A local government requests that a RAB be formed;
 - b. Fifty local residents sign a petition requesting that a RAB be formed;
 - c. An installation determines that a RAB is required; or
 - d. The installation is scheduled for closure.
3. The conversion of TRC's to RAB's will be accomplished by:

- a. Expanding existing TRC's to include additional community representatives;
- b. Establishing co-chairs, one from the community members on the RAB and one from the DON; and
- c. Opening meetings to the public.

10210. FEDERAL FACILITY AGREEMENTS (FFA)

1. The Marine Corps must enter into an FFA at its NPL sites as early as possible after it becomes apparent that an RI/FS is required. These agreements are a high priority and are intended to improve communications between all parties by allowing the EPA and the state to review all work and ultimately to make the selection of an RA less controversial. FFA's at NPL sites must outline and clearly state mutual obligations regarding the working relationship between the states, the EPA, and the Marine Corps.
2. The Marine Corps may enter into agreements only if the provisions are realistically attainable and structured to avoid excessive reporting, duplication of effort, and other administrative practices that reduce the efficiency of the overall remedial response.
3. The Marine Corps must continue efforts to define problems at Marine Corps sites and move aggressively to determine what RA's are appropriate. Negotiations on an agreement must not impede the Marine Corps responsibility to protect the public from harmful exposures or halt efforts to obtain RA decisions to address problems at Marine Corps sites.
4. The Marine Corps must consult fully with the EPA and the states in the course of continuing IR program efforts while negotiating the terms of the FFA. The model language established by agreement between the DoD and the EPA must be used as the basis for negotiations.
5. The cognizant EFD/EFA, in coordination with the installation, will negotiate FFA's and State Remediation Agreements.
6. The ASN(I&E) will sign the FFA's and State Remediation Agreements. The EFD/EFA will prepare final agreements in coordination with the installation; before the ASN(I&E) can endorse the final agreements, signatures must be obtained from

the following: the installation CG/CO, COMNAVFACENGCOM, the CMC (CL), and the CMC (LF).

10211. RECORD OF DECISION/DECISION DOCUMENT (ROD). The cognizant NAVFACENGCOM EFD/EFA will provide a recommended ROD or decision document to the installation CG/CO at the conclusion of an RI/FS. The installation CG/CO must review carefully the proposed ROD/decision document and the Administrative Record. If the CG/CO concurs, then the ROD will be signed. If the CG/CO disagrees or has questions on the ROD, the issues must be resolved through consultation with the EFD/EFA and the CMC (LF). For NPL sites, the ROD is forwarded to the EPA regional office for concurrence. Although neither a ROD nor an IAG is required under CERCLA at non-NPL sites, state remediation laws may contain requirements for decision documentation. Where such requirements apply, the cognizant NAVFACENGCOM EFD/EFA must write a decision document that satisfies state law for submittal by the installation. If the state remediation law contains no specific requirements for decision documentation, the cognizant NAVFACENGCOM EFD/EFA must write a decision document that contains the elements of a ROD; and the installation must forward the document to the EPA and the state.

10212. INTER-AGENCY AGREEMENT (IAG). At the completion of an RI/FS at an NPL site, the law requires that an IAG be signed. After the ROD, the previously negotiated FFA becomes an IAG when the statutory requirements are incorporated.

10213. REMEDIAL DESIGN/REMEDIAL ACTION (RD/RA). An RD/RA must be completed as expeditiously as possible, whether at NPL or non-NPL sites. The RPM oversees coordination of the RD/RA with the installation, the EPA, the state and local officials; maintains the Administrative Record; participates in community Resident Officer in Charge of Construction assists the RPM and the installation, and manages the RA construction to ensure that the RA meets all specifications and is constructed in a manner that protects human health, welfare, and the environment.

10214. PUBLIC INFORMATION PROGRAM. All IR program sites must implement a proactive public information program. All sites must

develop and implement a written CRP as soon as the SI shows that the program will move into the RI/FS phase.

10215. LONG-TERM OPERATIONS (LTO) OR REMEDIAL ACTION OPERATION (RAO). LTO or RAO is the responsibility of the cognizant NAVFACENCOM EFD/EFA using ER,N funds. This includes the O&M costs of a remedy after RAC and before RC.

10216. LONG-TERM MONITORING (LTM). Where HS's, pollutants, or contaminants remain on a site after RC is achieved, and as required by the decision document, LTM is the responsibility of the cognizant NAVFACENCOM EFD/EFA using ER,N funds for 5 years after RC. The LTM ensures that the site or the OU remains protective of human health and the environment. During this 5-year period, the cognizant NAVFACENCOM EFD/EFA will develop and implement a maintenance and monitoring plan and provide cost data to the installation to allow the installation CG/CO to budget in a timely manner for funds required to continue the LTM.

10217. MARINE CORPS AS A POTENTIALLY RESPONSIBLE PARTY (PRP). Historically, the Marine Corps has contracted with private companies to transport and dispose of HW generated at its installations. Many of the third-party disposal sites selected by contractors are threatening or contaminating the environment and need to be cleaned up. Upon receipt from the EPA or state authorities of a formal notice that a Marine Corps installation is involved in a site as a PRP, the installation must:

1. Provide the salient contents of the notice by message to the EFD/EFA that serves the geographic area in which the PRP site is located. Message information addressees should include the CMC (LF), COMNAVFACENCOM, and the appropriate counsel office (e.g., Eastern Area Counsel Office, Western Area Counsel Office, and/or installation counsel).
2. By mail, provide copies of the EPA or state notice to the geographic EFD/EFA where the PRP is located, to the CMC (LF), COMNAVFACENCOM, and the CMC (CL) representative serving the command. Some circumstances might warrant overnight mail service to provide the notice to the EFD/EFA.
3. Initiate actions to determine the extent of Marine Corps HW disposal at the site. Research requirements often will be time-sensitive. Collected information, such as HW disposal

records or results of interviews with employees familiar with prior HW disposal practices, will be made available to the EFD/EFA.

10218. FORMERLY OWNED OR USED MARINE CORPS PROPERTY/FORMERLY USED DEFENSE SITES (FUDS). FUDS differ from PRP sites in that FUDS are not identified as part of the EPA Superfund and are located on property formerly owned or operated by the DoD. The COE is responsible for the FUDS program. The Marine Corps responsibility for FUDS that were formerly Marine Corps sites is informational only. Should local interest arise, questions regarding the status of FUDS should be passed to appropriate COE officials. In special circumstances, authority can be obtained from the COE to address FUDS located on property that had been owned or operated by the Marine Corps. If an installation becomes aware of possible contamination at these properties (e.g., receives inquiries), forward the inquiries to the COE.

10219. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA). IR program actions that follow the NCP and fulfill public participation requirements are deemed to be in compliance with NEPA.

10220. STATE LAWS. Marine Corps policy is to comply with all state laws consistent with CERCLA, SARA, and the NCP. If state laws meet the criteria above, the Marine Corps can enter into negotiations with the state representatives to develop an agreement outlining response actions at the Marine Corps site. The guidelines to be considered during negotiation are as follows:

1. All response actions must be consistent with CERCLA and the NCP.
2. The issue of state oversight costs must be based on the DSMOA principles.
3. A modified two-party agreement modeled after the FFA's must be proposed to the state. The DON has lead responsibility for ensuring cleanup of non-NPL sites. The dispute resolution clause must allow the Marine Corps final decision authority and must provide the state all of their legal rights to judicial review.

4. The cognizant EFD/EFA, in coordination with the installation, will negotiate FFA's and State Remediation Agreements. The ASN (I&E) will review and sign the final agreement.

10221. CITIZEN SUITS

1. All major environmental statutes include "citizen-suit" provisions to allow private plaintiffs to make Government officials comply with statutory duties or to enforce permits or requirements. Citizen-suit provisions vary from statute to statute, and numerous legal considerations apply in each case. On receipt of any indication that a citizen suit might be commenced, an installation must rapidly coordinate environmental management, technical, and legal resources.

2. Immediately forward notice of a citizen suit to the cognizant EFD/EFA, the CMC (LF), and the CMC (CL).

10222. COORDINATION WITH OTHER ENVIRONMENTAL REGULATIONS. Although IR program actions that are consistent with CERCLA, section 121, and those that occur entirely on site are exempt from obtaining Federal, state, or local permits, inter-agency coordination is often required to ensure consistency with ARAR's or other environmental laws. RPM's must solicit early involvement of other Marine Corps/Navy specialists, including natural and cultural resources personnel to ensure that the Endangered Species Act, section 7, the National Historic Preservation Act, section 106, and related requirements are identified and completed. These requirements may occur at any phase of an IR program investigation including PA/SI, RI/FS, removal action, or RA.

10223. REAL PROPERTY TRANSFER. Installations must, in consultation with their cognizant NAVFACENGCOM EFD/EFA, ensure that the IR program is considered prior to engaging in real property transactions and as part of all land management decisions. IR program requirements associated with property transfer must be conducted pursuant to CERCLA, SARA, CERFA, and the NCP. For properties being obtained by the Marine Corps, the condition of the property should be evaluated from an IR program perspective prior to completing the property acquisition.

10224. SITE CLOSE-OUT. The following actions must be taken when it is determined that no further response actions are appropriate for the site ("site," in this case, refers to the installation as a whole).

1. NPL Sites. The installation must notify the EPA regional office that appropriate response actions have been completed and must request that the site be deleted from the NPL. The EFD/EFA and the installation must support the EPA and the state in their determination of whether to delete the site by providing information and public notification, as appropriate.

2. Non-NPL Sites. The installation must notify the EPA regional office and the state that appropriate response actions have been completed. The cognizant EFD/EFA, in coordination with the installation, must prepare the site(s) as NFRAP. The installation must ensure public notification by placing the NFRAP documentation in the information repository and by publishing the documentation's availability.

10225. CONSTRUCTION ON CONTAMINATED PROPERTY. All efforts must be made to ensure that Marine Corps projects are not constructed on contaminated sites. However, there may be times when the project is being planned or is underway and contamination is discovered.

1. If contamination is discovered during the planning stage, the site can be investigated and cleaned up following IR procedures. In most cases, this action takes several years, and the site may not be available for the subject project. The site investigation/cleanup competes with other IR sites on the basis of risk management.

2. If contamination is discovered during construction, the site investigation/cleanup can be done using ER,N funds and must compete with other IR sites on the basis of risk management. If ER,N funding is not available, construction project funds must be used to investigate/cleanup the site. If neither IR nor construction project funding is available in time to meet the construction schedule, the project will have to be re-sited. Subsequent investigation/cleanup of the original site with ER,N funds must again compete with other IR sites on a risk management basis. The installation must not pay for ER,N-eligible work with installation O&M funds if the sole project goal is site cleanup.

CHAPTER 10

INSTALLATION RESTORATION PROGRAM

SECTION 3: RESPONSIBILITIES

10300. CMC (LF)

1. Provide support to Marine Corps installations in interpreting Federal, state, and local environmental regulatory requirements and in uniformly applying Marine Corps policy as set forth in this Manual.
2. Assist installations with resolving disputes with Federal, state, and local regulatory agencies as required.
3. Coordinate with the Office of Chief Naval Operations (CNO (N-45)), COMNAVFACENGCOM, and the geographical EFD/EFA to ensure equitable and timely allocation of funding from the ER,N and BRAC cleanup accounts and to support remediation of HS releases at Marine Corps installations consistent with CERCLA, RCRA, and the NCP.
4. Provide oversight for the implementation of the IR program for active and BRAC Marine Corps installations worldwide, to include:
 - a. Ensuring that installations identify IR program requirements to NAVFACENGCOM EFD/EFA's;
 - b. Ensuring that program information and guidance are passed to their installations;
 - c. Ensuring that installations coordinate installation cleanup planning, programming, budgeting, and execution with their cognizant EFD/EFA;
 - d. Ensuring that installations fulfill their responsibilities under the Marine Corps IR program and appoint an IR Coordinator;
 - e. Ensuring that public participation and other legal requirements are met at installations with IR sites; and

f. Ensuring that installation budgets reflect resource requirements to support the IR program.

5. In conjunction with the Office of Legislative Affairs (OLA) and OASN(I&E), monitor proposed Federal environmental legislation for impact on Marine Corps operations and programs, and review the efforts of the Deputy Under the Secretary of Defense, Environmental Security to generate service input to congressional staff in the development of responsible and workable legislative proposals. Participate in the preparation of the DERP annual report to Congress.

6. After receiving and reviewing an endorsed FFA or state remediation agreement, provide the agreement to the OASN(I&E) for signature.

7. Ensure that coordination occurs, as appropriate, with the Safety Office in matters relating to HS releases and safety and health training.

8. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to environmental regulations.

10301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE (COMMARFORRES)

1. Develop base orders, or an environmental compliance and protection standard operating procedures document to implement the specifications set forth in this chapter.

2. Notify the NRC, as well as appropriate state and local authorities, as soon as there is knowledge of an HS release in excess of a reportable quantity at, or migrating from, the installation.

3. Ensure that all applicable statutory and regulatory requirements including safety and health training (for installation personnel) and natural resources are met during site assessment and response actions.

4. Provide necessary review and comment on IR action plans and reports to the cognizant EFD/EFA.

5. Forward appropriate IR documents to the EPA and state regulatory agencies. Forward all final primary documents to the EPA and state regulatory agencies prior to deadlines in either FFA's or state agreements or orders.
6. Budget for and conduct any operation and maintenance or long-term monitoring after these requirements are no longer eligible for ER,N funding, 5 years after RC.
7. Provide an IR coordinator and logistic support for IR projects at the installation.
8. Establish and conduct periodic meetings of the TRC or RAB, when appropriate.
9. Provide information as required for updating project exhibits to cognizant EFD/EFA's for IR program studies and RA's.
10. Provide information as required to the CMC (LF) for IR program salaries, support, travel, and training costs.
11. Prepare and implement a public participation program, including a CRP, for IR program sites.
12. In conjunction with the cognizant EFD/EFA, select the remedy and sign the ROD/decision documents for all IR program sites.
13. Participate in negotiations of FFA's and state agreements.
14. Notify appropriate commands of any EPA or state notice or PRP action, and support PRP response. Track actions by EFD/EFA's on behalf of the command regarding PRP suits.
15. Ensure that IR program site conditions are considered prior to land use planning, development, or operations, especially in reference to military construction.
16. Ensure that appropriate information is placed in the information repository.
17. Inform the public of the availability of technical assistance grants for installations on the NPL and other technical assistance programs designed to enhance public participation.
18. Endorse and forward FFA's or state remediation agreements to the CMC (LF).

19. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for IR that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with IR program requirements. Pay appropriate Federal, state, and local fees. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

10302. COMMANDER OF NAVAL FACILITIES ENGINEERING COMMAND (COMNAVFACENGCOM)

1. Operate the routine aspects of the IR program for the Marine Corps, in coordination with the Marine Corps installation and the CMC (LF), including the necessary overall planning, programming, budgeting, and execution.

2. Provide contract services to support technical aspects of the IR program at Marine Corps installations. Facilitate the development and use of innovative remediation technologies.

3. Conduct BRAC IR activities at closing and realigning installations by:

a. Planning, programming, and executing activities that support property reuse, using the results of relative risk site evaluations, and other criteria to meet DPG program goals.

b. Measuring program progress through the reduction of relative risks at sites, the progression of sites through the restoration phases, the accomplishment of milestones leading to site completion, and the acres of land environmentally suitable for transfer.

4. Conduct the FTC program to expedite the restoration and transfer or lease of property at closing or realigning installations. This procedure includes improving the efficiency of the IR process, partnering with Federal, state, and local regulatory agencies, and working with local communities and other stakeholders.

5. Perform IR studies and RA projects and prepare NFRAP documentation by contract, in-house effort, or a combination thereof.
6. Coordinate, at all stages, with regulatory agencies and installation CG's/CO's prior to initiating projects through project completion.
7. Ensure that IR work plans and ecological risk assessments are reviewed by health and safety and natural resources professionals affiliated with the site.
8. Integrate the relative risk concept into IR program planning and execution in accordance with the DoD Risk-Based Site Evaluation Primer.
9. Provide support to the DSMOA program by reviewing work plans, documents, and progress reports, and by forwarding budgeting requirements.
10. Prepare project plans and reports in coordination with the installation; prepare contract documents; coordinate review and comments; distribute final documents to installations.
11. Track project progress to meet schedule requirements; provide technical and financial oversight during project performance.
12. Prepare the ROD document and forward it to the installation CG/CO with a recommended alternative for review and signature.
13. Ensure that the IR database is updated quarterly for Marine Corps installations. EFD/EFA's should provide the installation with a chance to review database information prior to quarterly update.
14. Support the installation in fulfilling its TRC/RAB responsibilities.
15. Maintain the Administrative Record and distribute copies to the installation and appropriate parties.
16. Provide IR study results to Marine Corps environmental planning, real estate, and natural resources personnel. Work with the Marine Corps chain-of-command to ensure that other Marine Corps programs and projects account for HS site conditions before irreversible decisions are made.

17. Provide site-specific technical, progress, and budgeting information to satisfy program reporting requirements and to provide semi-annual IR program execution plans to the CMC (LF).
18. Review and update, in coordination with the installation, the Federal Agency HW Compliance Docket and upgrade repository information.
19. Upon receipt of a notice, message, or documentation from the Marine Corps installations regarding notification of PRP action, the EFD/EFA's will:
 - a. Prepare and submit substantive responses to the EPA and state inquiries related to the HW site and subsequent cleanup.
 - b. Meet with other PRP's and the EPA and state representatives to plan for remediation.
 - c. Negotiate and, on behalf of the DON, executes agreements relating to PRP remediation. Prior to execution, forward proposed agreements to the CMC (LF) for review and to the involved Marine Corps command(s) for information.
 - d. Administer remediation agreements, to include payment of costs borne by the ER,N.
20. The EFD/EFA, in close coordination with the installation and the appropriate Marine Corps Counsel Office, will negotiate FFA's and state remediation agreements. The final draft will be endorsed by the CMC (LF), NAVFAC, and forwarded to the Marine Corps installation for endorsement and resubmittal to the CMC(LF).

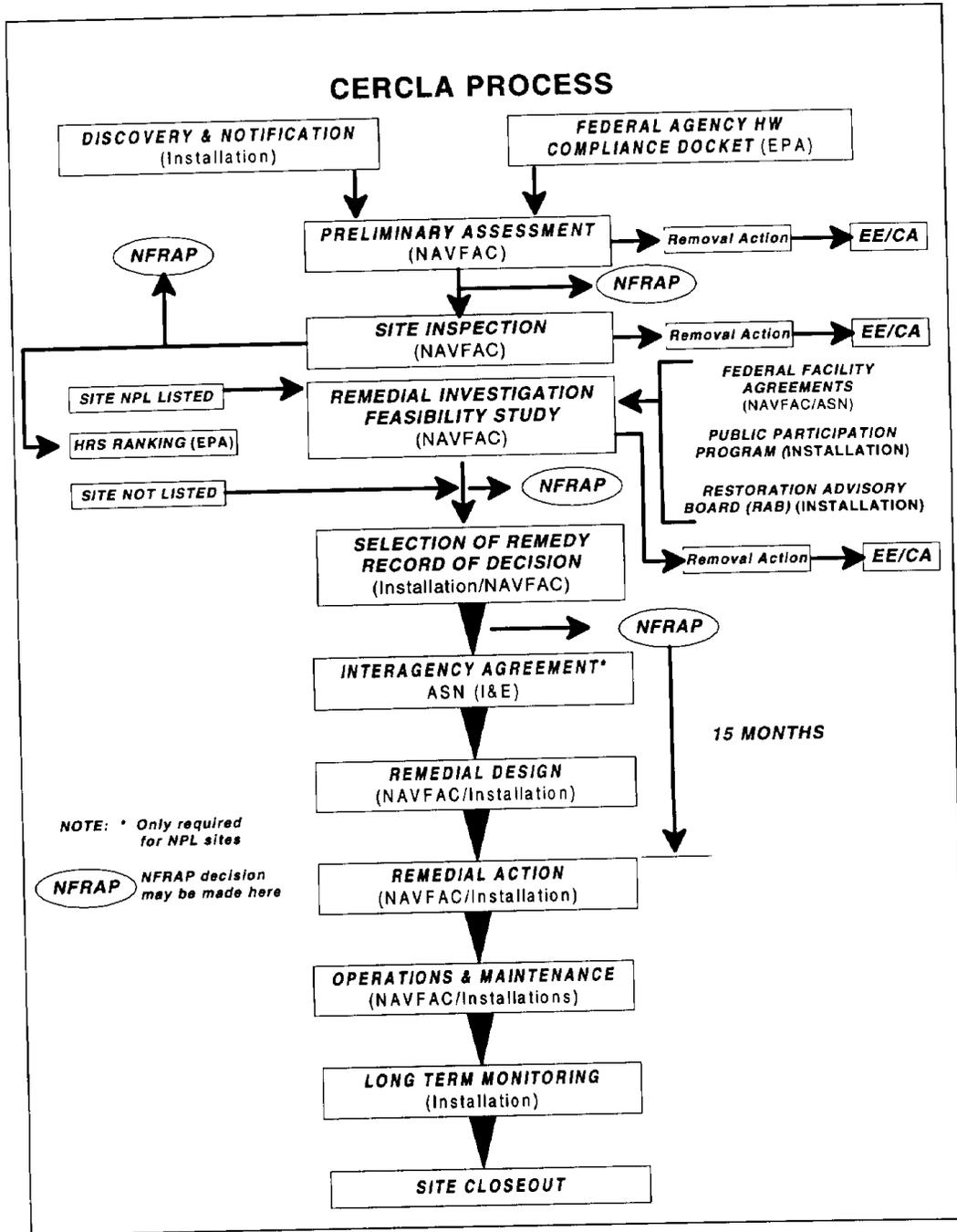


Figure 10-1. Installation Restoration (IR) Program CERCLA Process.

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

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CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 1: INTRODUCTION

11100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with procedural and statutory requirements for managing natural resources at Marine Corps installations. This chapter summarizes the Natural Resources Management Program, which consists of land management, fish and wildlife management, forest management, and resource-based outdoor recreation management.

11101. APPLICABILITY. See paragraph 1101.

11102. BACKGROUND. The making of Marines requires extensive training. Marines train as they fight, and that training requires access to land. Training can be destructive to land and natural resources. Unless properly managed, Marine Corps lands can become damaged to the point where realistic training can no longer occur. In addition, the American people have placed intrinsic values on certain natural resources. These values are manifested in laws requiring the Marine Corps to protect and conserve natural resources. Failure to comply with natural resources laws can lead to judicial, legislative, and executive decisions denying the Marine Corps access to land for training. Accordingly, installation and unit commanders must work to guarantee continued access to our land, air, and water resources for realistic military training and testing by ensuring that the natural resources entrusted to the Marine Corps' care remain healthy and available for future generations.

11103. FEDERAL STATUTES AND EXECUTIVE ORDERS (E.O.S)

1. Bald Eagle Protection Act of 1940, as Amended (16 U.S.C. 688 et seq.). The act prohibits taking, possessing, and transporting bald eagles and golden eagles and importing and exporting their parts, nests, or eggs. The definition of "take" includes pursue, shoot, shoot at, poison, wound, capture, trap, collect, molest, or disturb. The act also provides for penalties of up to \$5,000 for possessing eagles or eagle parts

taken from birds after June 1940. Regulations implementing the act are found at 50 CFR Part 22.

2. Clean Water Act (CWA) of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). The CWA, in part, requires Federal agency consistency with state nonpoint source pollution management plans. The CWA and its implementing regulations also require permits for controlling wastewater discharges and placing fill materials into waters of the United States, including wetlands. These permits are required before initiating proposed actions.

3. Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. 1451 et seq.). The CZMA requires that, to the maximum extent practicable, Federal actions affecting any land/water use or coastal zone natural resource be implemented consistent with the enforceable policies of an approved state coastal management program. The CZMA also authorizes states to administer approved coastal nonpoint source pollution programs. Advance concurrence from the state Coastal Commission is required before taking an action affecting the use of land, water, or natural resources of the coastal zone. Excluded from the coastal zone are lands solely subject to or held in trust by the Federal government, its officers, or its agents.

4. Conservation Programs on Military Reservations (Sikes Act) of 1960, as Amended (16 U.S.C. 670(a) et seq.). The Sikes Act requires each military installation to manage natural resources for multipurpose uses and public access appropriate for those uses, consistent with the military department's mission, in accordance with an Integrated Natural Resources Management Plan (INRMP). Each INRMP must be prepared in consultation with the U.S. Fish and Wildlife Service (FWS) and the cognizant state fish and wildlife agency. The public must be afforded an opportunity to review and comment on INRMPs prior to their finalization. The Sikes Act also requires, to the extent practicable using available resources, sufficient numbers of professionally-trained natural resource management personnel and natural resources law enforcement personnel, be available and assigned responsibility to, perform tasks necessary to carry out Title I of the Sikes Act, including preparing and implementing INRMPs.

5. Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901-3932). The act promotes wetlands conservation for the public benefit and helps fulfill various migratory bird treaty obligations.

6. Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.). Implemented by 50 CFR 402 and 50 CFR 17, this ESA requires Federal agencies to carry out programs to conserve Federally-listed endangered and threatened plants and wildlife. Development and implementation of these programs must be carried out with the consultation and assistance of the Departments of the Interior (DOI) and Commerce. Preparation of a biological assessment may be required to determine whether formal consultation with the FWS/National Oceanic and Atmospheric Administration - Fisheries (NOAA Fisheries) is necessary and/or may serve as a basis for a FWS/NOAA Fisheries biological opinion.

7. Estuarine Areas Act (16 U.S.C. 1221-1226). The act provides for a Federal study and inventory of estuaries and authorizes their management and development through Federal and State agreements.

8. Plant Protection Act (7 U.S.C. 7701 et seq.). Consolidates and modernizes all major statutes pertaining to plant protection and quarantine.

9. Strengthening Federal Environmental, Energy, and Transportation Management (E.O.) 13423, 24 January 2007). Sections 2(d) and 3(a) of this E.O. require the use of sustainable environmental practices and energy efficiency, greenhouse gas emissions avoidance or reduction, and renewable energy.

10. Marine Mammal Protection Act (MMPA) of 1972, as Amended (16 U.S.C. 1361 et seq.). Implemented by 50 CFR 18, 215, and 228, the MMPA mandates a moratorium on the killing, capturing, harming, and importing of marine mammals and marine mammal products. The MMPA also prohibits the taking of any marine mammal by any person, vessel, or conveyance subject to the jurisdiction of the United States on the high seas or the taking of any marine mammal by a person, vessel, or conveyance in waters or lands under the jurisdiction of the United States. "Taking" means to harass, hunt, capture, collect, or kill any marine mammal, and the term includes, without limitation, any of

the following: collection of dead animals or their parts, restraint or detention of a marine mammal, tagging a marine mammal, the negligent or intentional operation of an aircraft or vessel, or doing of any other negligent or intentional act that results in the disturbing or molesting of a marine mammal.

11. Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.). The MPRSA establishes regulations relating to dumping specific materials into open waters and establishes a program for designating and regulating national marine sanctuaries.

12. Migratory Bird Treaty Act (MBTA) of 1918, as Amended (16 U.S.C. 703 et seq.). The MBTA protects migratory birds (listed in 50 CFR 10.13) and their nests and eggs and establishes a permitting process for the taking of migratory birds.

13. Military Reservation and Facilities: Hunting, Fishing and Trapping Act of 1958 (Public Law 85-337, 10 U.S.C. 2671). The act requires all hunting, fishing, and trapping on each military installation be in accordance with the state fish and game laws where the installation is located. Appropriate state licenses must be obtained for these activities on the installation, but the act permits an installation commander to exempt active duty military personnel from state licenses to hunt, fish, and trap on a military installation if the state does not permit them to obtain a resident license.

14. Sale of Certain Interests In Lands; Logs (10 U.S.C. 2665). This law establishes requirements for installation sale of forest products.

15. Leases: Non-Excess Property of Military Departments (10 U.S.C. 2667). This law permits installations to lease real or personal government property, including land leased for agricultural purposes.

16. National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.). NEPA requires consideration of environmental concerns during project planning and execution. NEPA and Council on Environmental Quality NEPA-implementing regulations (40 CFR Part 1500) require Federal agencies to prepare an Environmental Assessment or Environmental Impact statement for Federal actions with the potential to significantly affect the

quality of the human environment, including natural and cultural resources.

17. Fish and Wildlife Conservation Act (FWCA) of 1980 (16 U.S.C. 2901 et seq.). The FWCA promotes state programs for conserving nongame fish and wildlife, their habitats, and their use.

18. Plant Quarantine Act (7 U.S.C. 151-167). The act regulates the importation and movement of nursery stock and other plants and plant products within the United States to control injurious plant and pest transportation.

19. Protection of Wetlands (E.O. 11990, 24 May 1977). This E.O. addresses Federal agency actions required to identify and protect wetlands, minimize the risk of wetlands destruction or modification, and preserve and enhance the natural and beneficial values of wetlands.

20. Floodplain Management (E.O. 11988, 24 May 1977). This E.O., in part, requires each Federal agency to evaluate potential effects of actions that it may take in a floodplain and ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management.

21. Outdoor Recreation - Federal/State Program Act (16 U.S.C. 460(L) et seq.). The act encourages consultation with the United States National Park Service regarding outdoor recreation management.

22. Rivers and Harbors Act (33 U.S.C 401). The act, in part, prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waters of the United States without Congressional approval.

23. Soil Conservation Act (16 U.S.C. 590a et seq.). To control and prevent soil erosion, the act ensures that programs administered by the Secretary of Agriculture for the conservation of soil are responsive to the long-term needs of the United States.

24. Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009). To preserve and improve land and water resources and the quality of the environment, the act authorizes Federal

assistance to local organizations for flood prevention and the planning and completion of projects in watershed areas for conservation and land and water use.

25. Exotic Organisms (E.O. 11987, 24 May 1977). This E.O., in part, requires Executive agencies, to the extent permitted by law, to restrict the introduction of exotic species into the natural ecosystems on lands and waters they own, lease, or hold.

26. Invasive Species (E.O. 13112, 3 February 1999). This E.O.'s purpose is to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause.

27. Farmland Protection Policy Act (7 U.S.C. 4201-4209). The act encourages Federal agencies to take steps to ensure their actions do not cause United States farmland to be irreversibly converted to nonagricultural uses.

28. Responsibilities of Federal Agencies to Protect Migratory Birds (E.O. 13186, 10 January 2001). This E.O., in part, requires each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within two years, a Memorandum of Understanding with FWS that shall promote the conservation of migratory bird populations.

29. Use of Off-Road Vehicles on the Public Lands (E.O. 11644, 9 February 1972). This E.O., in part, establishes policies and provides for procedures for ensuring off-road vehicle use on public lands will be controlled and directed to protect natural resources.

30. Superfund Implementation (E.O. 12580, 23 January 1987), as amended by E.O. 12777 (18 October 1991). This E.O. delegates to various Federal officials the responsibilities vested in the President for implementing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

11104. REQUIREMENTS

1. Natural Resources Management. Each Marine Corps installation shall manage its natural resources to provide for sustained military use of the land.

a. INRMPs. Each installation having custody of Class I property (i.e., land and water) suitable for the conservation and management of natural resources shall prepare, or ensure preparation of, and implement a comprehensive INRMP that includes all elements of natural resources management applicable to the installation. INRMPs must be prepared by professionally-trained personnel and must address compliance with legal mandates protecting specific natural resources. Each installation, as applicable, shall continuously monitor its INRMP implementation and review its INRMP annually. Each installation, as applicable, shall also revise and/or reapprove its INRMP at least every five years. For more information, see paragraph 11200.4 of this chapter.

b. Pesticide Use in Natural Resources Management Programs. Pesticide use, storage, application, and disposal, in support of installation natural resources management activities shall comply with reference (a) and applicable occupational safety and health requirements. Each installation shall use the principles of Integrated Pest Management to avoid and minimize the use of pesticides when nonchemical alternatives are available and cost effective.

c. Public Access Associated with the Natural Resources Management Program. Marine Corps lands will be available to the public for enjoyment and use of natural resources, except when a specific determination has been made by the installation Commanding General/Commanding Officer (CG/CO) that a military requirement prevents such use for safety or security reasons, or when such use would cause substantial environmental degradation. A nonaccess or limited access determination will be explained in the installation's INRMP.

d. Access by Federal and State Conservation Officials. Federal, State, and local officials will be permitted access to installation land and waters for official purposes after proper safety and security measures are taken.

e. Consistency with Coastal Zone Management Plans. Reference (b) requires each installation to ensure that its operations, activities, projects, and programs affecting the coastal zone in or on coastal lands or waters are consistent to the maximum extent practicable with the Federally-approved

Coastal Zone Management Plan of the State. Installation natural resources management planning shall comply with this requirement.

f. Protection of Coastal Barriers. Before construction, maintenance, military activities, implementation of natural resources management projects, or other Federal expenditures on coastal barrier islands, the Marine Corps will consult with the Secretary of the Interior to determine the impacts on these resources. In areas designated as coastal barriers, the Marine Corps may only expend funds for 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 nonstructural projects for shoreline stabilization.

g. Exotic and Invasive Species

(1) Installations and units shall prevent the introduction of exotic species into any installation's natural ecosystem unless the Secretary of Agriculture or the Secretary of the Interior finds that such introduction will not have an adverse effect on those ecosystems.

(2) Installations, organizations and military units shall not authorize, fund, or carry out actions likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere. They shall provide for invasive species control and minimize the economic, ecological, and human health impacts that invasive species cause. Installations, organizations and military units with actions that may affect the status of an invasive species shall, to the extent practicable and permitted by law, identify such actions, and subject to the availability of appropriations, and within budgetary limits, use relevant programs and authorities to: prevent the introduction of invasive species; detect and respond rapidly to and control populations of such species in a cost-effective and environmentally-sound manner; monitor invasive species populations accurately and reliably; provide for restoration of native species and habitat conditions in ecosystems that have been invaded; conduct research on invasive species and develop technologies to prevent introduction, and provide for environmentally-sound control, of invasive species;

and promote public education on invasive species and the means to address them.

h. Partnerships and Volunteer Programs. Installations may use appropriate partnerships and volunteers to enhance conservation programs whenever practicable. This work will be performed under the direction of professionally-trained natural resources personnel in accordance with reference (c).

i. Natural Resources Personnel. Personnel with natural resources responsibilities must, as a condition of employment, possess the appropriate knowledge, skills, and professional training/education to perform their duties. Installation commanders will provide natural resources personnel timely and necessary supplemental training to ensure proper and efficient natural resources management. Installation commanders will also maintain adequate natural resources staffing levels to provide and sustain installation natural resources.

2. Land Management

a. Wetlands Protection. The Marine Corps will obtain a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill material into waters of the United States, including wetlands. The Marine Corps will comply with the national goal of no net loss of wetlands and will avoid loss of size, function, and value of wetlands. In addition, the Marine Corps will preserve and enhance the natural and beneficial values of wetlands while conducting its activities.

Installations, when engaged in an authorized activity that may or will result in the destruction of, or an adverse impact to, a wetland, may make payments to a wetland mitigation banking program or "In-Lieu-Fee" mitigation sponsor approved in accordance with references (d) or (e), and any implementing administrative guidance or regulation.

b. Nonpoint Source Pollution. The Marine Corps will comply to the extent permitted by law with State CWA nonpoint source pollution control requirements. Further, the Marine Corps will manage its lands and waters in accordance with reference (f), which requires installations to consider their proposed resource management activities within the broader context of the watershed where their activities are being contemplated.

c. Agricultural Outleasing. As part of the integrated management of natural resources, installation commanders shall review the suitability of their lands for agricultural leasing, under authority of reference (g) when such leasing is advantageous to the United States. Installation commanders should also review the suitability of existing leases to ensure they promote the national defense or are in the public interest and do not conflict with existing or planned military land use requirements. In addition, any agricultural leases must be compatible with the goals and objectives of the installation's INRMP.

d. Soil Conservation. The Marine Corps shall manage its lands and waters to control and prevent soil erosion, soil loss, and aquatic sedimentation and to preserve natural resources by conducting surveys and implementing soil conservation measures. Construction projects shall be designed to eliminate post construction soil erosion, and altered or degraded landscapes and associated habitats shall be restored and rehabilitated whenever practicable.

e. Farmland Protection. The Marine Corps shall identify prime and unique farmland and take into account the adverse effects of Marine Corps actions on farmland preservation. In reviewing its actions, the Marine Corps shall consider appropriate alternative actions to reduce such adverse effects and will ensure that such actions, to the extent practicable, are compatible with state and local government and private farmland protection programs and policies.

f. Control of Noxious Weeds. Installations shall implement control measures for Federally- and State-listed noxious weeds. Base Exterior Architecture Plans will include a list of prohibited noxious weeds for landscaping. Installations must also cooperate with State, county, and local governments and easement holder management plans for controlling noxious plants provided that similar programs are being implemented generally on state or private lands in the same area.

g. Floodplain Management. As it implements land management, construction, and land use actions, the Marine Corps shall avoid direct and indirect floodplain development and shall restore and preserve the natural and beneficial values served by floodplains. Installations and units must evaluate the

potential effects of proposed actions in floodplains according to the NEPA procedures described in Chapter 12.

h. Wildfire Suppression and Prescribed Burning. Fire is an important component of fire-adapted ecosystems. These ecosystems may require some level of prescribed burning to mimic the temporal frequency and intensity of the natural fire regime. Burning outside the natural fire regime may impact or convert vegetation plant communities to a non-native type. Prescribed burning is an important tool to reduce fuel loading and maintain fire-dependent ecosystems. Accordingly, Marine Corps installations shall include fire management in their INRMP. Wildland fire response and prescribed burning shall be conducted in accordance with reference (h).

3. Fish and Wildlife Management

a. Endangered Species

(1) Each installation shall survey and take other appropriate actions to document the presence of candidate species and endangered or threatened species on the installation, and identify their currently used and periodically-or indirectly-used habitats. Each installation shall assist FWS in determining whether any such habitats may be included or excluded from critical habitat designation. Each installation shall also survey and take other appropriate actions to document the presence of state or territory rare and endangered species.

(2) The Marine Corps will consult with FWS or NOAA Fisheries (as appropriate) on any Marine Corps action that may affect any endangered or threatened species or critical habitat to ensure that such action is not likely to jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitat. Such consultations may be either formal or informal. When necessary, the Marine Corps will prepare a biological assessment of the effects of a proposed action on a listed species and/or its critical habitat to assist FWS or NOAA Fisheries in issuing a Biological Opinion on whether the action will jeopardize the continued existence of the species and/or adversely modify its critical habitat. In addition, the Marine Corps will further programs for the conservation of endangered and threatened species. Each installation supporting endangered or threatened species must

address their management in its INRMP detailing protective measures that assure the continued health and viability of these species on the installation. Each installation will also assist FWS and NOAA Fisheries in preparing recovery plans for endangered or threatened species on the installation.

(3) Each installation shall designate an installation representative to liaise with local governmental agencies and organizations interested in endangered and threatened species protection. The initial contacts shall include the local FWS field office, the local field office of NOAA Fisheries, and the State fish and wildlife agency.

b. Marine Mammals. The Marine Corps shall not take (e.g., harass, hunt, capture, or kill) marine mammals on the high seas or in waters or on land under the jurisdiction of the United States. The Marine Corps will evaluate each operation that may affect marine mammals and will avoid impacts to them. For actions with the potential for unintentional harm to marine mammals, application to NOAA Fisheries will be made for a Letter of Authorization or other permit to comply with MMPA requirements. In addition, many marine mammals are also endangered species, and proposed actions that may affect any Federally-listed threatened or endangered species require consultation under Section 7 of reference (i).

c. Migratory Birds. The Marine Corps shall consult with FWS during INRMP preparation to ensure that actions not directly associated with military readiness activities (e.g., training) are conducted in a manner that minimizes the taking of birds protected by reference (j) and listed in reference (k). While incidental take of migratory birds is authorized during the conduct of military readiness activities, the Marine Corps will discuss with FWS the impacts of such activities to migratory birds. Installations shall consult with local or regional FWS offices on proposed actions intended to take (e.g., banding or marking, scientific collecting) migratory birds, their young, or eggs. The lawful pursuit of migratory game birds is permissible in compliance with Federal, State, and local hunting regulations.

d. Hunting, Fishing, and Trapping Licenses. Installations allowing hunting, fishing, and trapping shall require all civilian hunters, fishers, and trappers to possess applicable state licenses for hunting, fishing, or trapping on the

installation. Military personnel engaged in these activities must possess such licenses if the host State permits the issuance of a resident license to members of the military without regard to residency requirements. At installations within States that do not authorize licenses under the conditions noted herein, military personnel may, at the discretion of the installation CG/CO, hunt, fish, or trap with an installation permit in lieu of a state license.

e. Hunting, Fishing, and Trapping Access Fees. Each installation with an INRMP permitting hunting, fishing, or trapping may collect nominal fees for these recreational opportunities. Each installation should develop the permit fee schedule, in part, after considering cost associated with INRMP installation fish and wildlife enhancement operations.

f. Fish and Wildlife Management. Installations with INRMPS shall ensure that professional services implement and enforce them. When procuring INRMP implementation and enforcement services, priority shall be given to Federal and State agencies having responsibility for the conservation or management of fish or wildlife.

4. Forest Management

a. Management Requirements. As part of the integrated management of natural resources, installation commanders shall review the suitability of their lands for merchantable forest products. Installations containing forests or lands with the potential to grow and produce merchantable forest products shall ensure the optimum sustainable yield of forest products and the improvement of forest resources consistent with the military mission and local ecosystem condition. When appropriate, installation INRMPS will 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.

b. Forest Product Sales. Per references (l) and (m), Marine Corps contracts for the sale of timber and other forest products shall include requirements for orderly harvesting, operational procedures, and payment. Forest products will not be donated; abandoned; carelessly destroyed; used to offset

costs of contracts; or traded for products, supplies, or services. Proceeds collected from the sale of installation forest products shall be forwarded to the servicing Marine Corps accounting and finance officer. Each installation selling forest products shall maintain records of sales proceeds by fiscal year for use in identifying the host State's share of forest product sale proceeds (subsection (e)(1) of reference 1)).

c. Accounting and Use of Forestry Proceeds. Installations incurring costs for the production of forest products shall be reimbursed from proceeds from forest product sales (subsection (d) of reference (1)). Reimbursable forest product costs, however, must be directly related to the economic production of forest products (i.e., directly related to forest enhancement, protection, conservation, and management). Insofar as they meet this test, forest product costs may also include funding forest management cooperative agreements and forest research agreements. Reimbursable production costs exclude expenses for the production of forests that are incapable of economic production of forest products.

d. Forest Pest Suppression. Installations with forest resources shall fully cooperate in the planning, coordination, and execution of field operations to prevent and suppress forest damage and insect and disease outbreaks. This cooperation, when determined to be necessary by either the Regional United States Forest Supervisor or the cooperating state forestry department or commission, shall be consistent with the terms of reference (n).

5. Outdoor Recreation

a. Recreation Opportunities. Installations shall provide the public access to natural resources, provided such access is consistent with natural resources and military readiness preservation.

b. Off-Road Vehicles. Recreational off-road vehicle use on installations shall be permitted only on trails and other areas designated by installation commanders. Installations shall

monitor unimproved roads to detect off-road vehicle impacts and, thereby, protect sensitive natural, cultural, and geophysical resources.

6. Environmental Restoration

a. Natural Resources Trustees. The CERCLA "natural resources" definition includes "land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources..." Reference (o) designates the President as the trustee for Federally-protected or managed natural resources. Reference (p) designates the President's natural resources trustee responsibilities on Department of Defense (DOD) lands to the DOD. Accordingly, the Marine Corps serves as the natural resources trustee for its natural resources.

b. Natural Resources Trustee Responsibilities. After receiving notice of, or discovering, a natural resources injury, loss, or threat, a natural resources trustee shall take actions to recover for such damages. These actions include conducting a preliminary survey of areas affected by a discharge or release to determine if natural resources are or may be affected; cooperating with the On-Scene Coordinator/Regional Project Manager in coordinating assessments, investigations, and planning; and carrying out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. The Marine Corps may take these actions when acting as a natural resources trustee.

c. Ecological Risk Assessments. The Marine Corps performs ecological risk assessments during the remedial investigation/feasibility study phase of each CERCLA remedial action. Reviewing these assessments requires natural resource expertise, and installation natural resources personnel should, to the greatest extent practicable, review ecological risk assessments for their installation.

11105. DEFINITIONS

1. Adaptive Management. Adaptive management is an approach to treat all management decisions as experiments to be tested. Rather than immediately prescribe a management decision, the manager working in an adaptive fashion tests possible solutions to problems using a scientific method, complete with variable

controls and measures of success. This approach welcomes new ideas, new data, and revision of plans when better approaches are possible.

2. Agricultural Outleasing. The use of DOD lands under a lease to an agency, organization, or person for the purpose of growing crops or grazing domesticated animals.

3. Annual Operational Plan. An INRMP management section addendum prepared annually to describe current fiscal year land management projects and their cost.

4. Biodiversity. The diversity of life and its processes: living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

5. Biological Assessment. As defined by section 402.02 of reference (q). Within reference (q) are the minimum requirements for inclusion in a biological assessment for ESA regulatory consultation.

6. Candidate Species. Any species being considered under reference (i) by the Secretary of the Interior or Commerce for listing as an endangered or threatened species, but not yet the subject of a proposed rule.

7. Coastal Zone. As defined by section 1453(1) of reference (b).

8. Conservation. (When generally used in this chapter apart from the discussion per reference (i)), the planned management, use, and protection of natural resources to provide their sustained use and continued benefit to present and future generations.

9. Conservation Law Enforcement Officer. A person, having satisfied the minimum conservation officer training requirements and other position prerequisites of reference (r), serving in an installation position with primary responsibility for enforcing conservation and natural and cultural resources protection laws.

10. Critical Habitat. As defined in section 1532 (5)(A) of reference (i) and section 402.02 of reference (q).

11. Damages. As defined in section 11.14(1) of reference (s).
12. Ecological Risk Assessment. An investigation into the actual or potential impacts of contaminants from a hazardous waste site on plants and animals other than humans or domesticated species.
13. Ecosystem. A dynamic, natural complex of living organisms interacting with each other and with their associated nonliving environment.
14. Ecosystem Management. A goal-driven approach to managing natural and cultural resources that supports present and future mission requirements; preserves ecosystem integrity; is at a scale compatible with natural processes; is cognizant of natural processes' time scales; recognizes social and economic viability within functioning ecosystems; is adaptable to complex, changing requirements; and is realized through effective partnerships among private, local, State, tribal, and Federal interests. Ecosystem management is a process that considers the environment as a complex system functioning as a whole, not as a collection of parts, and recognizes that people and their social and economic needs are a part of the whole.
15. Endangered or Threatened Species. As respectively defined in sections 1532(6) and (20) of reference (i).
16. Exotic Species. As defined in reference (t), all species of plants and animals not naturally occurring, either presently or historically, in any ecosystem of the United States.
17. Fish and Wildlife Management. A coordinated program of actions for conserving, enhancing, and regulating indigenous wildlife and its habitats, including conserving protected species and non-game species, managing and harvesting game species, reducing bird aircraft strike hazards, and controlling animal damage.
18. Forest Management. A coordinated program of actions for ensuring that the health, vigor, and diversity of forest ecosystems are maintained while providing a diverse, quality military training environment and sustaining the production of forest products. Major forest management actions include forest administration, timber management, timber inventory, reforestation, timber stand improvement, timber access road

construction and maintenance, integrated pest management, and fire management.

19. Forest Products. All plant materials in wooded areas that have commercial value.

20. Game Species. Fish and wildlife that may be harvested in accordance with applicable Federal, State, and local laws.

21. Grounds. All land areas not occupied by buildings, structures, pavements, and other facilities. Grounds may be classified as improved (those near buildings), semi-improved (those near runways and roads), or unimproved.

22. Habitat. An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies their life requirements per reference (u).

23. Injury. As defined in section 11.14(v) of reference (s).

24. Invasive species. As defined in reference (v), an alien species whose introduction does, or is likely to cause, economic or environmental harm or harm to human health.

25. INRMP. A planning document using ecosystem management principles directing the management and conservation of installation natural resources.

26. Land Management. Programs and techniques to manage lands, wetlands, and water quality, including soil conservation, erosion control, nonpoint source pollution, surface and subsurface waters, habitat restoration, control of noxious weeds and poisonous plants, agricultural outleasing, grassland/rangeland management, identification and protection of wetlands, watershed protection, floodplains management, landscaping, and grounds maintenance.

27. Natural Resources. As defined in section 11.14(z) of reference (s).

28. Natural Resources Trustee. Federal trustees are those agencies which have statutory responsibility to protect or manage natural resources or stewardship responsibility as a manager of Federally-owned land. State agencies and Native American tribes also may be trustees.

29. Nongame Species. Species not harvested for recreation or subsistence purposes. As defined in reference (u).

30. Nonpoint Source Pollution. Any source of water pollution that does not meet the CWA definition of point source. Nonpoint source pollution is normally associated with diffuse runoff from rainfall or snowmelt.

31. Noxious Weeds. As defined in section 7702 of reference (w).

32. Off-Road Vehicle. As defined in reference (x), any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (C) any vehicle whose use is expressly authorized by the Marine Corps under a permit, lease, license, or contract.

33. Outdoor Recreation. Program, activity, or opportunity dependent on the natural environment. Examples are picnicking, bird watching, off-road vehicle use, hiking, wildlife and scenic river use, and primitive camping. Developed or constructed facilities such as golf courses, tennis courts, riding stables, lodging facilities, boat launching ramps, and marinas are not included as defined in reference (u).

34. Stewardship. The responsibility to inventory, manage, conserve, protect, and enhance natural resources entrusted to one's care in a way that respects the intrinsic value of those resources, and the needs of present and future generations.

35. Waters of the United States. As defined in references (y) and (z).

36. Watershed. An area where rain, snow, sediment, and dissolved material drains to a river, lake, wetland, or other common point body of water.

37. Wetlands. As defined in references (y) and (z).

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 2: MARINE CORPS POLICY

11200. GENERAL

1. Stewardship. Natural resources under Marine Corps stewardship and control shall be managed to support military readiness and be conserved, preserved, protected, rehabilitated, and enhanced. Land use practices and decisions shall be interdisciplinary and maintain military readiness, rely on scientifically sound conservation procedures and techniques, and employ scientific methods.

a. Procedures. Natural resources stewardship is an important and identifiable responsibility of command to maintain use of Marine Corps lands for mission requirements. Each installation shall establish procedures to ensure commanders on the installation are aware of:

(1) The condition of natural resources available to them;

(2) Any installation INRMP objectives and requirements applicable to them; and

(3) Any foreseeable or actual conflicts between their proposed actions and any installation INRMP objectives and requirements.

b. Management. Each installation shall possess a natural resources program manager with responsibilities including making the installation commander aware of the condition of installation natural resources, the INRMP's objectives, and the potential or actual conflicts between natural resources management and maintaining military readiness and the capability of installation lands to support the installation's mission. Natural resources management shall encourage installation natural resources staff to participate in natural resources training and seminars.

c. Proposed Actions. The Marine Corps acts responsibly and in the public interest to restore, improve, preserve, and properly use installation natural resources to provide a landscape suitable for military mission accomplishment. Marine Corps plans, actions, and programs shall consider installation natural resources stewardship. Each action sponsor of a proposed new or continuing action affecting installation natural resources shall coordinate the proposal with installation natural resources managers. Each action sponsor shall, to the extent practicable, implement the natural resources manager's recommendations for minimizing adverse impacts to installation natural resources.

d. Outsourcing. Managing (including planning, implementation, and enforcement functions) and conserving Marine Corps natural resources are inherently Governmental functions that shall not be outsourced by the Marine Corps under the DOD Commercial Activities Program or an installation operating services contracts.

e. Non-Installation Natural Resources. The Marine Corps shall apply stewardship to non-installation natural resources, including marine mammals, coral reefs, land, and water potentially affected by Marine Corps military training and testing.

2. Ecosystem Management. The Marine Corps shall incorporate ecosystem management in installation land use planning and land management. Installation ecosystem management shall use adaptive management techniques.

3. Natural Resources Management. Each Marine Corps installation shall:

a. Preserve access to air, land, and seaspaces to meet military readiness requirements;

b. Comply with applicable natural resources protection requirements (e.g., laws, E.O.s, and regulations);

c. Provide public access to installation lands, where practicable, provided such access does not conflict with military readiness and does not harm sensitive installation natural resources; and

d. Participate in regional ecosystem management partnerships provided such participation does not conflict with military readiness and does not harm installation natural resources.

4. INRMP Preparation

a. General

(1) Each INRMP shall assist the installation commander to conserve, preserve, protect, rehabilitate, and enhance installation natural resources while maintaining military readiness and the capability of installation lands to support the installation's mission. Installation INRMPs, including revisions, shall be prepared in cooperation with FWS and the appropriate fish and wildlife agency for the State in which the installation is located.

(2) An installation shall prepare an INRMP when it supports: endangered or threatenend species and/or critical habitat, substantial wetland areas, or large areas (e.g., 50 or more acres) used for military readiness purposes that require care (e.g., actions to prevent soil erosion).

(3) The entire INRMP - not just those portions of the INRMP that specifically address fish and wildlife management - shall be prepared in cooperation with FWS and the appropriate State fish and wildlife agency. This cooperation as "parties" begins at the INRMP's developmental stage and extends through its preparation, revision, and completion. Cooperation informs FWS and the State fish and wildlife agency of the installation's mission, invites them to consider solutions to natural resources management challenges, and expedites final INRMP coordination. Though not required per reference (aa), each installation should prepare its INRMP also in coordination with NOAA Fisheries when it supports trust resources under NOAA Fisheries jurisdiction.

(4) The final INRMP shall reflect the parties' agreement concerning conservation, protection, and management of fish and wildlife resources. While agreement is the goal of the entire plan, agreement among the parties is only required for those elements of the plan where the installation is subject to the legal authority (i.e., authority derived from a source other

than reference (aa), such as reference (i)) of FWS and state fish and wildlife agency to conserve, protect, and manage fish and wildlife resources.

(5) The final INRMP shall not enlarge or diminish the existing responsibility and authority of FWS or a State fish and wildlife agency concerning installation natural resources management. Although not anticipated, where FWS or a State fish and wildlife agency withholds their agreement with an INRMP based on objections to elements of the INRMP clearly not within the agency's authority, an installation may, notwithstanding the objections, finalize its INRMP and proceed to manage its natural resources in accordance with its terms.

b. Cooperation

(1) At least 30 days before preparing or revising its INRMP, each installation shall provide all internal and external stakeholders written (e.g., letter, email) notice of its intent to begin the action. External stakeholders include FWS, the State fish and wildlife agency, and organizations and individuals holding installation real property interests. When providing this notice to FWS and the State fish and wildlife agency, the installation shall request FWS and the State fish and wildlife agency to cooperate in the INRMP's preparation, revision, and completion. The installation shall also request that FWS and the State fish and wildlife agency identify their desired number of draft and final documents and the preferred form (e.g., electronic file, hard copy) of receiving them.

(2) The FWS office for initial installation contact is the local FWS field office (attn: Sikes Act Coordinator) because a field office must review the draft INRMP and provide preliminary agreement concerning the INRMP's conservation, protection, and management of fish and wildlife resources provisions before it may be reviewed in the FWS regional office and the FWS Regional Director takes final action on it. An installation may contact its FWS regional coordinator for help in contacting a FWS field office.

(3) At least 60 days before providing a draft INRMP for review, each installation shall provide FWS and the State fish and wildlife office written notice of its intent to take the action. When providing FWS and the State fish and wildlife office a draft INRMP for review, each installation shall

identify the review period in writing and request written acknowledgement of the draft's receipt within 15 days after its receipt.

(4) The FWS field office and the State fish and wildlife office should provide written comments to the installation within the requested review period and send copies of their comments to the Sikes Act Coordinator at the FWS regional office and the State fish and wildlife agency director's office.

(5) Each installation shall provide the public a meaningful opportunity to review and comment on the INRMP draft. Installations should afford this opportunity that, absent extraordinary circumstances, shall be a minimum of 30 days of public review and comment during the NEPA analysis of INRMP preparation or revision.

(6) Each installation shall consider all comments received and send the FWS regional office (exception: The Manager of the California/Nevada Operations office will coordinate on INRMPs for installations in California and Nevada) and the State fish and wildlife agency director's office a draft final INRMP for approval with a writing documenting the actions taken on all comments to previous INRMP drafts. Each installation shall request written acknowledgement of the draft final INRMP's and the written response to comments' receipt within 15 days after their receipt. Each installation shall also give the FWS field office a copy of the written response to comments.

(7) When forwarding the draft final INRMP for review and approval, each installation shall request the FWS regional office and the State fish and wildlife agency director's office to act on the draft final INRMP within 60 days after their agencies' receipt, unless the parties agree on a longer period. The FWS Regional Director's and the State fish and wildlife agency director's written concurrence constitutes the parties' agreement concerning the INRMP's conservation, protection, and management of fish and wildlife resources. The installation commander's signature on the final INRMP completes the INRMP approval process. However, the installation commander shall not sign the INRMP until the INRMP's NEPA analysis is complete.

(8) When INRMP development requires ESA Section 7 consultation, or when the installation requests its INRMP serve in lieu of designating critical habitat for an endangered or threatened species, the cooperation timeline discussed above may be modified for FWS, and FWS may comment apart from its INRMP review. When this occurs, the installation shall request, in writing, the FWS regional and field offices notify the installation of the appropriate review timeline within 15 days after their receipt of the draft INRMP.

(9) Unless otherwise agreed, if the FWS regional office and the State fish and wildlife agency director's office fail to act on the draft final INRMP within 60 days after their agencies' receipt, the installation shall request HQMC assistance in facilitating review.

c. Internal Coordination

(1) The installation INRMP shall be prepared or revised with the assistance of an installation multi-disciplinary team, including natural resources professionals, tenant military organizations, the installation comptroller, the facility planner, and counsel. This multi-disciplinary team shall ensure each INRMP is prepared or revised considering installation planning documents, including master plans, range plans, training plans, integrated cultural resources management plans, pest management plans, bird-aircraft strike hazard reduction plans, installation restoration plans.

(2) The installation INRMP shall briefly summarize the interrelationships with installation planning documents. It shall also identify where the documents may be obtained for additional information.

(3) If INRMP preparation or revision exceeds the installation's internal capability, the installation may request the cognizant Naval Facilities Engineering Command (NAVFACENGCOM) Engineering Field Division/Activity (EFD/EFA) or the USACE district to prepare the INRMP. The installation may also contract its INRMP preparation with other Federal or State agencies or private contractors, provided the installation INRMP preparation or revision continues with the assistance of an installation multi-disciplinary team.

d. Process. Installation INRMP preparation or revision shall use adaptive management techniques. An adaptive management approach to INRMP preparation or revision includes the following iterative steps:

- (1) Identify stakeholders;
- (2) Identify military readiness mission and other land use requirements;
- (3) Identify installation management requirements;
- (4) Identify natural resources management objectives;
- (5) Develop and evaluate natural resources management courses of action (with stakeholder participation);
- (6) Select and implement the selected natural resources management course of action;
- (7) Monitor and assess results; and
- (8) Revise natural resources management planning as necessary.

e. Consultation with American Indian Tribes

(1) Each installation shall consult with Federally Recognized Indian Tribes with interests that may be affected by INRMP preparation or revision. These interests vary. For example, the INRMP may affect traditional subsistence and medicinal resources and the character of sacred and religious sites. Indian tribes may have interests in timber thinning, prescribed burning, recreational access to lands, and agricultural practices. A treaty may also affect INRMP development, such as when an Indian tribe has guaranteed access to fish, game, and other natural resources on or adjacent to the installation.

(2) Procedures for consulting with Federally Recognized Indian Tribes are found in Chapter 8. During consultation, an Indian tribe may raise any number of matters, such as identifying installation areas and resources important to the tribe, providing advice on conservation needs and priorities, and sharing their specialized knowledge of installation natural

resources. Consultation may require the installation INRMP to preserve American Indian tribal interests, such as managing culturally important game and plant species (e.g., restricting herbicide use in gathering areas). In consultation, native Hawaiian organizations are not afforded the same legal status as Federally Recognized Indian Tribes or Alaska Native governments. However, an installation shall seek comments from native Hawaiian organizations with interests that may be affected by INRMP preparation or revision.

f. INRMPs and Critical Habitat Designation

(1) Reference (i) permits Marine Corps lands to be excluded from critical habitat designation when such lands are managed in accordance with an approved INRMP that provides a benefit to the endangered or threatened species. Accordingly, each installation possessing endangered or threatened species, candidate species, or unoccupied habitat where critical habitat may be designated, shall evaluate within the INRMP the benefits of managing the species and/or habitat. This evaluation shall be clearly identifiable in the INRMP and should be identified in the INRMP's Table of Contents.

(2) Each installation evaluating the benefits of managing the species and/or habitat shall use the following FWS criteria to determine whether an INRMP provides a benefit to the endangered or threatened species:

(a) The INRMP provides a conservation benefit to the species. The cumulative benefits of the management activities identified in the INRMP, for the length of the plan, must maintain or provide for an increase in a species' population, or the enhancement or restoration of its habitat within the area covered by the INRMP (i.e., those areas deemed essential to the conservation of the species). A conservation benefit may result from reducing fragmentation of habitat, maintaining or increasing populations, ensuring against catastrophic events, enhancing and restoring habitats, buffering protected areas, or testing and implementing new conservation strategies.

(b) The INRMP provides certainty that it will be implemented. Persons charged with INRMP implementation are capable of accomplishing its objectives and have adequate funding for it. They have the authority to implement the INRMP and have obtained all the necessary authorizations or approvals.

An implementation schedule (including completion dates) for the conservation effort is provided in the INRMP.

(c) The INRMP provides certainty that the conservation effort will be effective. The following INRMP components will be evaluated when determining the conservation effort's effectiveness: (i) biological goals (i.e., broad guiding principles for the program) and objectives (i.e., measurable targets for achieving the goals); (ii) quantifiable, scientifically valid parameters for demonstrating achievement of objectives, and standards for these parameters by which progress will be measured; (iii) provisions for monitoring and, where appropriate, adaptive management; (iv) provisions for reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort; and (v) a duration sufficient to implement the plan and achieve the benefits of its goals and objectives.

g. Annual Reporting

(1) Before 1 January of the current calendar year, each installation shall annually send FWS and the State fish and wildlife agency a written report of INRMP implementation actions taken during the preceding fiscal year. When making this report, each installation shall request comments from FWS and the State fish and wildlife agency about INRMP implementation effectiveness and whether they believe the INRMP is being fully implemented. Each installation with an INRMP is also required to use the Department of the Navy Natural Resources Metrics Builder as the tool for accomplishing the required INRMP annual review. The Metrics Builder is a web-based tool that includes seven-focus areas. Key focus areas are INRMP implementation, partnership effectiveness, INRMP team adequacy, impact on the mission, status of Federally-listed species and habitat, ecosystem integrity, and fish and wildlife management and public use. The objectives of the key focus areas are as follows:

(a) Assessment of INRMP Implementation. Determine if INRMP projects are properly developed and entered into the system for resourcing, document funding received, projects accomplished, and whether they meet expectations.

(b) Assessment of Listed Species and Critical Habitat. Determine if conservation efforts are effective and if

the INRMP provides the conservation benefits necessary to preclude designation of critical habitat.

(c) Assessment of Partnership Effectiveness. Determine if the partnership between the INRMP team is cooperative and resulting in the effective implementation of the INRMP.

(d) Assessment of Fish and Wildlife Management and Public Use. Rate the availability of public recreational opportunities such as fishing and hunting, given the existing security requirements for the installation.

(e) Assessment of Team Adequacy for Natural Resources Management. Determine if the Natural Resources Team is adequately supported and appropriately trained to implement INRMPs.

(f) Assessment of Ecosystem Integrity. Determine the integrity of the various installation habitats through the development of a simple protocol, using "indicator species" or possibly just the review team's subjective reasoning and consensus.

(g) Assessment of INRMP Impact on the Installation Mission. Measure the level to which existing natural resources compliance requirements and associated actions support the installation's ability to sustain the current operational mission.

(2) Before 15 December of the current calendar year, each installation shall annually, for a reporting period covering the preceding fiscal year, provide CMC (LFL) the following information for subsequent use in reporting progress towards meeting environmental goals:

- (a) The installation name and applicable state(s);
- (b) The fiscal year the most recent INRMP was completed or revised;
- (c) The date planned for the next INRMP revision;

(d) Whether and how the most recent INRMP was coordinated with appropriate operations and training personnel and tenant military organizations;

(e) Whether projects were added to the most recent INRMP from operations and training personnel and tenant military organization comments;

(f) Whether comments about INRMP implementation effectiveness were requested from operations and training personnel and tenant military organizations;

(g) Whether comments about INRMP implementation effectiveness were received from operations and training personnel and tenant military organizations;

(h) Whether FWS agreed to any of the most recent INRMP's elements concerning conservation, protection, and management of fish and wildlife resources;

(i) Whether projects were added to the most recent INRMP from FWS comments;

(j) Whether comments about INRMP implementation effectiveness were requested from FWS;

(k) Whether comments about INRMP implementation effectiveness were received from FWS;

(l) Whether the State fish and wildlife agency agreed to any of the most recent INRMP's elements concerning conservation, protection, and management of fish and wildlife resources;

(m) Whether projects were added to the most recent INRMP from State fish and wildlife agency comments;

(n) Whether comments about INRMP implementation effectiveness were requested from the State fish and wildlife agency;

(o) Whether comments about INRMP implementation effectiveness were received from the State fish and wildlife agency;

(p) Whether the most recent INRMP contains a list of projects necessary to meet INRMP goals, objectives, and timeframes for implementing projects to conserve, preserve, protect, rehabilitate, and enhance installation natural resources;

(q) The following INRMP implementation FY funding matters:

1. Funding required for Class 0 and 1 projects;
2. Amounts funded for Class 0 and 1 projects;
3. Funding required for Class 0 and 1 projects;
4. Amounts funded for Class 2 and 3 projects;
5. Funding requested for Class 2 and 3 projects;

6. A list of unfunded Class 0 and 1 projects greater than \$50K; and

7. An explanation of why each Class 0 and 1 project greater than \$50K is unfunded;

(r) Whether the installation received public comment on the draft of the most recent INRMP; and

(s) Whether projects were added to the most recent INRMP from public comments.

h. Compliance with Other Environmental Requirements. INRMP development may affect natural resources other than endangered and threatened species (e.g., wetlands, cultural resources, surface water, and air) and may require other Federal, State, or local environmental compliance regulatory involvement. Each installation shall, as necessary, consult with environmental compliance regulators early in the INRMP preparation or revision process (e.g., submit the INRMP to the state Historic Preservation Officer during Section 106 consultation in compliance with reference (ab)). Environmental compliance consultation requirements (e.g., permitting or other approval) shall, to the extent practicable, be complete before INRMP completion.

i. Public Availability. The final installation INRMP is generally subject to public disclosure. Unclassified portions of final INRMPs shall be available electronically via the World Wide Web, CD-ROM, or other similar means. All INRMPs should undergo Freedom of Information Act review, particularly for national security and sensitive information, before being disclosed to the public. For example, the specific locations of natural and cultural resources subject to pilfering or vandalism should not ordinarily be disclosed.

5. Coastal Zone Management

a. General. Marine Corps activities (e.g., operations, projects, and programs undertaken by or on behalf of the Marine Corps) that affect any land, water use, or natural resource of the coastal zone shall be carried out in a manner consistent, to the maximum extent practicable, with the enforceable policies of the coastal state's approved management program.

b. Wetlands Protection. Installations and units shall minimize the loss or degradation of coastal wetlands, enhance the natural value of wetlands, and protect water quality. Each installation shall support State development and implementation of any coastal nonpoint pollution control program affecting Marine Corps lands by identifying nonpoint sources, commenting on proposed management measures, and coordinating nonpoint source compliance efforts with the state.

6. Partnerships. Installations shall encourage the use of partnerships and volunteers, under the direction and approval of installation natural resources personnel, in connection with promoting natural resources management on the installation and facilities and programs for public outdoor recreation. Examples of effective partnership programs include Coastal America, Partners In Flight, Student Conservation Association, and the Chesapeake Bay Initiative. Each partnering or cooperating agreement in which installations formally participate must recognize that:

a. The primary Marine Corps national defense mission is to organize, train, and equip to provide Fleet Marine Forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may

be essential to the prosecution of a naval campaign. Marine Corps training on installations is vital to fulfilling this mission;

b. Actions specified in partnership or volunteer agreements shall not detract from Marine Corps national defense missions;

c. Installation lands shall not be used for mitigating off-installation, nonmilitary action impacts to the environment off the installation; and

d. Installation lands shall not be set aside as permanent environmental preserves. The Marine Corps must maintain the flexibility to adapt its installation land use to respond to evolving United States' national defense strategy.

7. Exotic Species. Installations shall restrict the introduction of exotic species into any natural ecosystem, and exotic species shall not be deliberately introduced into any installation natural ecosystem unless the installation determines in accordance with NEPA process that such an action would have no adverse impact. Exotic species control and removal measures, when determined to be practical and environmentally advantageous, shall be included in the installation INRMP.

8. Natural Resources Program Funding

a. Budgeting. Installation commanders shall ensure natural resources management funding is included within their installation Program Objective Memorandum submittals. Funds from other sources (e.g., agricultural outleasing, forestry, and hunting and fishing user fees) may also be available to supplement natural resources management program funding. Installations should not rely on other funding sources, however, because their availability fluctuates and is beyond DOD control.

b. INRMP Execution. The installation commander's signature on the final INRMP completes the INRMP and constitutes a commitment to seek funding and execute, subject to the availability of funding, all "must fund" projects and activities in accordance with the timeframes identified in the INRMP.

9. Natural Resources on Installations Identified for Closure. The disposition of natural resources on installations proposed

for closure shall be considered in installation disposal and reuse NEPA analysis. Conservation easements may be granted on closing-installation real property with significant ecological, cultural, scenic, recreational, or educational value.

The Marine Corps shall, in accordance with installation closure and reuse requirements, consider transferring real property on closing installations to conservation agencies or other organizations.

11201. LAND MANAGEMENT

1. Land Management. As applicable, installation INRMPs shall address the conservation, preservation, protection, rehabilitation, and enhancement of ecosystems, soils, water resources, wetlands and watersheds, estuaries, soil and water conservation, biodiversity, semi-improved and unimproved grounds maintenance, nonpoint source pollution control, landscaping, agricultural uses and potential uses, fire management, insect and disease management, range/grassland conditions and trends, critical or unique coastal barrier systems, critical habitats, and other special interest areas and the impact on natural resources from maintaining military readiness and the capability of installation lands to support the installation's mission. Installation INRMPs and the installation master plan shall also identify the boundaries of endangered and threatened species habitat, wetlands, and other geographically specific areas (e.g., highly erodible soils) important to natural resources stewardship.

2. Use of Native Plants in Landscaping. Each installation shall use environmentally and economically beneficial landscaping practices. Each installation shall, to the extent practicable, use regionally-native plants for landscaping, soil conservation, water conservation projects, and other natural resources management projects. Guidance for implementing this policy is contained in references (ac) and sections 2(d) and 3(a) of reference (ad).

3. Wetlands. In order to comply with the national policy to permit no overall net loss of wetlands, installations and units shall, as applicable:

a. Avoid, to the maximum extent practicable, wetlands destruction or degradation. Any installation or unit proposed action that cannot be sited to avoid a wetland shall be designed to minimize wetland degradation and shall include regulatory agency-required compensatory mitigation. Marine Corps land, lands of other entities, and wetland banks operated by governmental agencies or private organizations may be used for Marine Corps project compensatory mitigation when regulatory authority authorizes such use.

b. Request the Assistant Secretary of the Navy (Installations and Environment) approve/disapprove all installation permanent wetlands resource area proposals. Any installation agreement to a deed restriction on government property for the purpose of maintaining wetlands in perpetuity, however, requires property disposal authority delegated from the General Services Administration. Headquarters Marine Corps, Facilities and Services Division (CMC (LF)) shall approve/disapprove each non-Marine Corps entity request to mitigate a non-Marine Corps proposed project on Marine Corps land. This approval/disapproval is based on the installation's ability to maintain military readiness and support the installation's mission requirements, the nexus of the proposed project to the land at issue, and whether granting the request is in the best interests of the United States.

c. Evaluate impact of proposed actions significantly affecting wetlands pursuant to reference (ae) (See Chapter 12 of this Manual).

d. Map installation wetlands boundaries and distribute maps depicting them to facility planners, range control, installation tenants, and other potential users.

e. Maintain installation technical expertise for wetlands protection, management, identification, surveying, and mapping.

f. In all installation master plans, identify land suitable for preserving, creating, enhancing, and restoring wetlands. The Marine Corps encourages installation wetlands creation or enhancement projects and wetland banking, where compatible with maintaining military readiness and the capability of installation lands to support the installation's mission.

4. Nonpoint Source Pollution. Installations shall develop and implement nonpoint source pollution management programs emphasizing nonpoint source pollution prevention from ground-disturbing actions (e.g., military training and natural resources management).

5. Soil Conservation. Installations shall incorporate soil and water conservation measures and landscaping with native vegetation, as appropriate, in the preliminary engineering, design, and construction of facilities involving ground disturbance. They shall also require erosion prevention and control measures in the specifications for all ground-disturbing construction projects. Erosion prevention and control measure costs shall also be specifically identified in new project investigations and preliminary engineering reports.

6. Agricultural Outleasing

a. Outlease Agent. The NAVFACENGCOM is the Marine Corps agricultural outleasing agent, and installations may obtain agricultural outleasing assistance from the cognizant NAVFACENGCOM EFD/EFA. The EFD/EFA negotiate, execute, and administer real estate instruments, appraise land, and provide cadastral support.

b. Money Rentals. The NAVFACENGCOM shall deposit agricultural outlease money rentals in a special account in the Treasury to be used in accordance with reference (g) and as directed in references (af) and (ag).

c. Outlease Plan. Each agricultural outlease shall contain an outlease plan. The outlease plan shall contain:

(1) As part of the outleasing contract, a soil and water conservation plan that:

(a) Establishes specific practices and/or projects and an implementation schedule to be performed by the leasee to

protect and improve the productivity and fertility of the land;
and

(b) Requires restoration of the leasehold upon
termination of the lease.

(2) Agricultural and pest management practices for
maintaining compliance with State and Federal regulatory
requirements and consistency with maintaining military readiness
and the capability of installation lands to support the
installation's mission.

d. Other Instruments. The installation CG/CO shall sign
all outlease contracts, supplemental outlease agreements, and
agricultural outlease plans.

e. NEPA Compliance. NEPA compliance shall be complete
before the installation commander signs the outlease contract.

7. Agricultural Outlease Proceeds. Installation agricultural
outleasing administrative expenses that may be funded with money
rental proceeds are generally limited to supervisory, technical,
clerical, legal, and accounting costs attributable to
agricultural outleasing and financing of installation multiple
land use management programs. These expenses, which include
initiating new leases and administering existing leases, are
prioritized in the following order:

a. Costs, including personnel-related costs, directly
attributable to agricultural outlease management;

b. Costs of developing and implementing the INRMP and
supporting natural resources management programs;

c. Costs of improving or rehabilitating agricultural
outlease land and natural resources to enhance agricultural
productivity;

d. Costs of improving or rehabilitating land and water
resources for soil and water conservation;

e. Costs of improving land and water resources for
enhancing fish and wildlife habitat;

f. Costs of improving land and water for outdoor natural resources recreational use;

g. Costs of travel and training supporting integrated natural resources management programs; and

h. Procurement, maintenance, and repair costs for equipment and materials supporting integrated natural resources management programs and projects.

8. Agricultural Outleasing Fund Provisions. CMC (LF) provides installations with agricultural outlease funds to support natural resources management operations. These funds shall only be used for natural resources management operations and shall not be transferred to other accounts or used for any other purpose. Installation natural resources management expenditures shall be consistent with the INRMP. Natural resources management program expenses that may be funded with agricultural outlease money rental proceeds do not include:

a. Mitigation or compensation for damages to natural resources caused by construction projects or military activities;

b. Costs of the production of forest products (e.g., lumber);

c. Costs of recurring grounds maintenance on improved and semi-improved grounds (e.g., mowing, fertilizing, irrigating, seeding, pruning, ornamental planting, and pest control);

d. Archaeological/cultural resources survey costs and other cultural resources management costs unrelated to natural resources management;

e. Costs of animal damage control unrelated to natural resources management. However, costs of controlling or reducing bird and animal aircraft strike hazards are not excluded; and

f. General environmental and facilities organizational support costs unrelated to natural resources management.

11202. FISH AND WILDLIFE MANAGEMENT

1. Endangered and Threatened Species

a. General. The Marine Corps shall implement a fish and wildlife management program that complies with ESA consultation requirements.

b. Recovery. The Marine Corps shall enhance the recovery of endangered or threatened species and their habitats.

c. Candidate Species. Each installation shall inventory and monitor candidate species to evaluate and document any effects that military activities may have upon them.

d. State-Listed Species. Reference (i) does not protect state-listed species. However, each installation should inventory and monitor them because reference (ae) may require an installation or unit consider a proposed action's impacts on state-listed species and state laws and regulations may govern their possession, propagation, sale, or taking on the installation.

2. Management

a. Cooperative Agreements. In addition to the use of partnerships and volunteers to promote natural resources management on the installation, installation CGs/COs may execute cooperative agreements with other State and local agencies to exchange information, conduct research, or study projects contributing to installation INRMP preparation and implementation.

b. Natural Resources Law Enforcement

(1) Enforcing natural resources protection laws, including laws protecting outdoor recreational activities depending on natural resources, shall be an integral part of the installation natural resources management program. The installation environmental or natural resources manager shall direct natural resources law enforcement and installation conservation law enforcement officer conduct.

(2) Installations permitting hunting, fishing, and/or trapping shall issue regulations for harvesting fish and

wildlife and develop procedures for enforcing applicable laws and regulations.

c. Hunting, Fishing, and Trapping Permit Fee Deposits.

Each installation shall deposit hunting, fishing, and trapping permit fee proceeds into the Budget Clearing Account (Suspense) Navy 17X5095. The permit fee proceeds shall be delivered to the local disbursing officer for deposit, supported by an original and three copies of the Cash Collection Voucher (DD Form 1131) containing the following accounting data:

(1) Marine Corps C 17X5095.27XX. (The last two digits of the subhead (i.e., XX) reflect the fiscal year.);

(2) Unit Identification Code (UIC) and the name of the generating installation;

(3) The stated purpose (e.g., "proceeds collected from the sale of installation hunting and fishing access licenses"); and

(4) The collection date (must be the date payment is received).

Each installation shall also forward a copy of the DD Form 1131 to CMC (LF).

d. Hunting, Fishing, and Trapping Permit Fee Use. Permit fee proceeds may be available to reimburse installation fish and wildlife enhancement program expenses. Each installation shall request authority from CMC (LF) to use these funds, and each request shall include:

(1) A financial summary of the installation's deposits to the Budget Clearing Account by prior fiscal year and current fiscal year;

(2) The unobligated balance of the installation's deposits to the Budget Clearing Account brought forward from the preceding fiscal year (actual); and

(3) An estimate of fees to be collected during the remaining current and the next fiscal years.

e. Each installation commander shall implement a fish and wildlife management program and ensure the program expenses funded with permit fee proceeds do not exceed the amount of permit fee proceeds authorized by CMC (LF) to be available to the installation from the Budget Clearing Account. Each installation's fish and wildlife permit fee receipts and expenditures accounting shall comply with references (ah) and (ai).

f. Private Organizations

(1) Installation rod and gun clubs, conservation organizations established as part of the command recreation program, and other private organizations may volunteer services to promote installation natural resources management and facilities and programs for public outdoor recreation on the installation.

(2) Membership in a private organization shall not be a prerequisite to hunt, fish, or trap on an installation. Similarly, an installation's acceptance of a private organization volunteered services supporting installation natural resources management and facilities and programs for public outdoor recreation on the installation shall not require or be conditioned on excluding the public in any way from hunting, fishing, or trapping on the installation.

(3) Any private organization membership fee shall exclude the cost of obtaining an installation hunting, fishing, or trapping permit on the installation when the installation permit fee is based, in part, under the provisions of the installation's INRMP.

(4) Installations shall not solicit or accept private organization representation before regulatory authority.

(5) Private organization programs and projects on the installation shall comply with the installation INRMP and other Base orders and instructions.

11203. FOREST MANAGEMENT

1. Management. Each installation shall manage its forest in accordance with the installation INRMP.

2. Proceeds. Each installation shall identify its forest product sale proceeds with the applicable cost accounting code.

3. Forest Management Installations

a. Installations. The following installations may implement a Forest Management Program:

- (1) MCB Quantico, VA;
- (2) MCAS Cherry Point, NC;
- (3) MCB Camp Lejeune, NC (including MCAS New River, NC);
- (4) MCAS Beaufort, SC;
- (5) MCRD Parris Island, SC; and
- (6) MCLB Albany, GA.

b. Forest Product Funds. Each installation implementing a forest management program may sell timber and other forest products. Subject to the availability of funds, CMC (LF) shall reimburse installations for their costs for the production of forest products. These funds shall only be used for reimbursable forest product costs and shall not be transferred to other accounts or used for any other purpose. Installation forest product expenditures shall be consistent with the INRMP.

4. Forestry Expenditures. Installations shall plan and report reimburseable forest product costs using Cost Account Codes 3B10 through 3B70 in compliance with reference (aj). Reimburseable costs of expenditures shall be directly related to the economic production of forest products and may include:

- a. Timber stand improvement;
- b. Reforestation;
- c. Forest protection;
- d. Timber access road maintenance;
- e. Timber sale administration;

- f. Timber management; and
- g. Equipment purchases.

5. Revenue Deposits. Installation forest product sale proceeds shall be deposited into the Budget Clearing Account (Suspense) Navy (17F3875). The forest product sale proceeds shall be delivered to the local disbursing officer for deposit, supported by an original and three copies of the Cash Collection Voucher (DD Form 1131) that must contain the following accounting data:

- a. Marine Corps C 17F3875.27XX. (The last two digits of the subhead (i.e., XX) reflect the fiscal year.);
- b. UIC and name of the generating installation;
- c. The stated purpose (e.g., "proceeds collected from the sale of forest products"); and
- d. The collection date (must be the date payment is received). Each installation selling forest products shall also forward a copy of the DD Form 1131 to the CMC (LF).

6. Reporting Requirements. The Forestry Program Report is required by the CMC (LF) for the installations listed above. Report Control Symbol DD-5090-05 is assigned to this reporting requirement.

11204. WILDLAND FIRE MANAGEMENT

1. Integrated Wildland Fire Management Policy. The Marine Corps adopts the following policies and standards by reference:

- a. The Federal Wildland Fire Management Policy and Program Review of 1995 (as updated, Jan 01),
- b. Interagency Strategy for the Implementation of the Federal Wildland Fire Management Policy, June 20, 2003,
- c. The National Wildfire Coordinating Group (NWCG), National Interagency Incident Management System Wildland Fire Qualification System Guide (PMS 310-1/NFES 1414),
- d. The National Fire Protection Association (NFPA) Standard 1051 - Standard for Wildland Firefighter Professional

Qualifications, NFPA Standard 1143 - Standard for Wildland Fire Management, and NFPA Standard 1144 - Standard for Protection of Life and Property from Wildfire,

e. DOD Instruction 6055.06, 21 Dec 06, DOD Fire and Emergency Services Program, and

f. Homeland Security Presidential Directive-5 (HSPD-5), National Incident Management System (NIMS).

2. Applicability

a. Installations with burnable acreage, or bordered by burnable acreage, will develop and implement a Wildland Fire Management Plan (WFMP). The WFMP will be incorporated into or consistent with the INRMP and the Integrated Cultural Resources Plan.

b. Installations and/or facilities with minor wildfire hazard and/or prescribed burning activities may be exempted from WFMP requirements by CMC (LF). WFMP exemption requests should explain the outcome of the risk analysis conducted by the installation or command (e.g., under normal or worst case conditions, wildfires would rarely threaten people or facilities).

3. Program Authority

a. The installation commander or appropriate designee, defines the roles and responsibilities for wildland fire management on the installation, plans and programs resources, and will designate an installation Wildland Fire Program Manager in either the Fire and Emergency Services (F&ES) or Conservation/Natural Resources organization.

b. The installation commander, or appropriate designee, approves the installation WFMP.

c. The installation Wildland Fire Program Manager, in coordination with the installation Conservation/Natural Resources Manager and/or F&ES Fire Chief, is responsible for development of the WFMP. Additionally, the Wildland Fire Program Manager, in coordination with the installation Conservation/Natural Resources Manager and/or the F&ES Fire Chief, reviews and approves burn plans for prescribed fires

consistent with the WFMP, the INRMP, and other applicable operating instructions.

d. The installation commander, or appropriate designee, approves the deployment of Marine Corps civilian firefighters to any off-installation incident. For F&ES firefighters, the installation commander may establish pre-deployment approval for responses covered by established mutual aid agreements.

4. Wildland Fire Organization Standards. Marine Corps organizations involved in wildland fire activities will incorporate NWCG and NIMS standards into their organizational structure when necessary to accommodate cooperation and integration with other Federal, State, and local wildland fire organizations across jurisdictional boundaries.

5. Training and Fitness Standards for Wildland Fire Management Personnel

a. Training Standards

(1) All civilian, contractor, and emergency services personnel involved in wildland fire management must be trained for their expected level of involvement in the wildland fire organization. Training shall meet the applicable NFPA or NWCG Standards for wildland fire activities. State training by the State in which the installation is located is also acceptable if appropriate for the personnel's expected level of involvement in wildland fire activities.

(2) Personnel in the fire protection and prevention GS-081 job series will meet the training standards specified in references (ak) and (al), equivalent NWCG Driver/Operator Professional Qualification System Guide (PMS 310-1/NFES 1414) training or equivalent State training requirements. Personnel who have learned skills from outside wildfire suppression, such as agency specific training programs or training and work in prescribed fire, structural fire, law enforcement, search and rescue, etc. may not be required to complete specific courses in order to qualify in a wildland fire position. However, position task books must be completed for documentation of the training.

(3) Personnel in the natural resources job series (GS-401 thru GS-499), cultural resources (GS-0193), and natural/cultural resources contractors with jobs requiring

wildland fire suppression responsibilities must meet either the certifications as per references (ak) and (al) or the equivalent NWCG Wildland Fire Qualification System Guide (PMS 310-1/NFES 1414) certifications.

(4) Personnel mobilized to participate in wildland fire management activities on Federal properties not under DOD jurisdiction, through the National Inter-Agency Fire Center (NIFC) and the Joint Director of Military Support (JDOMS) requests (see paragraph 12), must be certified for the expected level of involvement under NWCG standards. GS-081 job series and DOD contractor personnel that seek wildland fire certifications other than the NFPA Job Levels listed in Table 11.1 must comply with the appropriate NWCG criteria.

(5) Position descriptions for new hires that will participate in wildland fire activities will reflect the expected level of involvement and required training. Position descriptions for natural/cultural resources personnel with wildland fire management duties must state if the position qualifies the position holder as a primary or secondary wildland firefighter, as described in reference (am). Natural resources personnel not classified as a primary or secondary wildland firefighter may perform collateral duties in wildland fire management activities as qualified.

(6) Personnel holding positions as primary and secondary wildland firefighters will be certified, as a minimum requirement, in Cardio-Pulmonary Resuscitation and Standard First Aid by the American Red Cross or comparable certification authority.

(7) HQ Air Force Civil Engineering Support Agency/Civil Engineering Fire Protection is the executive agent for the DOD F&ES Certification Program and will be responsible for issuing, maintaining, and tracking of NFPA wildland firefighter certifications for levels identified in Table 11-1. The installation Wildland Fire Program Manager is responsible for issuing, signing, and tracking of NWCG Qualification Card/Incident Command System (also known as "red cards") for installation personnel. Installations are encouraged to partner with NWCG units to issue, maintain, and track qualifications and to conduct and receive training.

b. Physical Fitness Standards

(1) The installation WFMP will describe a measurable and objective medical examination or physical fitness test (step-test, pack test, etc.) that will be used to establish fitness standards for personnel that participate in wildland fire management activities. All personnel involved in wildland fire activities must meet the medical examination or physical fitness test annually. NWCG publications, references (an), (ao), (ap), and (aq), provide guidance for establishing physical fitness standards for wildland fire management activities.

The WFMP will describe the procedures for notifying affected employees of the exam or test and how it relates to being qualified for their jobs, how employees are to be certified as fit to train for and take the physical fitness test, and the repercussions of failing the exam or test and procedures for re-examination or re-testing. All required exams and tests will be paid for by the Government.

(2) Personnel whose job description requires participation in wildland fire management activities as a primary or secondary firefighter on Marine Corps installations will meet the pre-employment medical and physical examination criteria contained in reference (ar).

6. Wildland Fire Management Plan Components. The installation WFMP should be developed to reduce wildfire potential, protect and enhance valuable natural resources, integrate applicable State and local permit and reporting requirements, and implement ecosystem management goals and objectives on Marine Corps installations. The WFMP will directly support the Marine Corps mission and be consistent with installation emergency operations plans.

As a minimum, the installation WFMP will include the following components:

a. Goals and Objectives. The WFMP shall establish goals and objectives for the wildland fire management program on the installation. The WFMP will identify all wildland fire management strategies including military training availability,

ecosystem sustainability, and protection of F&ES personnel and the public.

b. Organizational Structure. The WFMP will describe the wildland fire management organizational structure and will indicate its position within the installation command structure. The organizational structure for wildland fire activities will be consistent with NWCG and NIMS Incident Command System standards.

c. Wildland Fire Preparedness. The WFMP will include wildland fire preparedness, preplanned dispatch for both initial and extended attack, and prescribed fire and prevention per reference (as). The minimum level of service for wildfire suppression shall consist of a direct wildland attack capability within 10 minutes of arrival of the initial wildland fire company at the fire scene.

d. Training Program. Include procedures to train all personnel involved in wildland fire management activities to the appropriate NWCG PMS qualification documents (PMS 310) or reference (ak) as described in paragraph 6 of this policy.

e. Interagency Cooperation and Mutual Aid Agreements. Installations are encouraged to develop regional partnerships for wildland fire management support by means of reciprocal agreements with other Federal, State, local and private entities to share human, logistical, and operational resources. Emergency assistance and mutual aid agreements will conform to the guidelines stated in references (h) and (at). Include interagency agreements and mutual assistance agreements in the WFMP as references or appendices.

f. Smoke Management and Air Quality. Describe the mission, environmental, human health and safety factors specific to the installation and region that affect smoke management and identify necessary mitigation practices. Refer to reference (au) for guidance on factors to consider.

g. Safety and Emergency Operations. The WFMP must reflect that firefighter and public safety is the first priority in every wildland fire management activity. The WFMP will identify installation-specific safety and emergency operations protocols. The WFMP will require that all personnel involved in direct wildland fire management activities are outfitted with

protective clothing and equipment that meets NFPA 1977 - Standard on Protective Clothing and Equipment for Wildland Fire Fighting.

h. Risk Assessment/Decision Analysis Processes. Sound operational risk management will be the foundation of the Wildland Fire Management Plan. Identify the indices and/or fire danger rating system that will be used to assess wildfire risk and potential fire behavior. The indices and/or fire danger rating system must adequately describe fire hazard, severity, intensity, and other significant factors affecting the protection of life and property. Identify the environmental factors that will be measured prior to ignition of a prescribed fire treatment. Identify normal and unique weather patterns that affect fire behavior on the installation.

i. Wildland Fire History. Include in the WFMP an analysis of both recent and long-term wildland fire history on the installation and in the region.

j. Natural and Cultural Resources Considerations Checklist. Provide a checklist in the WFMP that can be used to identify sensitive natural and cultural resources that should be given consideration before conducting any wildland fire management activity.

k. Mission Impact Considerations. Identify the potential impacts to the installation mission (positive and negative) that may occur as a result of implementation of the WFMP.

l. Wildland Fuel Factors. Identify the effects of installation fuel types and fuel loads on fire behavior. Display data on fuel types and fuel loading by maps or other means. Conduct fuel surveys to collect wildland fire fuels data if necessary.

m. Monitoring Requirements. Identify the environmental factors that will be monitored and the frequency of monitoring required for both a wildfire and prescribed fire. Identify post-fire assessment protocols for both wildfire and prescribed fires.

n. Public Relations. Identify a protocol for notifying the media and affected persons for wildfire incidents and prescribed burning activities.

o. Funding Requirements. Identify the funding requirements to train and equip wildland fire management personnel to ensure safe, effective, and cost-efficient operations in support of the Wildland Fire Management Plan. Identify the appropriate sources of funding for wildland fire activities.

(1) The costs associated with developing and drafting installation WFMPs or amending existing WFMPs in order to comply with this order will be funded by the Operation and Maintenance, Marine Corps account.

(2) Wildland fire management activities that are conducted for the purpose of compliance with environmental laws and regulations will be supported by conservation funds.

(3) Wildfire suppression, prescribed burning and other wildland fire management activities to support training, range use, munitions testing and evaluation, or other mission activity will be supported by the responsible activity through direct funding or reimbursement.

(4) Funding for wildfire prevention and fuels management for hazard reduction is an installation operations and maintenance responsibility.

(5) In accordance with reference (1), expenditures for the protection and maintenance of commercial forests can be reimbursed by proceeds derived from the sale of forest products; however, the total reimbursement for forest management obligations related to wildland fire management cannot exceed the forest management program proceeds in a given fiscal year on the installation.

p. Personnel Training and Certification Standards and Records. The WFMP will identify the staffing requirements, according to specific certification and training requirements, for the tasks associated with wildland fire management activities on the installation. Current training and qualification records will be maintained for all personnel involved in wildland fire management activities.

q. NEPA process for WFMP Implementation. Actions proposed in any WFMP may constitute a major Federal action as defined in section 18, paragraph (b)(2) of reference (av). Major Federal

actions must be evaluated for potential environmental effects. The NEPA document prepared for the installation INRMP may also include and provide analysis of the WFMP.

7. Prescribed Fires

a. Use of Prescribed Fire on Marine Corps Installations. Prescribed fire can be used as a management tool to attain the goals and objectives of the INRMP and to support other Marine Corps mission needs. Two types of prescribed fires are recognized: 1) those ignited by qualified personnel in accordance with an approved site-specific burn plan, and 2) wildfires managed under prescribed conditions as addressed in an approved WFMP.

b. Site-Specific Burn Plans. A site-specific burn plan will be developed for each prescribed burn conducted on Marine Corps property. The installation WFMP will identify the required components for site-specific burn plans. At a minimum, burn plans will include the following:

- (1) Burn objectives;
- (2) Acceptable weather and fuel moisture parameters;
- (3) Required personnel and equipment resources;
- (4) Burn area map;
- (5) Smoke management plan;
- (6) Safety considerations;
- (7) Pre-burn authorization/notification checklist;
- (8) Coordination to consider mission, wildlife, endangered species, cultural resources, and noxious weed effects;
- (9) Alternative plan - to cover plan of action if wind or weather conditions change; and
- (10) Plan for analysis of burn success and identification of lessons learned.

c. Use of Fire Breaks. When planning for prescribed fires, and when suppressing wildfire, utilize natural and existing man-made features whenever possible. Fire breaks, if required, must be constructed, maintained, or rehabilitated to prevent erosion.

8. Labor Relations. In the implementation of this policy guidance, activities shall ensure compliance with their statutory labor relations obligations.

9. Mutual Aid

a. Following proper coordination with the Office of the Secretary of Defense through United States Northern Command (NORTHCOM) and JDOMS, military assistance (both military and civilian personnel) may be furnished to the NIFC in national fire emergencies pursuant to reference (aw) and subsequent modifications. Support for wildland fire incidents is reimbursable under reference (ax). Procedures for deployment of civilian personnel are provided in paragraph 12.

b. Local area assistance included in existing agreements may be authorized by the installation commander. Immediate response requests will be handled per references (ay).

10. Reporting

a. Each installation will report to HQMC Natural Resources Manager, annually, by 31 December, the number of installation acres burned by wildfires and the number of acres prescribed burned for the just completed fiscal year. All F&ES responses to wildland fire incidents shall be reported to the National Fire Incident Reporting System per reference (h).

b. Report all requests for civilian firefighter assistance or deployment per paragraph 12.

11. Compliance. Compliance with this policy will be monitored and evaluated as part of the HQMC Benchmark Environmental Compliance Evaluation (ECE) program in accordance with reference (az).

12. Deployment And Reimbursement Procedures for Wildland Fire
(not applicable outside the Continental U.S.)

a. DOD Civilian Firefighter Deployment

(1) Reference (ba) pre-approves the use of DOD civilian firefighters on wildfire incidents managed by other Federal agencies. Requests will be issued from regional or local Geographic Area Coordinating Centers to the specific civilian resources based on local mutual aid agreements. Notification procedures in paragraph 2 must be followed. Conditions for any deployment of civilian personnel include willingness of civilians to volunteer, approval by the installation commander, and coordination (through the chain of command) with JDOMS. Because of the rapid response necessary for deployment when requested by NIFC, permission should be obtained at the beginning of the fire season. The assignment must be accomplished by detail (i.e., temporary duty (TDY)).

(2) Notification Procedures. When a firefighter is deployed (and upon return), the installation wildland fire program manager, or acting, will report the deployment (or return) via e-mail to NORTHCOM and JDOMS with copy to the chain of command up to CMC (LF). The e-mail should include the name(s) of the firefighter(s), installation name, date of departure, name or location of wildfire (if known), and length of deployment (if known).

(3) Firefighter's Responsibilities. After obtaining the installation commander's permission, the civilian firefighter, through the installation wildland fire program manager, must ensure the following conditions are met.

(a) Passed current physical fitness requirement for NWCG position(s);

(b) Has current NWCG qualification card (red card);

(c) Has name and qualifications posted on the local wildland fire coordination center dispatch system;

(d) Has made arrangements for emergency TDY authorization; and

(e) Ensured that the sponsoring Federal agency involved with the mutual aid agreement has issued or will issue a funds obligating document for reimbursement of expenses or has made other arrangements for reimbursement of expenses.

b. Fiscal and Entitlement Support. Support is fully reimbursable under reference (ax). Volunteers will continue to be paid from their current payroll offices. All actual costs, including base salary, overtime, TDY travel, and per diem will be paid in accordance with paragraph b2. Employees selected for these assignments would be detailed to a set of duties and placed on TDY. The civilian firefighter will turn in all timesheets on return or, if possible, send to timekeeper weekly while deployed.

(1) Benefits and Entitlements. All current enrollments in Federal benefit coverage would continue (i.e., Federal Employees Health Benefits, Federal Employee Group Life Insurance, Thrift Savings Plan, Workers Compensation, etc.). Individuals with private insurance should check with their respective carriers to determine coverage. Firefighters identified for deployment should be advised to update their designation of beneficiaries, emergency contacts, and medical allergies statements. If required, components would submit a request for waiver of the biweekly maximum earnings limitation for approval.

(2) Reimbursement. Local resource managers should establish a local automatic reimbursable account. Actual costs related to the wildfire incident would be billed to this account. At the beginning of the fire season or prior to deployment, ensure that a funds-obligating document is received by the installation from the sponsoring Federal agency involved (such as the U.S. Department of Agriculture Forest Service, Bureau of Land Management, FWS, National Park Service, Bureau of Indian Affairs) or ensure that other reimbursement processes are in place. The funds obligating document (similar to a Military Interdepartmental Purchase Request) may be a Form AD-672 Reimbursement or Advance of Funds Agreement, BLM Form 1681-3, a Resource Order, or similar document. This document will contain financial information for reimbursement and billing procedures. Within thirty (30) calendar days after the month in which the deployment occurred, the employee will turn in all wildfire time records and all other expense records. The local resource manager will ensure that employee's time and travel voucher

cover all expenses (e.g., night differential, hazard pay). The local resource manager will bill the Federal agency listed on the funds obligating document for reimbursement of all expenses.

11205. OUTDOOR RECREATION

1. Outdoor Recreation Planning. Each installation may develop outdoor recreation policies and programs in consultation with the DOI and the appropriate State agency. Any installation recreation resource use selection procedures shall be impartial.

2. Recreational Off-Road Vehicles

a. Installation commanders shall give preference to existing trails when designating roads for off-road vehicle use.

b. When considering the suitability of areas and trails for off-road vehicle use, installation commanders shall consider the applicability of NEPA analysis and the foreseeable impacts of each type of off-road vehicle, taking into account its seasonal use, range, and resulting impacts to installation natural resources, military readiness, and the capability of installation lands to support the installation's mission, and other recreation resources.

c. Any decision to open installation lands to off-road vehicle use shall apply equally to the public and military personnel. Each installation shall control off-road vehicle use to maintain public safety, security, military readiness, and natural resources. Therefore, any decision to open installation lands to off-road vehicle use shall include procedures for controlling the number and types of off-road vehicles, limiting their frequency and intensity of use, and limiting their range (i.e., restricting access to areas and trails authorized for off-road vehicle use).

d. Installations may deny installation access to persons violating off-road vehicle requirements.

e. If the installation commander or a designee determines that off-road vehicle use will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources, the installation will immediately prohibit such off-road vehicle use until the

effects have been eliminated and measures have been implemented to prevent their recurrence.

11206. ENVIRONMENTAL RESTORATION. Each installation shall utilize installation natural resources professionals' expertise in contingency planning and in acting as a natural resources trustee. Each installation shall also coordinate with stakeholders when acting as a natural resources trustee.

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 3: RESPONSIBILITIES

11300. CMC (LF)

1. Ensure a Marine Corps-wide organizational capability and the programming necessary to establish and maintain installation integrated natural resources management programs.
2. Provide installations policy for establishing and maintaining INRMPS.
3. Coordinate Marine Corps natural resources management program issues with other Federal agencies, the military services, and private organizations.
4. Identify Marine Corps-wide program and project priorities, and distribute available funds to meet installation natural resources management requirements that cannot be locally funded.
5. Maintain reports and other records of installation natural resources business transactions (e.g., agricultural outlease proceeds; hunting, fishing, and trapping permit fee proceeds; forest product sales proceeds) and track natural resources management expenditures charged to applicable accounts.
6. Ensure, through field visits and the ECE Program, Marine Corps compliance with applicable Federal, State, and local natural resource management requirements.
7. Assist installations in resolving any disputes with Federal, State, and local natural resource regulatory officials.

11301. COMMANDER, U.S. MARINE FORCES ATLANTIC; COMMANDER, U.S. MARINE FORCES PACIFIC; COMMANDER, MARINE CORPS SYSTEMS COMMAND; AND COMMANDER, MARINE FORCES RESERVE (COMMARFORRES)

1. Coordinate proposals for new and continuing actions that affect natural resources with the managers of those resources.
2. Take appropriate action to ensure that authorized, funded, or conducted actions comply with reference (ae) and all related natural and cultural resources laws and executive orders.

11302. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Ensure the installation implements the requirements and policies of this chapter.
2. Act as the installation natural resources trustee.

REFERENCES

- (a) 7 U.S.C. 136-136y
- (b) 16 U.S.C. 1451-1465
- (c) Office of the Undersecretary of Defense, Memorandum for Assistant Secretary of the Army (Installations, Logistics and Environment), Assistant Secretary of the Army (Installations and Environment), Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations and Environment), "Volunteer and Partnership Cost-Share Program," January 12, 1994
- (d) Federal Register, Volume 60, page 58605, November 28, 1995
- (e) Federal Register, Volume 65, page 66913, November 7, 2000
- (f) Federal Register, Volume 65, page 62565, October 18, 2000
- (g) 10 U.S.C. 2667
- (h) DOD Instruction 6055.06, "DOD Fire and Emergency Services (F&ES) Program," December 21, 2006
- (i) 16 U.S.C 1531-1544
- (j) 16 U.S.C. 703-712
- (k) Title 50, Code of Federal Regulations, Part 10, Section 13, "List of Migratory Birds," 2005 edition
- (l) 10 U.S.C. 2665
- (m) DOD Financial Management Regulation, Volume 11A, "Reimbursable Operations, Policy and Procedures, Chapter 16 - Accounting for Production and Sale of Forest Products," August 2002
- (n) Title 1533.31 of the Forest Service Manual - "Forest Insect and Disease Suppression Agreement," Washington Office (WO) Amendment 1500-91-9, effective June 13, 1991
- (o) 42 U.S.C. 9601-9675

(p) Executive Order 12580, "Superfund Implementation," January 23, 1987

(q) Title 50, Code of Federal Regulations, Part 402, "Interagency Cooperation - Endangered Species Act of 1973, As Amended," 2006 edition

(r) MCO 5090.4A

(s) Title 43, Code of Federal Regulations, Part 11, "Natural Resource Damage Assessments," 2006 edition

(t) Executive Order 11987, "Exotic Organisms," May 24, 1977

(u) Title 32, Code of Federal Regulations, Part 190, Section 3, "Definitions," 2005 edition

(v) Executive Order 13112, "Invasive Species," February 3, 1999

(w) 7 U.S.C. 7701-7772

(x) Executive Order 11644, "Use of Off-Road Vehicles on the Public Lands," February 8, 1972

(y) Title 33, Code of Federal Regulations, Part 328, Section 3, "Definitions," 2007 edition

(z) Title 40, Code of Federal Regulations, Part 122, Section 2, "Definitions," 2007 edition

(aa) 16 U.S.C. 670-670f

(ab) 16 U.S.C. 470-470w-6

(ac) Presidential Memorandum, "Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds," April 26, 1994

(ad) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007

(ae) 42 U.S.C. 4321-4347

(af) NAVFAC P-73, Chapter 19, "Real Estate Procedural Manual"

- (ag) NAVFAC P-73, Volume 2, "Natural Resources Management Procedural Manual"
- (ah) NAVCOMPT Manual, paragraph 032114
- (ai) MCO 7301.116
- (aj) NAVCOMPT Manual, Volume 2, "Accounting Classification," paragraph 024640
- (ak) National Fire Protection Association 1051, "Standard for Wildland Fire Fighter Professional Qualifications," 2007 edition
- (al) National Fire Protection Association 1002, "Standard for Fire Apparatus Driver/Operator Professional Qualifications," 2003 edition
- (am) Office of Personnel Management, "CSRS and FERS Handbook for Personnel and Payroll Offices, Chapter 46 - Special Retirement Provisions for Law Enforcement Officers, Firefighters, Air Traffic Controllers, and Military Reserve Technicians," April 1998
- (an) National Wildfire Coordination Group, National Interagency Incident Management System, Wildland Fire Qualification System Guide, PMS 310-1/NFES 1414, April 2006
- (ao) National Wildlife Coordination Group, National Fire Equipment System, "Fitness and Work Capacity: Second Edition," NFES 1596, PMS 304-2, 1997
- (ap) National Wildlife Coordination Group, National Fire Equipment System, "Fit to Work?" NFES 1595, PMS 304-1, 1985
- (aq) National Wildlife Coordination Group, National Fire Equipment System, "Fit to Work, Fatigue and the Firefighter (video)," NFES 2071, PMS 306, 1989
- (ar) DOD 6055.05M, "Occupational Medical Examinations and Surveillance Manual," May 2, 2007
- (as) National Fire Protection Association 1710, Standard for the Organization and Deployment of Fire Suppression Operations,

Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments," 2004 edition

(at) MCO P11000.11B

(au) National Wildfire Coordination Group, National Fire Equipment System, "Smoke Management Guide," NFES 1279, PMS 420-2, 2001

(av) Title 40, Code of Federal Regulations, Parts 1500-1508, "Council on Environmental Quality NEPA-implementing Regulations," 2005 edition

(aw) Interagency Agreement for the Provision of Temporary Support During Wildland Firefighting Operations among the United States Department of the Interior, the United States Department of Agriculture and the United States Department of Defense, 2005

(ax) 31 U.S.C. 1535

(ay) DOD Directive 3025.1, "Military Support to Civil Authorities (MSCA)," January 15, 1993

(az) MCO P5090.2A

(ba) DTG 281832Z APR 06 OPER/DOD SUPPORT OF CIVIL AUTHORITIES//MSGID/ORDER/CJSC STANDING EXORD.

Table 11-1.--Correlation of NFPA and NWCG Certification Levels and Corresponding NWCG Training Requirements for Attaining Each Level		
NFPA Job Title	NWCG Equivalent	NWCG Equivalent Training
Wildland Fire Fighter I	Firefighter II	<ul style="list-style-type: none"> • S-130 Fire Fighter Training • S-190 Introduction to Fire Behavior • L-180 Human Factors on the Fireline • I-100 Introduction to the Incident Command System • RT-130 Annual Fireline Safety Refresher
Wildland Fire Fighter II	Firefighter I	<ul style="list-style-type: none"> • S-131 Advanced Fire Fighter Training • S-133 Look Up, Look Down, Look Around • S-201 Supervisory Concepts and Techniques • S-211 Portable Pumps and Water Use • S-212 Wildland Fire Chain Saws • S-216 Driving for the Fire Service • RT-130 Annual Fireline Safety Refresher
Wildland Fire Officer I	Single Resource Boss or Incident Commander Type 4	<ul style="list-style-type: none"> • S-200 Initial Attack Incident Commander • S-213 Tractor Use/Tractor Boss* • S-214 Tanker Use/Tanker Boss* • S-215 Fire Operations in the Urban Interface • S-230 Crew Boss (Single Resource)* • S-231 Engine Boss (Single Resource)* • S-234 Ignition Operations • S-260 Fire Business Management Principles • S-270 Basic Air Operations • S-290 Intermediate Wildland Fire Behavior • I-200 Basic Incident Command System • P-151 Wildfire origin and Cause Determination • RT-130 Annual Fireline Safety Refresher <p><i>*Only one of these courses is required, depending upon the type of Single Resource Boss certification desired.</i></p>

Table 11-1.--Correlation of NFPA and NWCG Certification Levels and Corresponding NWCG Training Requirements for Attaining Each Level--Continued		
NFPA Job Title	NWCG Equivalent	NWCG Equivalent Training
Wildland Fire Officer II	Incident Commander Type 3	<ul style="list-style-type: none">• S-300 Incident Command Extended Attack• S-301 Leadership and Organizational Development• S-330 Task Force/Strike Team Leader• S-390 Introduction to Wildland Fire Behavior Calculations• I-300 Intermediate Incident Command System• RT-130 Annual Fireline Safety Refresher

CHAPTER 12

THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

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CHAPTER 12

THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SECTION 1: INTRODUCTION

12100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with reference (a).

12101. APPLICABILITY

1. This chapter applies to all Marine Corps active and reserve installations, commands, detachments, and units located within the United States, its territories, and possessions.

2. Marine Corps active and reserve installations, commands, units, and detachments may also need to comply with State environmental planning procedures when joint activities with non-Federal parties are conducted.

3. Marine Corps actions in foreign countries are not subject to the requirements of reference (a). Thus, the requirements of this chapter do not apply to Marine Corps actions abroad. However, certain Marine Corps actions are subject to references (b) and (c) concerning environmental effects abroad of major Department of Defense (DOD) actions. Commanders must comply with these requirements, which are reprinted at reference (d).

12102. BACKGROUND. Reference (a) is the basic national charter for the protection of the environment. It establishes policies, sets goals, and provides means for carrying out environmental policy.

12103. FEDERAL STATUTES

1. National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)

a. Basic National Charter. Reference (a) establishes national policy and goals for protection of the environment. Reference (a) requires Federal decision makers to consider the environmental consequences of a proposed action before making the decision to take the action. For certain actions, reference (a) requires decision makers to open the decision making process to public scrutiny and involvement.

b. "Action-Forcing" Provisions. Section 102(2) of reference (a) contains "action-forcing" provisions to ensure that Federal agencies act according to the letter and the spirit of reference (a). Section 102(2)(A) of reference (a) mandates that Federal agencies "utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts, in planning and in decision making that may have an impact on man's environment." Section 102(C) of reference (a) requires that Federal agencies "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impacts of the proposed action." Further, section 102(E) of reference (a) requires that Federal agencies "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

c. Council on Environmental Quality (CEQ). Section 202 of reference (a) created the CEQ in the Executive Office of the President. CEQ promulgates regulations that implement section 102(2) of reference (a). CEQ's regulations (reference (e)) are binding on the Marine Corps. CEQ also provides guidance documents that aid Federal agencies in their implementation of the myriad of NEPA procedural requirements.

d. Four Basic Tenets. The four basic tenets of references (a) and (e) are:

(1) Procedures must be in place to ensure that environmental information is available to decision makers and citizens before decisions are made and before Federal actions are taken.

(2) The NEPA process should identify and assess reasonable alternatives to proposed actions that would avoid or minimize adverse environmental effects.

(3) The purpose of reference (a) is to help agency officials make decisions based on an understanding of environmental effects, enabling them to take actions that protect, restore, and enhance the environment.

(4) Agencies must integrate the NEPA process with other planning at the earliest possible time to ensure that planning

and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.

2. Interaction with other Environmental Statutes, Regulations, and Executive Orders (E.O.s). A number of environmental statutes, implementing regulations, and E.O.s that impose substantive and procedural requirements, may apply to a proposed action. The NEPA process facilitates the identification of applicable statutes, regulations, and E.O.s with which the Action Proponent must also comply. Completion of the NEPA process does not substitute for compliance with these other laws and statutes; however, certain procedural requirements included in the NEPA process may satisfy those of other statutes and streamline compliance. The following is a representative, but not inclusive, list of environmental legislation and E.O.s that may apply to a proposed action:

- a. American Indian Religious Freedom Act (42 U.S.C. 1996 and 1996a).
- b. Archaeological Resource Protection Act (ARPA) of 1979, as amended (16 U.S.C. 470aa-mm).
- c. Clean Air Act (CAA) of 1970, as Amended (42 U.S.C. 7401 *et seq.*).
- d. Clean Water Act of 1977, as Amended (33 U.S.C. 1251 *et seq.*).
- e. Coastal Zone Management Act of 1972 (16 U.S.C. 1451 *et seq.*).
- f. Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).
- g. Marine Mammal Protection Act of 1972, as Amended (16 U.S.C. 1361 *et seq.*).
- h. Marine Protection Research and Sanctuaries Act of 1972, as Amended (33 U.S.C. 1401 *et seq.* and 16 U.S.C. 1431 *et seq.*).
- i. Migratory Bird Treaty Act of 1918, as Amended (16 U.S.C. 703 *et seq.*).
- j. National Historic Preservation Act of 1966, (16 U.S.C. 470 *et seq.*).

k. Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801 *et seq.*).

l. Pollution Prevention Act of 1990 (42 U.S.C. 13101 *et seq.*).

m. Safe Drinking Water Act of 1974 (42 U.S.C. 300(f) *et seq.*).

n. E.O. 11988, Floodplain Management, 24 May 1977.

o. E.O. 11990, Protection of Wetlands, 24 1977.

p. E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 11 February 1994.

q. E.O. 12962, Recreational Fisheries, 7 June 1995.

r. E.O. 13007, Indian Sacred Sites, 24 May 1996.

s. E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, 21 April 1997.

t. E.O. 13089, Coral Reef Protection, 11 June 1998.

u. E.O. 13112, Invasive Species, 3 February 1999.

v. E.O. 13158, Marine Protected Areas, 26 May 2000.

w. E.O. 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000.

x. E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, 10 January 2001.

12104. POLICY

1. Headquarters Marine Corps, Facilities and Services Division (CMC (LF)) is the cognizant organization within the Marine Corps for affecting compliance with reference (a) and should be consulted regarding Marine Corps interpretation of the procedures contained in this chapter and references (e) and (f), as well as any procedural requirements related to NEPA analysis and decision making within the chain of command.

2. The Marine Corps will, consistent with its mission and the environmental laws and regulations of the United States and applicable international treaties and agreements:

a. Prevent or reduce adverse impacts on the environment through effective environmental planning.

b. Consider environmental factors concurrently with mission effectiveness, cost, and other relevant factors.

c. Commence a systematic examination of the environmental implications of proposed actions at the earliest possible time.

d. Understand and comply with all environmental legal requirements, anticipate and control associated costs, and avoid delays caused by inadequate preparation and planning.

e. Provide environmental training commensurate with the responsibilities of the trainee and consistent with the mission of the Department of the Navy (DON) through courses on environmental planning and by integrating instruction in environmental planning into other courses of training for military members and civilian employees.

f. Encourage effective and practical public participation in environmental planning.

g. Include appropriate consideration of socioeconomic issues in environmental planning matters where the potential for disproportionately high and adverse impacts on minority and low-income populations exists.

h. Include appropriate provisions for environmental planning in instructions, orders, plans, or other guidance.

i. Include the costs of environmental planning in planning, programming, and budgeting for the proposed action.

j. Prepare, safeguard, review, and disseminate required planning, analysis, and environmental documents, if any, for classified actions in accordance with applicable security instructions and requirements.

k. Assign responsibility for preparation of action specific environmental analysis under reference (a) to the Action Proponent. The Action Proponent should understand the plans, analyses, and environmental documents related to that action.

3. Whenever possible, Action Proponents must include pollution prevention alternatives in the NEPA process. In particular, Action Proponents must consider life-cycle costs and the options available in employing pollution prevention alternatives to minimize these costs when evaluating potential projects or actions.

4. Action Proponents must ensure that, consistent with other national policies and national security requirements, practical means and measures are used to protect, restore, and enhance the quality of the environment; to mitigate adverse consequences; and to attain the following NEPA (section 101) objectives:

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

b. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices.

c. Enhance the quality and conservation of renewable resources and work toward the maximum attainable recycling of depletable resources.

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

e. Provide the opportunity for public comment and involvement.

5. The command Environmental Impact Review Board (EIRB) must include individuals with appropriate expertise to ensure that the document meets the requirements of reference (a), is consistent with the command's operational and master planning goals, and meets the policies and goals of the command in the military and civilian communities.

CHAPTER 12

THE NATIONAL ENVIRONMENTAL POLICY ACT

SECTION 2: MARINE CORPS PROCEDURES

12200. GENERAL NEPA COMPLIANCE OBJECTIVES. To comply with the NEPA procedural requirements, the Marine Corps must attain the following objectives:

1. Ensure compliance by beginning analysis of the effects of an action at the earliest planning stage.
2. Assess environmental consequences of proposed actions that could affect the quality of the environment in the United States, its territories, and its possessions per references (e) and (f).
3. Use a systematic, interdisciplinary approach that ensures integrated use of the natural and social sciences and environmental considerations in planning and decision making when an adverse impact on the environment could occur.
4. Consider reasonable alternatives (including the "no-action" alternative) to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available natural resources.
5. Make available to states, counties, municipalities, institutions, and individuals any advice and information useful toward restoring, maintaining, and enhancing the quality of the environment.
6. Use ecological information when planning and developing resource-oriented projects.
7. Ensure that presently unmeasured environmental amenities (i.e., recreation areas open to the public, leased lands to State or private entities) are considered in the decision making process.
8. Set time limits appropriate to the proposed action, considering operational requirements, as well as necessary time for public notice and comment periods required under section 10 of part 1506 of reference (e) as legally applied by the Environmental Protection Agency (EPA).

12201. SPECIFIC REQUIREMENTS

1. NEPA Process. The requirements of this chapter apply to proposed Federal actions that have potential to impact the human environment (i.e., those actions that could result in a change to the physical environment; social and economic impacts alone are not sufficient to trigger reference (a)). To ensure installation environmental planning staff coordinate on actions with the potential to impact the human environment, Action Proponents shall submit a completed Request for Environmental Impact Review (REIR) to the installation's environmental planning staff for all proposed actions that have potential to impact the human environment. The REIR shall be a form prescribed by the Commanding General/Commanding Officer (CG/CO) exercising a Finding of No Significant Impact (FONSI) signature authority, and should contain enough information to support the use of a categorical exclusion (CATEX) (in case a CATEX applies). Installations are encouraged to use the example REIR in appendix R, or develop an REIR suitable to meet installation coordination and documentation requirements. This reporting requirement is exempt from reports control per reference (g), part IV, paragraph 7.k. The commander exercising FONSI signature authority may delegate REIR signature authority to qualified environmental planning staff.

2. Step-By-Step Methodology. Use the following methodology to determine whether requirements of this chapter apply and, if so, what level of NEPA documentation the Action Proponent should initiate.

a. Step 1. Action Proponent: If the proposed action may result in an impact to the human environment, complete a REIR and submit it to the installation environmental planning staff or NEPA program manager and go to Step 2.

b. Step 2. Installation Environmental Planning Staff: Using the REIR, determine whether the proposed action is exempt from NEPA documentation pursuant to paragraphs (1) through (4) below. If the proposed action is exempt from reference (a), the requirements of this chapter do not apply and the exemption shall be documented on the REIR. Such a decision need not be presented to the command EIRB. If the proposed action is not exempt, go to Step 3.

(1) The proposed action is a Comprehensive Environmental Response, Compensation, and Liability Act cleanup action and documented pursuant to reference (h).

(2) The proposed action is one for which the Marine Corps has no decision making authority and no discretion in implementing the action, such as those carried out under a non-discretionary mandate from Congress (e.g., Congressional direction to transfer Federal property to a particular entity for a particular purpose that leaves DON no discretion in how the transfer will be implemented) or as an operation of law (e.g., reversionary interests in land recorded at the time the property was obtained and that provide no discretion in whether to trigger the reversion or how the reversion will be implemented).

(3) The proposed action is exempt from reference (a) by statute.

(4) Compliance with reference (a) would cause a clear and unavoidable conflict with another Federal law.

c. Step 3. Installation Environmental Planning Staff: Review the REIR and determine whether the proposed action is contained in the list of CATEXs at paragraph 12201.3.a. If it is on the CATEX list, go to Step 4. If the action is NOT contained in the list of CATEXs, go to Step 5.

d. Step 4. Installation Environmental Planning Staff: Determine whether any of the enumerated conditions listed in paragraph 12201.3.b apply. If one of the enumerated conditions applies, document it on the REIR and go to Step 5. If none of the enumerated conditions apply, the proposed action is categorically excluded from the requirement of preparing an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The Installation Environmental Planning Staff shall annotate the CATEX number on the REIR and forward the REIR to the official with REIR signature authority for signature. Note that even if a proposed action technically qualifies for a CATEX, the Action Proponent may prepare an EA if the circumstances are such that it would be prudent.

e. Step 5. Installation Planning Staff: Determine whether the proposed action requires an EA under paragraph 12201.4 or an EIS under paragraph 12201.5. If so, annotate on the REIR and return to the Action Proponent for preparation of an EA or EIS, as appropriate.

f. Step 6. Action Proponent: Based on the determination of the Installation Environmental Planning Staff documentation

on the REIR, proceed with preparation of an EA or EIS (using the assistance of the Installation Environmental Planning Staff).

3. CATEX (section 4, part 1508 of reference (e))

a. List of CATEXs (section 6(f) of reference (f)).

Pursuant to references (e) and (f), actions that will have no significant effect individually or cumulatively on the human environment, under normal circumstances, may be categorically excluded from the requirement to prepare an EA or EIS. If one of the enumerated conditions applies, it will be documented on the REIR with the signature of environmental planning staff who have been delegated Command authority to do so. Proponents should note that categorical exclusion of the action under the NEPA does not relieve proponents from compliance with other Federal statutes (e.g., section 106 of the National Historic Preservation Act).

(1) Routine fiscal and administrative activities, including administration of contracts.

(2) Routine law and order activities performed by military personnel, military police, or other security personnel, including physical plant protection and security.

(3) Routine use and operation of existing facilities, laboratories, and equipment.

(4) Administrative studies, surveys, and data collection.

(5) Issuance or modification of administrative procedures, regulations, directives, manuals, or policy.

(6) Military ceremonies.

(7) Routine procurement of goods and services conducted in accordance with applicable procurement regulations, executive orders, and policies.

(8) Routine repair and maintenance of buildings, facilities, vessels, aircraft, and equipment associated with existing operations and activities (e.g., localized pest management activities, minor erosion control measures, or 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, and pumps).

(13) Routine recreational/welfare activities.

(14) Alteration of and additions to existing buildings, facilities, structures, vessels, aircraft, and equipment to conform or provide conforming use specifically required by new or existing applicable legislation or regulations (e.g., hush houses for aircraft engines, scrubbers for air emissions, improvements to storm water and sanitary and industrial wastewater collection and treatment systems, and installation of fire fighting equipment).

(15) The modification of existing systems or equipment when the environmental effects will remain substantially the same, and the use is consistent with applicable regulations.

(16) Routine movement, handling, and distribution of materials, including hazardous materials (HM)/hazardous 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 non-explosive military training exercises or research, development, and 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 percent 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 HM.

(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 (NRHP) that 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 non-military land or water areas, where such training is consistent with the type and tempo of existing non-military 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 DON 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 of 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 times and where there is no significant change in land use.

(32) Renewals and/or initial real estate in-grants and out-grants involving existing facilities and land wherein use does not change significantly (e.g., leasing of Federally-owned or privately-owned housing or office space, and agricultural out-leases).

(33) Grants of license, easement, or similar arrangements for the use of existing rights-of-way or incidental easements complementing the use of existing rights-of-way for use by vehicles (not to include significant increases in vehicle loading); electrical, telephone, and other transmission and communication lines; water, wastewater, storm water, and irrigation pipelines, pumping stations, and facilities; and 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 containment 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, and other HM.

(36) Acquisition, installation, and operation of utility (e.g., water, sewer, or 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 DON property in order 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 operating area; (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 DON 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.

(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 DON 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.

b. Conditions Not Permitting the Use of a CATEX (section 6(e) in reference (f)). A CATEX will not be used if the proposed action:

(1) Would adversely affect public health or safety.

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

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

(4) Threatens a violation of Federal, State, or local environmental laws applicable to the DON.

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

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

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

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

(d) Have an adverse effect on archaeological resources or resources (including but not limited to ships, aircraft, vessels, and equipment) listed or determined eligible for listing on the NRHP.

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

c. CATEX Documentation. The administrative record on the decision to forgo preparation of an EA or EIS on the basis of one CATEX will be documented on the REIR. The REIR will identify the applicable CATEX number being used or will specify the enumerated conditions that do not permit the use of a CATEX. The REIR must be signed by the authorized environmental planning staff, returned to the Action Proponent, and retained per reference (k), Standard Subject Classification Code (SSIC) 5090.4. The REIR and any records or proposed action review correspondence must accompany the project file through project planning.

d. Documentation of Requirements for CATEX Approval. In the event certain conditions or requirements must be met to qualify for the CATEX, before, during, or following the implementation of the proposed Federal action, the environmental planning staff may impose those requirements on a Decision Memorandum or similar correspondence. The Action Proponent must acknowledge and agree to such conditions by signing and returning the Decision Memorandum or similar correspondence to the environmental planning staff, to remain with the file.

4. EA (section 9, part 1508 of reference (e))

a. Overview. An EA analyzes the potential environmental impacts of a proposed action. An EA is prepared for those proposed actions that do not qualify for a CATEX, and when the Action Proponent:

(1) Initially predicts that the proposed action will not have a significant impact on the environment.

(2) Is uncertain whether the effects of the proposed action will have a significant impact on the human environment.

(3) Has reason to believe the proposed action will be environmentally controversial. Based on these criteria, an EA will result in either a FONSI or a decision to prepare an EIS.

b. Actions for which an EA Must Be Prepared. The following are examples of actions that under normal circumstances would require an EA:

(1) Training exercises for which the impacts are unknown, are potentially significant, or have the potential for environmental degradation or controversy.

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

(3) Proposed land use that would impact the quality or quantity of tidelands or freshwater wetlands.

(4) Real estate acquisitions or outleases of land involving:

(a) New in/out-grants only (i.e., neither renewals nor continuances wherein land use remains the same).

(b) Substantive changes in existing land use.

(c) Renewals of agricultural or grazing leases that involve notably different animal stocking rates, agricultural practices, seasons of use, or conversions to or from cropland.

(5) Acquisition of any size or in/out-grants that may be considered environmentally controversial, regardless of the appropriation or intended use.

(6) Family housing projects when the resident population changes.

(7) New target ranges or range mission changes with new or increased environmental impact.

(8) New low-altitude aircraft training routes or special use airspace and warning areas wherein over flights impact persons (particularly of low-income or minority populations), wildlife (particularly endangered species), or property.

(9) Mission changes, base closures, relocations, consolidations, or 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.

(10) Any proposed activity that may adversely affect a Federally-listed threatened or endangered species, candidate species, or designated or recommended critical habitat of an endangered species. The EA does not replace the requirements for a biological assessment and consultation under reference (i) (see chapter 11 of this Manual for a complete discussion of endangered species requirements).

(11) Any activity that would adversely affect resources either listed, or eligible for listing in the NRHP (see chapter 8 of this Manual for a complete discussion of cultural resources requirements).

(12) Permanent closure or limitation of access to any areas previously open to public use (e.g., roads and recreational areas).

(13) Construction or any other action resulting in discharges to, or potential contamination of, an aquifer, watershed, or recharge zone as described in reference (j).

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

(15) Transportation of hazardous substances, conventional munitions, or other wastes for intentional disposal into the ocean.

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

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

c. EA Public Participation (section 4(b), part 1501 in reference (e)). In the preparation of an EA, CEQ regulations require agencies to involve the public to the extent practicable. Therefore, commands proposing an action will develop an appropriate public involvement strategy. In determining the extent to which public participation is practicable, consider the following factors:

(1) What individuals and organizations would be interested in or affected by the proposed action.

(2) The magnitude of the environmental considerations associated with the proposed action.

(3) The extent of anticipated public interest.

(4) Methods that would most effectively notify and involve the public.

(5) Any relevant issues of national security or classification.

d. EA Procedures/Responsibilities

(1) Action Proponent

(a) Following the determination that an EA should be prepared for a proposed action and using the information submitted on the REIR as a foundation, the Action Proponent must, in consultation with the installation environmental planning staff, compile the following information:

1. A clear, detailed description of the need for, and purpose (objectives) of the action, the proposed action, and its expected results.

2. A brief description of all considered alternatives, including the reasons for eliminating them from further consideration.

3. A description of the likely results of canceling the proposal (e.g., "no action" alternative) and not meeting the need for action.

4. A description of the potential adverse impacts that might result from engaging in the proposed action and any alternative actions considered in detail.

5. A list of the supporters and likely opponents of the proposed action and alternatives.

6. A list of the names of persons and organizations familiar with the proposal, a summary of any current responses to the proposal, and a list of additional persons or agencies to be contacted during scoping.

7. A description of any associated support or facility requirements that would be necessary to accomplish the proposed action and any other connected actions, similar actions, or cumulative actions (see paragraph 12202.20 for the definition of "Scope").

8. A list of other past, present, or reasonably foreseeable future actions with the potential, together with the proposed action, to cause cumulative environmental impacts.

(b) The action proponent is responsible for the EA preparation (exclusive of the EA conclusion and final recommendation) via contractor, Engineering Field Division/Activity as a reimbursable service, installation environmental staff, or Action Proponent staff (if the proposed action is not part of the mission of the affected Marine Corps activity). At the earliest opportunity, the Action Proponent must determine which entity will prepare the EA.

(2) Installation Environmental Planning Staff. The installation environmental planning staff will review the EA documentation provided by the Action Proponent and prepare draft recommendations of findings, a separate conclusion in the context of one of the alternatives identified here, and distribute all documentation to the Installation EIRB for appropriate action.

(3) Installation EIRB

(a) The Installation EIRB will review the documentation and make one of the following determinations:

1. The proposed action will have no significant impact on the environment, a FONSI is appropriate, and the action may proceed as planned.

2. The proposed action as planned may have a significant impact on the environment unless prescribed mitigation measures are accomplished. The final recommendation will contain a full description of all required mitigation and monitoring necessary to ensure that no significant impacts will occur. These measures will be made a part of the FONSI and incorporated into project design.

3. The proposed action cannot proceed as planned without a significant impact on the environment. However, a reasonable alternative to the proposal that was not originally evaluated in the EA can proceed without a significant impact. The final recommendation from the EIRB will contain a full description of the new preferred alternative and direct the EA to be revised appropriately.

4. A FONSI for the proposed action is inappropriate; significant impacts can be avoided only if the "no action" alternative is selected. The final recommendation will be to begin an EIS if the Action Proponent wishes to

continue with the proposal. The determination should describe the significant impacts that cannot be avoided.

(b) Upon considering the EA and the conclusion of the environmental staff, the EIRB will prepare a recommended course of action (to include a draft FONSI, if appropriate) for consideration by the commander exercising FONSI signature authority.

(4) Commander exercising FONSI Signature Authority. The commander exercising FONSI signature authority, upon consideration of the EA conclusion and EIRB recommendation, will take one of the following three actions:

(a) Finalize, approve, and issue a FONSI and initiate a course of action for proceeding with the selected action.

(b) For proposed actions that fall within one of the categories set forth in paragraph 12201.5e, forward the proposed FONSI, EA, and a recommended course of action to the CMC (LF) for review and approval before the commander exercising FONSI signature authority signs the FONSI.

(c) Direct the preparation of an EIS if the Action Proponent intends to proceed with the proposed action.

e. Coordinate with the CMC (LF)

(1) If the commander exercising FONSI signature authority decides not to issue a FONSI and concludes that an EIS is required, notify CMC (LF). EIS notification shall occur prior to commencing EIS preparation or receiving any public or regulatory agency involvement.

(2) Notify CMC (LF) as soon as it becomes apparent that potentially sensitive public interest issues are involved with the preparation of an EA.

(3) For proposed actions that fall within one or more of the following categories, forward the proposed FONSI, EA, and recommended course of action to the CMC (LF) for review and appropriate action:

(a) The proposed action is, or is closely similar to, one that normally requires the preparation of an EIS.

(b) The proposed action is of a nature that is without precedent.

(c) The proposed action is to develop substantial acres of undeveloped land.

(d) The proposed action has or can be expected to have substantial public or congressional interest.

(4) Commands must promptly submit a copy of all published FONSI's and related EIRB recommendations (in the form of minutes taken during board meetings) to the CMC (LF).

f. Content of EA (section 9, part 1508 of reference (e)). EA preparation should follow the basic format provided in paragraph 12201.5e.

Following this format, the EA should:

- (1) Describe the proposed action.
- (2) Briefly discuss the purpose and need for the action.
- (3) Describe reasonable alternatives considered (including the "no-action" alternative).
- (4) Describe the existing environment within the area of effect for the proposed action.
- (5) Describe the potential environmental impacts of the proposal and alternatives considered, paying special attention to the following actions:
 - (a) Address the potential impact on endangered or threatened species and/or their habitat.
 - (b) Satisfy the requirements of the General Conformity Rule under section 176(c) of reference (1).
 - (c) Satisfy references (m) and (n) by identifying and addressing in the EA disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations.

(d) Address the potential impacts to:

1. Resources listed in or eligible for listing in the NRHP.

2. Archaeological resources to comply with references (o) and (p).

(6) Describe any avoidance, mitigation, or environmental monitoring requirements.

(7) List the agencies and persons consulted.

(8) Include in the appendix substantive comments, replies, and consultation correspondence from agencies or entities with relevant expertise.

g. Preparation of a FONSI

(1) Signature Authority. If the commander exercising FONSI signature authority approves of the recommendation by the EIRB for a FONSI, he or she will finalize and sign the FONSI. For actions described in paragraph 12201.4e, the commander exercising FONSI signature authority will seek the CMC (LF) review and approval before signing the FONSI.

(2) Contents. The FONSI will consist of a brief summary of the EA. Each main section of the EA (as described in paragraph 12201.4f) should be summarized in the FONSI, excluding the list of agencies, consultants, and correspondence. A Notice of the Availability (NOA) of a FONSI can be published in local newspapers vice the entire FONSI text.

(3) Publication

(a) Unless the proposed action meets one of the conditions in paragraph 12201.4g(3)(b), the Action Proponent is responsible for publishing the signed FONSI or the NOA in local newspapers for at least three consecutive days if practicable (preferably over a weekend to ensure higher public visibility). The proposed action may begin once publication is effected.

(b) If the proposed action involves one of the following two conditions, the Action Proponent must make the FONSI available for public review (including in State- and area-wide clearing-houses and forward the FONSI to the CMC (LF) for publication in the *Federal Register*) for 30 days before making

the final determination whether to prepare an EIS and before the action may begin. The conditions are:

1. The proposed action is, or is closely similar to, one that normally requires the preparation of an EIS (e.g., there is a reasonable argument for the preparation of an EIS).

2. The nature of the proposed action is without precedent (e.g., if it is an unusual case, a new kind of action, or a precedent-setting case such as a first intrusion of even a minor development into a pristine area).

5. EIS (section 1, part 1502 in reference (e))

a. Overview. An EIS provides a full and unbiased discussion of significant environmental impacts and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. Briefly, the EIS process includes public "scoping," the issuance of a draft EIS (DEIS), a final EIS (FEIS), a supplemental EIS (if applicable), and the opportunity for public comment. The process culminates in the issuance of a Record of Decision (ROD).

b. Significantly. As defined in paragraph 12202, Terms and Definitions, the term "significantly" provides a basis for determining whether a proposed action significantly affects the quality of the human environment. While all aspects of the definition are important, commands should pay special attention to the following issues set forth:

(1) The Geographical Extent of the Action (section 27(b)(3), part 1508 of reference (e)). For example, construction and land use modification to support a limited maneuver or training exercise by an individual command may not have a significant effect on the environment. However, training exercises on a broad geographic scale involving diverse natural areas could have a significant effect on environmental quality.

(2) The Long-Term Impact of the Action (section 27(b)(6,7), part 1508 of reference (e)). Maintain an objective overview toward the magnitude of environmental effects of both the immediately contemplated action and future actions for which the proposed action may serve as a precedent and that could result in a cumulatively significant impact.

(3) The Risk Potential (section 22, part 1502 of reference (e), section 27(b)(5), part 1508 of reference (e)). For example, even though the environmental impact of an efficiently and safely operated fuel depot may not be significant, if a massive oil spill is reasonably foreseeable in the lifetime of the project, the effects of an oil spill could render significant the effects of construction or operation of such a depot.

(4) Sites Having Existing or Possible Historic, Architectural, or Archaeological Interest (section 27(b)(8), part 1508 of reference (e)). (See chapter 8 of this Manual.)

(5) The Potential Impact on Endangered or Threatened Species, and/or Their "Critical Habitat" as designated by the United States Fish and Wildlife Service or National Marine Fisheries Service (section 27(b)(9), part 1508 of reference (e)). (See chapter 11 of this Manual.)

c. EIS Preparation

(1) General (section 2, part 1502). To achieve the NEPA goal of preparing a concise and useful statement, Action Proponents must prepare an EIS per the format in paragraph 12201.5e, following these guidelines:

(a) Write an analytic, rather than encyclopedic, EIS.

(b) Discuss impacts in proportion to their significance. Briefly discuss issues that are less significant. As in a FONSI, write only enough to show why more study is not warranted.

(c) Keep the EIS concise and no longer than is necessary to comply with reference (a), these regulations, and regulations issued by the CEQ. Length should vary first with potential environmental issues and then with project scope.

(d) Outline the criteria for selecting alternatives.

(e) Outline the range of alternatives, including a "no action" alternative, to be discussed in the EIS and considered by the ultimate decision maker or by the lead agency if the DOD is a cooperating agency.

(f) Cognizant commands must not make irreversible commitments of resources that change the physical environment before making a final decision.

(g) To satisfy references (m) and (n), identify and address in the EIS disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations.

(2) Document Length (section 7, part 1502 in reference (e)). Restrict the document to pertinent facts, excluding material not directly applicable to the expected impact. The EIS must contain sufficient information and baseline data to support the conclusions reached. Supporting data can be included in the EIS as appendices.

(3) Scoping (section 7, part 1501 in reference (e)) and Lead and Cooperating Agencies (sections 5 and 6 , part 1501 of reference (e))

(a) The scoping process will:

1. Invite the participation of affected Federal, State, and local agencies, any Native American tribe, minority and low-income populations, and other interested persons.

2. Determine the scope and the significant issues to be analyzed in depth in the EIS.

3. Identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review. Narrow the discussion of these issues to a brief presentation of why they will not have a significant effect on the human environment or provide a reference to their coverage elsewhere.

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

5. Indicate any public EAs and other EISs that are being, or will be, prepared and that are related to, but are not part of, the scope of the EIS under consideration.

6. Indicate the relationship between the timing of the preparation of an EIS and the agency's tentative planning and decision making schedule.

7. Identify other environmental review and consultation requirements (e.g., section 7 of reference (i), the compliance requirement of reference (o), CAA Conformity, or reference (q)), so the lead and cooperating agencies may prepare other required analyses and studies concurrently with the EIS.

8. Identify environmental permits and regulatory agency approvals required for the project and the relationship between the timing of permits and approvals with the start of the proposed action.

(b) These scoping functions may be carried out in the context of a public, informal meeting at which written responses or oral presentations resulting from the public notices may be received. Such meetings, while not mandatory, may be held whenever practicable. There is no authority for the payment of expenses incurred by any person(s) in the preparation and presentation of information at these meetings.

(4) Public Notification (section 6, part 1506 of reference (e)). As soon as practicable after the cognizant command has determined that an EIS is required and the proper chain of command has been notified, undertake the following efforts to involve agencies and the public appropriately and to focus the environmental analysis on the significant issues:

(a) The Command EIRB drafts a Notice of Intent (NOI) to prepare an EIS and forwards it to the commander exercising FONSI signature authority for approval. The commander forwards the NOI to the CMC (LF) for Headquarters Environmental Impact Review Board (HQEIRB) review and approval. If approved, the Deputy Chief of Installations and Logistics or designee signs the NOI.

(b) The CMC (LF) must publish the NOI to prepare an EIS in the *Federal Register*.

(c) Action Proponents must mail the NOI to national organizations that the cognizant command reasonably expects to be interested in the matter. In all cases, the cognizant command must mail the notice to those who have requested it.

(d) The NOI will:

1. Solicit the comments and suggestions of affected Federal, State, and local agencies; any affected Native American tribes; Hawaiian interest groups; the proponent of the action; and any other interested persons (including those who might not be in accord with the action on environmental grounds).

2. Briefly describe the proposed action and the scoping process to be undertaken.

3. Include a public notice of any scoping meetings to be held. This notice may be published separately from the NOI, but must be published no less than 15 days before the scheduled meeting, regardless of whether it is an individual notice or part of the NOI.

4. Be mailed directly to concerned agencies, organizations, and individuals and may be published in local newspapers.

(e) Per reference (m), whenever practicable and appropriate, the NOI and announcement of the scoping meeting must be translated for non-English speaking populations.

(f) In the case of an action with effects of primarily local concern, the NOI can include compliance with the affected state's public notice procedures of comparable actions.

(5) Time Limits (section 8, part 1501 in reference (e)). The EPA publishes a weekly notice in the *Federal Register* listing the EISs filed during the preceding week. The following schedule, calculated from the date of publication of the EPA notice, must be followed:

(a) The DEIS should be made available to the public 15 days prior to any public hearing or meeting on the DEIS.

(b) The FEIS may not be filed less than 45 days after publication of the NOI of the DEIS.

(c) Prior to any ROD on the proposed action, the DEIS must be made available to the public for no less than 90 days, and the FEIS for no less than 30 days.

d. Format (section 10-18, part 1502 of reference (e)). Print the document on 8-1/2 by 11-inch bond paper; foldout sheets may be used as long as the 11-inch vertical dimension is retained. Use the following format for all EIS documents and, as appropriate, for EA documents:

(1) Cover Sheet. The one-page cover sheet includes the following:

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

(b) The title of the proposed action that is the subject of the environmental analysis (and if appropriate, the titles of related cooperating agency actions), together with states, counties, and other jurisdictions where the action is located.

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

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

(e) A one-paragraph abstract of the analysis.

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

(2) Summary. The summary appears at the beginning of the document, immediately follows the cover sheet, usually will not exceed 15 pages, and includes the following:

(a) Indication of whether the analysis is an EA, DEIS, or FEIS.

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

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

(d) A summary of the adverse environmental impacts and mitigating actions considered. This summary includes a statement as to whether the action is subject to the General

Conformity Rule under section 176(c) of reference (1), and if so, whether applicable requirements have been met.

(e) A list of considered alternatives.

(f) A statement as to whether the action may have a significant environmental impact or may be environmentally controversial.

(g) For DEISs, a list of all Federal, State, and local agencies from which comments have been requested; for FEISs, a list of all Federal, State, and local agencies and other sources from which written comments have been received

(h) The dates the DEIS and FEIS were made available to the CEQ and public.

(3) Purpose and Need. This section, which actually begins the body of the analytic portion of the document, briefly specifies the underlying need for the project and its objectives for which the Marine Corps or Action Proponent is presenting the proposed action and alternatives. It succinctly and objectively justifies the proposed action and explains the essential requirements that must be satisfied to achieve the purposes of the proposed action.

(4) Alternatives, Including the Proposed Action

(a) This section is the heart of the EA or EIS. Based on the information and analysis presented in paragraphs 12201.5d(5) and (6) sections 5 and 6, it presents the environmental impacts of the proposal and the alternatives in a comparative (matrix) form, thus sharply defining the issues and providing a basis for choice among the options by the decision makers and the public.

(b) Rigorously explore and objectively evaluate all reasonable alternative actions, particularly those actions that might enhance environmental quality or avoid some or all of the adverse environmental effects. Include, where relevant, alternatives to the proposed action not within the existing authority of the agency. If applicable, conduct an analysis of such alternatives, and report the results relating to their environmental benefits, costs, and risks. This analysis should accompany the proposed action through the agency review process. If a cost/benefit analysis relevant to the choice among environmentally different alternatives is prepared, discuss the

relationship between the analysis and any analysis of unquantified environmental impacts, values, and amenities as per section 23 of part 1502 of reference (e). The analysis evaluates qualitative and quantitative considerations, including factors not related to environmental quality that are likely to be relevant and important to a decision. This process will prevent a premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

(c) Alternatives include, but are not limited to, the following examples:

1. Taking no action.
2. Postponing action.
3. Selecting actions of a substantially different nature that would meet mission and project objectives and have different environmental impacts.
4. Adopting different designs or details of the proposed action that would present different environmental impacts (including mitigation measures).
5. Those alternatives not within the authority of the Marine Corps or Action Proponent to implement but that would still meet project objectives.

(d) In each case, the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the proposed action and each reasonable alternative. In all cases, however, evaluate the impact of not proceeding with the proposed action ("no action" alternative). Throughout the EA or EIS, the discussion and analysis should be structured to prevent a premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

(5) Existing Environment in which the Proposed Action Would Occur. Succinctly describe the existing environment within the area that would be affected by the proposed action, including existing and anticipated uses and activities in the area (i.e., a baseline description from which to compare the probable impact). The descriptions will be no longer than necessary to understand the effects of the proposed action. In the analysis, present the interrelationship of other Federal and non-Federal actions that might cause cumulative environmental

impacts with the proposed action. The amount of detail provided in such descriptions will be commensurate with the extent and impact of the action and with the amount of information required at the particular level of decision making.

(6) Environmental Consequences. This section forms the scientific and analytic basis for the comparison of impacts presented in the alternatives section. The discussion will include the proposed action, any adverse environmental impacts that cannot be avoided should the proposal be implemented, the relationship between short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. This section does not duplicate the discussions in the alternatives section, but does include the following discussions:

(a) Direct effects and their significance; i.e., an analysis of the positive and negative effects of the proposed action. The attention given to different aspects of the human environment varies according to the nature, scale, and location of proposed actions. Give primary attention to a discussion of those aspects most evidently impacted by the proposed action.

(b) Indirect effects and their significance. Include a discussion of secondary or indirect consequences for the environment in the analysis. Many major Federal actions, especially those that involve construction (e.g., new installation or joint use of an installation), stimulate or induce secondary effects in the form of associated investments and changed patterns of social and economic activities. Such secondary effects, by their impact on existing community facilities and activities, by inducing new facilities and activities, or by changing natural conditions, often are more substantial than the primary effects of the original action. For example, estimate the effects of the proposed action on population and growth if they may be significant. Evaluate the effect of any possible change in population patterns or growth upon the resource base, especially those that may impact low-income and minority populations, such as impacts on land use, water resources, and public services of the area in question. Consider major Federal actions that may cause indirect effects on the natural and physical environment off site or later in time.

(c) Possible conflicts between the proposed action and the objectives of Federal, State, and local (and in the case of a reservation, Native American tribe) land use plans, policies, and controls. Discuss how the proposed action will conform or conflict with the objectives and specific terms of approved or proposed Federal, State, and local land use plans, policies, and controls for the area affected, including those developed in response to environmental legislation. Where a conflict or inconsistency exists, describe the extent to which the agency has reconciled its proposed action with the plans, policies, or controls. In the absence of full reconciliation, document justification for any decision to proceed.

(d) The environmental effects of alternatives, including the "no action" alternative. Base comparisons as outlined in paragraph 12201.5e(4), preceding.

(e) Energy requirements and conservation potential of various alternatives and mitigation measures. Address the energy impact of the proposed action and alternatives.

(f) Any irreversible or irretrievable commitments of resources that would be involved if the proposed action is implemented. From a survey of unavoidable impacts, identify the extent to which the action irreversibly curtails the range of potential uses of the environment. "Resources" (both renewable and nonrenewable) means the natural and cultural resources committed to, or lost by, the action, as well as labor, funds, and materials committed to the action.

(g) The relationship between local short-term use of the environment and maintenance and enhancement of long-term productivity. Briefly discuss the extent to which the proposed action involves trade-offs between short-term environmental gains and the expense of long-term losses (and vice versa). Discuss the extent to which the proposed action forecloses future options. In this context, "short-term" and "long-term" do not refer to any fixed periods, but should be viewed in terms of the environmentally significant consequences of the proposed action.

(h) Urban quality, historic architecture, cultural value, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

(i) Ways to mitigate and/or monitor adverse environmental impacts (if not previously discussed). When appropriate, discuss mitigation measures in the form of avoidance, design modification, rehabilitation, preservation, or compensation; address the extent of countervailing benefits derived from implementing mitigation measures and/or monitoring programs to avoid or reduce some or all of the adverse environmental effects. In the EIS, mitigation measures and monitoring programs, including implementing feasibility and funding availability, should be discussed in the context of "potential mitigation measures" and "potential monitoring programs." The decision to commit to a particular mitigation measure or monitoring program is made in the ROD. In many cases, mitigation measures should also be coordinated with cognizant regulatory agencies.

(j) Cumulative impacts as appropriate and in context with the scope and magnitude of the proposed action. Rigorously examine the potential overlap of the proposed action and alternatives with the impacts of current and future actions planned in the immediate vicinity of the proposed action. Include a discussion any programs currently in place to monitor impacts from previous actions and whether the observations from such programs inform the assessment of impacts anticipated from the proposed action. Also discuss any programs that should be put in place to monitor long-term impacts on specific resources.

(k) Any probable and unavoidably adverse environmental effects should the proposal be implemented. Briefly discuss those effects that are adverse, not amenable to mitigation, and unavoidable under the proposed action.

(7) List of Preparers. Prepare environmental statements using an interdisciplinary approach that will ensure the integrated use of the natural, social sciences, and the environmental design arts. To verify that this approach was undertaken, list the names, together with the qualifications (expertise, experience, professional disciplines) of the persons primarily responsible for preparing the EA or EIS, or significant background papers, including basic components of the statement. Where possible, identify the persons who are responsible for the particular analysis, including analyses in background papers. Normally the list will not exceed two pages.

(8) Distribution List. Include in the document a complete distribution list, including the names and addresses of

all the organizations, agencies, and individuals to whom copies of the statement are to be sent.

(9) Correspondence. List all Federal, State, and local agencies, and their records of correspondence related to the proposed action, from which comments and coordination have been requested.

(10) Appendix. An appendix to an EIS is optional; however, if used, it will:

(a) Consist of material prepared in connection with the EIS (as distinct from material that is not so prepared and that is incorporated by reference).

(b) Normally include material that substantiates any analysis fundamental to the impact statement.

(c) Normally be analytic and relevant to the decisions to be made.

(d) Circulate with the EIS or be readily available upon request.

e. Incorporation by Reference (section 21, part 1502 of reference (e)). As much as possible, commands preparing an EIS must incorporate material into the document by reference when doing so will cut down on bulk without impeding agency and public review of the action. Cite the incorporated material in the statement and briefly describe its contents. Do not incorporate material by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Do not incorporate by reference material based on proprietary data that is itself not available for review and comment.

f. Incomplete or Unavailable Information (section 22, part 1502 of reference (e)). For the purposes of this section, "reasonably foreseeable significant adverse impacts" include those impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason. When the command preparing the EIS is evaluating reasonably foreseeable significant adverse effects on the human environment and there is incomplete or unavailable information, it must make

clear that such information is lacking. For such situations it can take the following actions:

(1) Include the information in the EIS 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.

(2) Include the following items in the EIS, 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 (e.g., the means for obtaining it are beyond the state of the art):

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

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

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

(d) The Action Proponent's evaluation of such impacts based on theoretical approaches or research methods generally accepted in the scientific community.

g. The CMC (LF)/Secretary of the Navy (SECNAV) Review of DEIS/FEIS. Following the Command EIRB recommendation, the commander exercising FONSI signature authority forwards the DEIS and FEIS to the CMC (LF) for HQEIRB approval. If approved by the HQEIRB, the DEIS or FEIS is forwarded to the Deputy Assistant Secretary of the Navy (Installations and Environment) (DASN I&E) or a designee for signature. The CMC (LF) must also deliver copies of the document to EPA Headquarters. The Action Proponent distributes the DEIS or FEIS to interested parties.

h. ROD (section 2, part 1505 of reference (e))

(1) The ROD is a public record of the decision to select one alternative for implementation from among the alternatives considered in detail in an EIS. The document, as proposed by

the activity/Action Proponent, will be finalized by the CMC (LF) on behalf of the HQEIRB and will state the decision, identify the alternatives considered (including those that were environmentally preferable), and discuss all factors, including non-environmental considerations, that influenced the decision. The ROD will commit the Action Proponent to the appropriate mitigation, if applicable, to minimize environmental harm, and to identify those measures that were considered, but not selected, for implementation. Additionally, any monitoring program associated with selected mitigation measures will be addressed. After the ROD is signed, it becomes the responsibility of the activity/Action Proponent to track implementation of mitigation measures and review the effectiveness of monitoring programs.

(2) The ROD must be drafted by the command in coordination with the CMC (LF) environmental planning staff. The Command EIRB must review the ROD and forward it with its recommendation to the commander exercising FONSI signature authority for approval. The commander exercising FONSI signature authority must forward the ROD to the CMC (LF) for consideration by the HQEIRB and approval. The CMC (LF) must forward the ROD to the DASN I&E or a designee for signature. The CMC (LF) must publish the signed ROD in the *Federal Register*, and the command or Action Proponent publishes the document in the local newspaper(s) and mails it to appropriate agencies, organization, and individuals.

6. Other Issues

a. Contractor Involvement in NEPA Documentation (section 5, part 1506 of reference (e)). An EIS, like an EA, frequently is prepared by a contractor. To obtain unbiased analyses, the contractor must be selected in a manner avoiding any conflict of interest. Therefore, contractors will execute disclosure statements approved by the Marine Corps, which specify that the contractors have no financial or other interest in the outcome of the project. Contractor efforts should be closely monitored throughout the process to ensure an adequate document and avoid extensive, time consuming, and costly revisions. Project planners, the environmental planning staff, the Action Proponent, and area land managers should be continuously involved in the process.

b. Cooperation with Federal, State, and Local Agencies (section 2, part 1506 of reference (e)). To eliminate duplication with Federal, State, and local procedures and to

fully address their requirements, commands must cooperate with other agencies as much as possible. Such cooperation could include:

(1) Joint planning processes.

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

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

(4) Joint EAs or EISs.

c. Administrative Record. The administrative record is a critical component of the NEPA process. The administrative record consists of all documents and materials (including intra-office e-mails) directly or indirectly considered by the decision maker. Should a decision be challenged, a reviewing court will review the decision primarily (if not solely) based on the administrative record. The decision maker is responsible for assembling and maintaining the administrative record. To this end, commanders/supervisors/officers-in-charge must ensure that all administrative record documents and materials are properly maintained and readily retrievable upon request. The administrative record must be retained after the proposed action has taken place, in the event that the action is challenged after the fact, per reference (k), SSIC 5090.4.

d. Classified EA and EIS Documents (section 3(c), part 1507 of reference (e))

(1) The fact that a proposed action is of a classified nature does not relieve the Action Proponent from complying with the requirements of this chapter. Prepare, safeguard, and disseminate the DEIS and FEIS, as well as the EA, per the requirements applicable to classified information. When feasible, organize these documents in such a manner that classified portions are included as appendices so the unclassified portions can be made available to the public. Coordinate the review of classified NEPA documentation with the EPA for requirements applicable to section 309 of reference (1).

(2) An EA or EIS containing classified information, or other information for which the public release is prohibited by

law, serves the same purpose as an EA or EIS without classified material, even though not all of its contents are subject to public review and comment. The entire package must accompany the proposal through the decision making process. The content of an EA or an EIS containing portions that cannot be released to the public must meet the same overall content requirements applicable to a fully published EA or EIS.

e. Emergency Actions. Where emergency circumstances outside Marine Corps control make it necessary to take an action with significant environmental impact without observing the provisions of CEQ regulations, the Marine Corps must consult with the CEQ about alternative arrangements. Action Proponents must contact the CMC (LF), as soon as practicable, to allow consultation with SECNAV and the CEQ. The CMC (LF) will consult with the CEQ and make alternative arrangements as appropriate with the CEQ to effect NEPA compliance for emergency actions. Alternative arrangements are limited to those aspects of a proposal that must proceed on an emergency basis. Remaining action to be taken is subject to normal NEPA review. Ordinarily, the failure to plan properly does not establish an emergency. Note: Regulations implementing other environmental laws (e.g., references (i) and (r)) contain requirements for consultation with the applicable regulatory agencies for actions taken relative to emergency circumstances.

f. Acquisition Programs

(1) The Acquisition Program Manager must comply with references (a) or (b) when a proposed action within an acquisition program will impose a physical effect on the natural environment.

(2) Reference (s) provides the requirements for NEPA compliance relative to the acquisition process.

g. Pollution Prevention

(1) The EPA evaluates NEPA documentation for incorporation of pollution prevention measures to assist Federal agencies in acknowledging and receiving credit for commitment to pollution prevention.

(2) The term "pollution prevention" includes equipment or technology modifications; process or procedure modifications; reformulation or redesign of products; substitution of raw materials; and improvements in housekeeping, maintenance,

training, or inventory control. During all stages of project formulation, from early planning and NEPA documentation through implementation, Action Proponents should seek opportunities to incorporate pollution prevention into their programs.

(3) The following list describes areas where pollution prevention opportunities may be appropriately addressed during the NEPA scoping and subsequent environmental review phases:

(a) The definition of the project's purpose and need (it should be clearly identified and not slanted to support the proponent's desires, which could limit pollution prevention options).

(b) The project design specification and standards.

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

(d) The facility location.

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

(f) Rejection of certain alternatives.

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

(h) The proposed action's potential to prevent pollution.

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

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

(4) Further guidance on compliance with reference (t), as well as pollution prevention strategies, can be found in chapters 6, 7, and 15 of this Manual.

h. Tiering (sections 20 and 28, part 1502 of reference (e)). Reference (e) encourages the use of tiering whenever appropriate to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for discussion at each level of the environmental review. An EA or EIS of broad scope discussing the impacts of a wide-ranging or long-term phased program, referred to as a programmatic EA or EIS, can be followed by an EA or EIS of more narrow scope concentrating solely on issues specific to the actions being considered. Tiering is appropriate when it helps the Action Proponent to focus on issues that are ripe for decision and excludes from consideration issues already decided or not yet ripe. This results in a stepped approach to planning and decision making.

(1) Tiering is appropriate when the sequence of statements or analysis is:

(a) From a broad program, plan, or policy (not necessarily site-specific) EIS to a program, plan, or policy statement of lesser scope or to a site-specific EA or EIS. For example, a national program providing for mineral exploration on military-held lands with a subsequent analysis tiered for each installation impacted, or the initiation of a new training apparatus where the use of the apparatus itself may impact the environment, with subsequent tiered analysis at each site proposed for locating such training.

(b) From an EIS on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent EIS or EA at a later stage (such as environmental mitigation).

(2) Content of Programmatic EIS. In addition to the discussion required by these procedures for inclusion in an EIS, the programmatic EIS will discuss:

(a) A description of the related stages, sites, or actions that may ultimately be proposed in as much detail as presently possible.

(b) The implementing program factors that are known at the time of EIS preparation.

(c) The environmental impacts resulting from establishing the overall program that would be similar for subsequent stages, sites, or actions as further implementation plans are proposed.

(d) The appropriate mitigation measures that would be similarly proposed for subsequent stages, sites, or actions.

(3) Preparation of a Tiered Analysis

(a) When the subsequent tier itself may have significant impact on the quality of the human environment or when an impact statement is required by these procedures, use the EIS as the analytical document for a staged or site-specific analysis subsequent to the programmatic EIS. Otherwise, document the subsequent tiered analysis with an EA to fully assess the need for an EIS or a FONSI.

(b) In addition to the discussion required by these procedures for inclusion in EA and EIS documents, each subsequent tiered analysis must:

1. Summarize the program-wide issues discussed in the programmatic statements and incorporate discussions from the programmatic statement by reference.

2. Concentrate on the issues specific to the subsequent action.

3. State where the programmatic document is available for review.

(4) Programmatic EISs and all the subsequent tiered EISs will be prepared, circulated, and distributed in the same fashion as required of any other EIS. Commands must prepare, circulate, and distribute tiered EAs and resulting FONSI per the procedures applicable to EAs.

i. Supplemental Statements (section 9, part 1502 of reference (e)). Prepare supplements to either a DEIS or FEIS if substantial changes are made in the proposed action and they are relevant to environmental concerns, or if significant new circumstances or information arises that is relevant to environmental concerns. Prepare, circulate, and file such supplements in the same fashion as a DEIS or FEIS. Scoping is not required.

j. Procedures for Conducting Public Hearings under NEPA. Conduct hearings as follows:

(1) Guidelines and Standards. The Action Proponent, in coordination with the CMC (LF), determines whether a public

hearing will be held. Public hearings are appropriate in the following situations:

(a) When the proposed agency action will have a direct or peculiar environmental impact on the people residing in a particular geographic area.

(b) When public organizations or members of the public possess expertise concerning the environmental impact of the action that may not otherwise be available.

(c) When the proposed action is not a classified action, or when there is no overriding concern for national security associated with the proposed action.

(d) When a request for a hearing has been submitted by another agency with jurisdiction over the action and is supported by reasons why a hearing will be helpful.

(e) When a minority or low-income population may be affected.

(2) Preparation

(a) The purpose of the public hearing on a proposed project is twofold. First, the hearing is intended to provide interested members of the public with relevant information. Second, the hearing affords members of the public an opportunity to present their views of the proposed action. The two foregoing objectives dictate the format for conducting public hearings.

(b) If the proposed action dictates that a hearing be held, the public must be advised of the proposed hearing via the *Federal Register* at least 15 days prior to the scheduled hearing. This *Federal Register* notice is in addition to publication in local newspapers. Per reference (m), provide notice, wherever practicable and appropriate, in foreign language local newspapers. Notification should include:

1. The date and time of the meeting, and the phone number of the hearing officer.

2. The request that speakers submit in writing their intention to participate.

3. The suggestion that technical statements or statements of considerable length be submitted in writing.

4. Any time limitation on the length of oral statements.

5. A summary of the proposed action, and the findings contained within the DEIS.

6. Offices/locations where the DEIS is available for examination.

7. A request that any individual or groups with special needs (e.g., accessibility/transportation or need for foreign language interpretation) notify the agency conducting the hearing.

(c) If feasible, make copies of the DEIS available to the public at an appropriate regional or local location. Also, forward copies of the DEIS to the appropriate State, regional, and metropolitan clearing-house (unless the governor of the state involved has designated some other point for receipt of the information). At the same time the statement is sent to CEQ, the EPA, and other Federal agencies, make the DEIS available to the public at least 15 days prior to public hearings. Use local outlets such as libraries and county commissioners' offices whenever appropriate. As necessary, translate document summaries into languages other than English.

(d) Hold hearings at a time and place readily accessible to civilian organizations and individuals interested in the proposed action. Generally, hearings are preferable in a civilian facility such as a high school auditorium on a weekday evening when such groups can reasonably be expected to attend.

(e) The Action Proponent must select a hearing officer who is of appropriate seniority, preferably military, thoroughly familiar with the proposed action, and of suitable temperament to preside at a public meeting at which the news media may attend. While there should be only one hearing officer, he/she may be assisted by other personnel who are also familiar with the proposed action or some phase of it. These personnel may help explain details or specialized portions of the proposed action. Foreign language interpreters should be present, as appropriate.

(f) An experienced court reporter or stenographer may prepare a verbatim or summary written record of the hearing, or the Action Proponent may tape the hearing. Append to the record as exhibits all written statements submitted to the hearing officer during the hearing or prior to the record's completion. Add to the record the list of persons attending the hearing, along with the organizations or interests they represent and their addresses. Mail a copy of the hearing to persons who have indicated this desire, subject to the cost of the reproduction.

(3) Format. The following format for the conduct of a hearing is provided as a general guideline. Hearing officers should tailor the format for each hearing as the circumstances dictate to meet the objectives of the hearing. The objectives are to provide information to the public and to record the opinions of interested persons for later evaluation in conjunction with the proposed action.

(a) Apprise the hearing officer of those who attend the hearing. A record of attendance assists in preparing the record, in recognizing individuals who desire to make a statement, and in mailing written answers to persons who desire them. That record can be compiled by having each person attending the hearing complete an individual card indicating name, address, and organization represented, if any, and whether a statement will be made at the hearing. Use an appropriate number of attendants to distribute and collect the cards and to separate cards of those who desire to make a statement from those who do not. The hearing officer may then use the cards as an orderly system for calling upon individuals who desire to make statements. Additionally, those individuals responding to the announcement and requesting opportunity to speak should be asked to provide copies of any remarks for hearing proceedings.

(b) The hearing officer and any assistants first should be introduced, make a brief statement on the purpose of the hearing, state the general ground rules, and welcome any present dignitaries. Explaining the hearing's purpose will be simplified if written copies have been made available to attendees. The hearing officer should inform the attendees that he/she is not authorized to make any decision as to whether the project is to proceed, be modified, or be abandoned.

(c) The hearing officer will fully explain what the proposed action entails, including information on alternative

courses of action. The hearing officer may call upon one or more assistants to explain any particular phase of the program.

(d) The hearing officer only should answer questions that seek clarification of the action and should not attempt to respond to attacks on it. Include all questions asked in the record of the hearing.

(e) Offer the persons attending the hearing an opportunity to present oral and/or written statements and publicize this opportunity in the Notice of Public Hearing. The hearing officer will ensure that the name and address of each person submitting an oral or written statement is noted. The attendees should be permitted to submit written statements during the hearing and within a reasonable time following the hearing (normally two weeks). Allot a reasonable length of time (three to five minutes) for oral statements. After all other scheduled statements have been completed, offer an opportunity to speak to individuals who desire to make a written or oral statement, but did not so indicate on the cards submitted when they entered the meeting.

(f) When it is time to adjourn the meeting, the hearing officer should first thank the attendees. Attendance may warrant an additional hearing, perhaps at another time and location. If so, the hearing officer should announce the intent, but not normally agree to repeat the entire procedure of publishing notice in the *Federal Register*, etc. At the conclusion of the meeting, the hearing officer should not express any opinion on the merits of the proposals or comments presented at the hearing.

7. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

12202. TERMS AND DEFINITIONS

1. Action. Broadly interpreted as any proposal initiated by the Marine Corps, including:

a. New activities or projects entirely or partly funded, assisted, conducted, regulated, or approved by the Marine Corps.

b. Substantive changes in continuing actions, such as major changes in operation tempo, areas of use, or in methodology/equipment, where these changes have the potential for significant impact.

c. Specific projects, such as construction or management activities located in a defined geographic area (e.g., Military Construction projects, public/private venture projects, special projects, land acquisition, natural resources management projects, and locally funded projects).

2. Action Proponent. The commander, commanding officer, or civilian director of a unit, activity, or organization who initiates a proposal for action, as defined in section 23, part 1508 of reference (e), and who has command and control authority over the action once it is authorized. For some actions, the Action Proponent will also serve as the decision-making authority for that action. In specific circumstances, the Action Proponent and decision maker may be identified in Navy regulations, other SECNAV Instructions, operational instructions and orders, acquisition instructions, and other sources which set out authority and responsibility within the DON.

3. Administrative Record. The administrative record is a critical component of the NEPA process and consists of all documents and materials (including intra-office emails) directly or indirectly considered by the decision maker. Should a decision be challenged, a reviewing court will review the decision primarily (if not solely) based on the administrative record. The decision maker is responsible for assembling and maintaining the administrative record. To this end, commanders/supervisors/officers-in-charge must ensure that all administrative record documents and materials are properly maintained and readily retrievable upon request.

4. CATEX (section 4, part 1508 of reference (e)). Actions that the DON has determined do not have a significant effect, individually or cumulatively, on the human environment under normal circumstances and for which neither an EA nor an EIS is required. DON CATEXs are provided in section 6, paragraph f of reference (f).

5. Installation EIRB. A selected group of subject matter experts appointed by the CG/CO of the installation. The board reviews environmental documentation to determine if the potential for environmental degradation or public controversy exists and the recommended level of NEPA documentation. The

composition of this EIRB will include a cross section of the command, and where appropriate, other Marine Corps commands/units and tenants. Members of the board should include the counsel or staff judge advocate; the heads of facilities, environment, and operations/training; the comptroller; public affairs; community plans and liaison office; and any others as determined by the commander exercising FONSI signature authority. The EIRB will ensure that the documentation is in compliance with reference (a).

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

7. EA (section 9, part 1508 of reference (e)). An EA is a concise document that:

a. Briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or FONSI.

b. Aids Marine Corps compliance with reference (a) when no EIS is necessary.

c. Facilitates preparation of an EIS when one is necessary (i.e., when the contemplated actions are considered to have a potential for significant environmental impact or environmental controversy, and therefore a FONSI is not appropriate).

d. Includes brief discussions of the need for the proposal, reasonable alternatives to the proposed action, environmental impacts of the proposed action, and a list of the agencies and persons consulted.

8. EIS (part 1502 of reference (e)). A NEPA document that provides full and fair discussion of significant environmental impacts of major Federal actions and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. It is used by Federal officials, in conjunction with other relevant materials, to plan actions and make decisions.

a. DEIS. A document normally prepared for actions potentially having a significant impact on the quality of the human environment or having potentially controversial environmental effects. DEISs are filed with the EPA and distributed to cognizant Federal, State, local, and private agencies, organizations, and individuals for review and comment before preparation of an FEIS.

b. FEIS. A completed statement, normally a separate and additional document from the DEIS, incorporating all pertinent comments and information provided during public and agency review of the DEIS. Responses to all substantive review comments will be contained in the FEIS. The FEIS is filed with the EPA.

c. SEIS (section 9, part 1502 of reference (e)). A document evaluating changes to either a DEIS or an FEIS necessitated by substantial modifications to the proposed action or significant new circumstances or information that would result in different environmental impacts than those evaluated in the original document. An SEIS may be prepared at any time after the preparation and filing of a DEIS or FEIS; it is filed with the EPA and distributed to recipients of the DEIS and FEIS.

9. FONSI (section 13, part 1508 of reference (e)). A document in which the Marine Corps briefly presents reasons why an action, not otherwise categorically excluded, will not have a significant effect on the human environment and for which an EIS will not be prepared. A FONSI may be one result of the review of an EA.

10. HQEIRB. A selected group of subject matter experts established at the CMC (LF) to review and assess the content of submitted EISs and selected EAs.

11. Human Environment (section 14, part 1508 of reference (e)). The natural and physical environment and the relationship of people with that environment.

12. Impacts (sections 7 and 8, part 1508 of reference (e)). Impacts are synonymous with effects and include direct, indirect, and cumulative impacts.

a. Direct Effect. Effect caused by an action that occurs at the same time and place as the action.

b. Indirect Effect. Effect also caused by an action and which occurs later in time or farther removed in distance from the action. Indirect impacts include:

(1) Growth-inducing effects.

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

(3) Related effects on the human environment, including the natural and physical environment.

c. Cumulative Impact. Impacts that 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) undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.

13. Lead Agency. The agency or agencies preparing or having taken primary responsibility for preparing an EIS.

14. Mitigation (section 20, part 1508 of reference (e)). Activities that would lessen or modify the adverse impacts associated with a proposed action. Mitigation includes:

a. Avoiding the impact altogether by not taking a certain action or parts of an action; this mitigation measure is preferred.

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

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

d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

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

15. Proposal (section 23, part 1508 of reference (e)). A "proposal" exists at that stage in the development of an action when the Action Proponent has a goal and is actively preparing to make a decision on one or more alternative means of

accomplishing that goal and the effects can be meaningfully evaluated. A proposal may exist in fact as well as by agency declaration that one exists.

16. REIR. A standard form prescribed by the Installation Commander to document the need for environmental analysis and compliance with reference (a).

17. ROD. A concise public document providing a rationale for the alternative selected for implementation as presented in an FEIS. The document, as proposed by the activity/Action Proponent, will be finalized by the CMC (LF) on behalf of the HQEIRB and will state the decision, identify the alternatives considered (including those that were environmentally preferable), and discuss all factors, including non-environmental considerations, that influenced the decision. The ROD will commit the Action Proponent to the appropriate mitigation, if applicable, to minimize environmental harm, and to identify those measures that were considered, but not selected, for implementation. Additionally, any monitoring program associated with selected mitigation measures will be addressed.

18. Scope (section 25, part 1508 of reference (e)). "Scope" consists of the range of actions, alternatives, and impacts to be considered in an EA or an EIS. The scope of an individual EA or EIS may depend on its relationships to other EAs or EISs. To determine the scope of an EA or an EIS, Action Proponents must consider three types of actions, three types of alternatives, and three types of impacts. They include:

a. Actions (other than unconnected single actions) that may be:

(1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are "connected" if they:

(a) Automatically trigger other actions that may require EISs.

(b) Cannot or will not proceed unless other actions are taken previously or simultaneously.

(c) Are interdependent parts of a larger action and depend on the larger action for their justification.

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An Action Proponent may wish to analyze these actions in the same EA or EIS. It should do so when the best way to assess adequately the combined impacts of similar actions is to treat them in a single EA or EIS.

b. Alternatives, which include:

(1) No Action alternative.

(2) Other reasonable courses of action.

(3) Mitigation measures (not in the proposed action).

c. Impacts, which may be:

(1) Direct.

(2) Indirect.

(3) Cumulative.

19. Scoping. An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

20. Significantly (section 27, part 1508 of reference (e)). "Significantly" as used in NEPA requires consideration of both context and intensity:

a. Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

b. Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

(3) Unique characteristics of the geographic area such as proximity to cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

(8) The degree to which the action may adversely affect districts, sites, landscapes, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under reference (i).

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

CHAPTER 12

THE NATIONAL ENVIRONMENTAL POLICY ACT

SECTION 3: RESPONSIBILITIES

12300. CMC (LF)

1. Establish policy and procedures regarding NEPA compliance.
2. Coordinate the CMC (LF) review and disposition of EAs referred by the commander exercising FONSI signature authority and DEIS and FEIS documents through the HQEIRB.
3. Coordinate as appropriate with the CEQ; EPA; Deputy Under Secretary of Defense for Environmental Security, Office of the Assistant Secretary of the Navy, Installations and Environment; and Office of the Assistant Secretary of the Navy, Research, Development, and Acquisition regarding NEPA actions elevated to Headquarters level.
4. Coordinate with the command EIRB during preparation of a ROD. The proposed ROD will be drafted to reflect the HQEIRB review of the FEIS and will be forwarded to SECNAV by the CMC (LF) for signature and final disposition.
5. Assist commands with the interpretation of policies, implementation of procedures, and compliance with reference (a) for Marine Corps actions.
6. Coordinate, as appropriate, with the director of public affairs, for releasing to the public environmental documents per reference (a) and other applicable Federal laws.
7. Publish NOIs, announcements of public hearings, and RODs in the *Federal Register*.
8. Provide assistance for actions initiated by private persons, State or local agencies, and other non-DON/DOD entities for which DON involvement may be foreseen.
9. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, State, local, and overseas NEPA requirements and by uniformly applying Marine Corps policy as set forth in this Manual.

10. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies as required.

11. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to NEPA regulations.

12301. HQEIRB. Receive, review, and provide recommendations, as appropriate, to Deputy Chief of Staff, Installations and Logistics on DEIS, FEIS, ROD, and those EA/FONSI documents elevated to Headquarters level.

12302. CGS/COS OF INSTALLATIONS, AND COMMANDER MARINE FORCES RESERVE EXERCISING FONSI SIGNATURE AUTHORITY

1. Designate, chair, and provide for establishing a command EIRB consisting of a cross section of command personnel, including both environmental and legal staff.

2. Designate an individual and alternate, in addition to the commander exercising FONSI signature authority, in cases where the action has been identified as a CATEX.

3. Promptly notify the CMC (LF) when a decision to prepare an EA that meets conditions in paragraph 12201.5.b, or a DEIS has been made.

4. Decide whether a FONSI is appropriate when the proposed action does not involve any of the circumstances listed at paragraph 12104.5, recommend preparation of a DEIS, or recommend that the action not proceed. The decision must be based on the command EIRB's recommendation.

5. Ensure that adequate funding and personnel are available for environmental review and that appropriate orders include the requirements of planning and funding environmental documents.

6. Ensure that analyses are conducted for the environmental effects of current and proposed actions per DOD regulations, reference (e), and other applicable statutes and regulations.

7. As appropriate, encourage public participation in environmental evaluations of projects or programs.

8. Ensure that environmental analysis and the NEPA process are included at the initial planning stages and at each following

procedural step or decision milestone in the development of a project or program.

9. Ensure that all agency consultations and coordination, excluding permits (e.g., wetland or stormwater permits), are completed prior to signing FONSI and prior to forwarding final EISs to CMC (LFL).

10. Ensure that the administrative record supporting the NEPA process for the proposed action is assembled and maintained.

11. Identify and submit to the Commandant of the Marine Corps, Logistics, Facilities, CMC (LFL), and CMC (LFF) project documentation and funding requests for NEPA-related actions that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with NEPA requirements. Pay appropriate Federal, State, and local fees. Ensure that the Environmental Management Hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

12. Ensure that impacts to installation resources are mitigated, as required per applicable environmental statutes.

13. Ensure that permit conditions and commitments are met.

12303. EIRB

1. Ensure that all NEPA documents fully comply with all legal and procedural requirements through a review for technical sufficiency, including, but not limited to:

a. Complete analysis of alternatives and their associated impacts;

b. Appropriateness of alternatives analyzed; and

c. Appropriateness of proposal as required to coexist with other actions on the installation.

2. Ensure that all NEPA documents have undergone appropriate staff review.

3. Assist the Action Proponent in determining whether the proposed action requires the preparation of an EA or EIS.
4. Review the completed EA, and make recommendation to the commander exercising FONSI signature authority for a FONSI, a DEIS, or no action. The EIRB will draft the proposed FONSI and forward both the EA and FONSI to the commander exercising FONSI signature authority for signature.
5. If the EA meets one of the requirements discussed in paragraph 12104.5, the EIRB will forward, for the commander exercising FONSI signature authority, the EA and proposed FONSI to HQEIRB for review and concurrence for approval.
6. Draft NOI, DEIS, and EIS, and forward NOI to commander exercising FONSI signature authority for approval.
7. Retain on file, for no less than 10 years, copies of all decision memoranda, completed EAs and EISs, published FONSI statements, RODs, and minutes taken during EIRB meetings.
8. The EIRB will include the designated chair of the commander exercising FONSI signature authority, a legal representative, the heads of facilities, environment, operations/training, comptroller, public affairs, community plans and liaison departments, as appropriate, and any others as determined by the commander exercising FONSI signature authority.

12304. INSTALLATION ENVIRONMENTAL PLANNING STAFF

1. Assist the Action Proponent to effect reference (a).
2. Provide specific installation guidance related to reference (a).
3. Review NEPA documents and provide technical assistance.
4. Natural resource program managers shall serve as the primary point of contact for all formal or informal consultation with the appropriate regulatory agencies when actions may impact natural resources (e.g. threatened or endangered species, critical habitat, wetlands).
5. Cultural resource program managers shall serve as the primary point of contact for all consultations with State

Historic Preservation Offices, Native American tribes and Native Hawaiian organizations when actions may impact cultural resources.

6. Negotiate (in coordination with action proponent) mitigation requirements with applicable regulatory agencies.
7. Monitor and track mitigation implementation and adjust as necessary to ensure success.

12305. ACTION PROPONENTS

1. Provide funds for NEPA documentation and all related ancillary studies and mitigation costs. NEPA funding is not centrally managed. Action Proponents and/or Action Proponents must program funds for NEPA compliance.
2. Coordinate with the command environmental staff at the earliest possible opportunity to determine the level of NEPA documentation required. The command environmental staff will consult with counsel and/or the EIRB when the level of NEPA documentation may be subject to legal or other qualifying interpretations.
3. Sign a decision memorandum if required for an action that has been CATEX'd, with conditions to be met before, during, and following completion of the proposed action. The Action Proponents are to maintain the original documentation. Copies of the REIR and/or decision memorandum must be made available to the CMC (LF) upon request.
4. Coordinate with the installation environmental staff and fund for the development of an EA or EIS, as appropriate for actions not identified on the list of CATEXs.
5. Coordinate with the installation environmental staff and fund for the publication of the FONSI, NOI, or ROD, as appropriate, in local newspapers.
6. Ensure funds are available and programmed to fund implementation of mitigation commitment(s) and satisfy established success criteria.

REFERENCES

- (a) 42 U.S.C. 4321-4347
- (b) Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions," January 4, 1979
- (c) DOD Directive 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," March 31, 1979
- (d) 32 CFR 187
- (e) 40 CFR 1500-1508
- (f) 32 CFR 775
- (g) SECNAV M-5214.1
- (h) 42 U.S.C. 9601-9675
- (i) 16 U.S.C. 1531-1544
- (j) 42 U.S.C. 300f-300j-26
- (k) SECNAV M-5210.1
- (l) 42 U.S.C. 7401-7671
- (m) Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 16, 1994
- (n) DOD Strategy on Environmental Justice, March 24, 1995
- (o) 16 U.S.C. 470-470w-6
- (p) 16 U.S.C. 470aa-470mm
- (q) 16 U.S.C. 1451-1465

(r) 33 U.S.C. 1251-1387

(s) SECNAVINST 5000.2D

(t) 42 U.S.C. 13101-131

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

CHAPTER 13

NOISE MANAGEMENT

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CHAPTER 13

NOISE MANAGEMENT

SECTION 1: INTRODUCTION

13100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for reducing environmental noise at Marine Corps installations. Workplace noise as an occupational health and safety issue is not addressed in this Manual.

13101. APPLICABILITY

1. See paragraph 1101.
2. This chapter also applies to overseas installations.

13102. BACKGROUND

1. The Noise Control Act seeks to protect Americans from "noise that jeopardizes their health or welfare." This Act directs Federal agencies to further this policy within their programs.
2. Marine Corps operations have the potential to cause adverse noise impacts on surrounding communities. State, local, and host nation laws may also prescribe maximum noise levels to control these impacts.

13103. FEDERAL STATUTES. The Noise Control Act of 1972 (42 U.S.C. 4901 et seq.) requires that Federal performance standards be incorporated into the design of certain new vehicles, railroad equipment, and products in order to reduce noise emissions. The Noise Control Act does not prescribe retrofit modifications for existing noise sources. Military aircraft, combat equipment, and weapon systems are exempt from new product design standards. The Act provides only for the prescription and amendment of standards for nonmilitary aircraft noise and sonic boom.

13104. REQUIREMENTS

1. Executive Order (EO) 12088, October 13, 1978. EO 12088 directs Federal facilities to comply with all requirements applicable to environmental noise management. Federal facilities must also comply with boundary noise limits established by state and local laws subject to specific exemption.

2. Air Installations Compatible Use Zone (AICUZ) Program. The AICUZ program was established by DoD, as described in appendix L, OPNAVINST 11010.36 and in 32 CFR 256. This program identifies and addresses incompatible developments in areas adjacent to air installations and subject to rated levels of aircraft noise and potential accident impacts.

3. State and Local Requirementsa. State and Local Laws

(1) State and local regulations on environmental noise vary too widely for any generic use in determining compliance for a specific operation at a specific site. As a general rule, states tend to treat environmental noise as source-specific, the emissions from which will be controlled depending on the community area specifically affected. State and local laws may prescribe maximum noise levels across property lines. These boundary noise limits are attainable by a variety of structural and natural noise path barriers and by source design modifications.

(2) The following Marine Corps installations and activities may be subject to state and local regulations and may require studies to determine the impact of environmental noise on the surrounding communities:

- (a) Airfields.
- (b) Weapon, rocket, missile-firing ranges.
- (c) Test tracks for vehicles.
- (d) Outdoor power-generating equipment.
- (e) Demolition and explosive disposal sites.

b. Even in the absence of state and/or local environmental noise regulations, the Marine Corps must be aware of adverse

noise impacts in the surrounding community. The Marine Corps can minimize adverse public response to its programs by initiating a coordinated cooperative approach with the community and by emphasizing mutual problem solving with state and local governmental authorities and community organizations.

c. A review of complaints from residents of surrounding communities can help to determine the degree and extent to which the surrounding community perceives the Marine Corps as responsible for an adverse environmental noise impact. The Public Affairs Office and the community planning and liaison officer can be especially helpful in handling complaints and in advising the community of actions being taken to minimize environmental noise impacts.

d. Compliance with state and local requirements is generally interpreted to mean that the Marine Corps will comply with the procedural as well as the substantive aspects of environmental noise legislation. Obtaining permits forregulated functions would be an example of procedural compliance.

4. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable EO's, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

13105. TERMS AND DEFINITIONS

1. AICUZ Program. The AICUZ program recognizes that some air installation operations are incompatible with certain possible uses of the land in the vicinity of the installation. The AICUZ program seeks to restrict the use of such land to compatible uses through such means as local zoning, state legislation, acquisition of restrictive easements, and acquisition of fee titles by the Federal Government.

2. Environmental Noise. The intensity, duration, and character of sounds from all sources.

3. Low-Noise Emission Product. Any product that emits noise in amounts significantly below the levels specified in noise emission standards applicable to that type of product under the Noise Control Act at the time of procurement.

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

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SECTION 2: MARINE CORPS POLICY

13200. GENERAL

1. Unless specifically exempted, Marine Corps commands engaged in any activity resulting in noise emissions must comply with Federal, state, interstate, and local requirements for the control and management of environmental noise.

2. The Marine Corps noise control and management programs must:

a. Coordinate with other Federal agencies to maintain active programs to protect the health and welfare of both on-base and off-base personnel from hazardous noise levels.

b. Procure, whenever feasible, low-noise emission products. Emphasize a "buy quiet" approach in procurement actions.

c. Soundproof, wherever feasible, Marine Corps-owned or-operated school and child development center buildings significantly affected by noise from military operations.

d. Locate noise-sensitive housing and other developments away from major noise sources.

e. Cooperate with and support neighborhood self-help programs to identify and address local noise problems.

f. Consider noise problems when planning, acquiring, and siting noise-generating equipment such as engine test stands. Give full attention to all available alleviating measures, such as remote siting and sound suppression equipment. Consider allocating aviation buffer zones to wildlife refuges or agricultural outleasements to preclude encroachment of the civilian community.

g. Notify the public to the extent feasible of any significant increases in noise generation or in deviations from normal noise generation patterns. Also, where the generation of significant noise routinely affects the civilian community,

institute a program of community education to develop positive public relations.

h. Minimize disruption to the local community regarding operations that are known to generate complaints. These activities should still be consistent with military requirements and the efficiency of operations, but they should be conducted at such times, locations, and under such conditions as to minimize the disruption to the local community.

13201. WORKPLACE NOISE. Workplace noise is not considered an environmental noise. Guidance for occupational noise is provided in MCO 6260.1.

13202. AVIATION NOISE SUPPRESSION

1. Marine Corps installations must consider ameliorating options such as remote siting, sound suppression equipment, and sound barriers when developing new aircraft-related systems such as engine test stands.

2. Marine Corps installations must consider suitably quiet, ground support equipment (e.g., starters, hush houses) when procuring new aircraft systems.

13203. RESTRICTING NOISY OPERATIONS. As much as possible, personnel must limit to normal working hours the use of power tools, machinery, construction equipment, and other noisy devices.

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CHAPTER 13

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SECTION 3: RESPONSIBILITIES

13300. CMC (LF)

1. Promote research to define and study noise pollution problems unique to the Marine Corps, and coordinate such research with other Marine Corps facilities and with the Environmental Protection Agency.
2. Ensure that ground equipment associated with procurements of new and/or follow up aircraft contain necessary noise suppressers.
3. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, state, local, and overseas noise management requirements and by uniformly applying Marine Corps policy as set forth in the Manual.
4. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
5. Conduct special environmental compliance and protection studies with regard to noise management to assist in establishing policy or initiating actions.
6. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to noise management.
7. Track Marine Corps progress toward meeting established noise management goals.

13301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE (COMMARFORRES)

1. Establish a base or station order implementing the specifications set forth in this chapter.

2. Initiate procurement procedures to ensure that products and equipment not designed for combat use meet Federal or host nation noise standards.
3. Implement procedures for limiting on-base noise generating operations and for complying with property-line noise levels consistent with applicable local laws or host nation standards.
4. Ensure that coordination occurs as appropriate with the safety office in matters relating to noise exposure.
5. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for noise pollution management that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with environmental noise management requirements. Pay appropriate Federal, state, and local fees. Ensure that the Environmental Management Hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

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CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 1: INTRODUCTION

14100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for complying with the legal use of pesticides at Marine Corps installations in accordance with the Department of Defense (DOD) pest management specifications outlined in references (a) and (b).

14101. APPLICABILITY. See paragraph 1101.

14102. BACKGROUND

1. Reference (b) was signed jointly by direction of the Commandant of the Marine Corps and the Chief of Naval Operations and applies to all ships, stations, and deployed units of the Navy and Marine Corps including government-owned, contractor-operated installations, base-operating services, Marine Corps Community Services functions, including golf courses, land management planning including agricultural outleases, public-private venture (PPV) housing and other privatized operations on Naval Property, and non-naval property under Navy and Marine Corps stewardship where pest control operations are conducted.

2. The DOD pest management specifications described in enclosure 4 of reference (a) prescribes detailed procedures for the DOD pest management program. Procedures prescribed under the instruction are based on Integrated Pest Management (IPM) concepts. IPM is the method of choice for DOD pest management and disease vector control. IPM is a sustainable approach to managing pests and controlling disease vectors by combining applicable pest management tools in a way that minimizes economic, health, and environmental risks. IPM uses regular or scheduled monitoring to determine if and when treatments are needed and employs physical, mechanical, cultural, biological, genetic, regulatory chemical, and educational methods to keep pest numbers low enough to prevent unacceptable damage or impacts. Treatments are not made according to a predetermined schedule; they are made only when and where monitoring has indicated that the pest will cause unacceptable economic, medical, or aesthetic damage. Treatments are chosen and timed

to be most effective and least disruptive to the natural control of pests. Least hazardous, but effective, pesticides are used as a last resort.

3. Relationship of Pesticide Pollution Prevention to other Environmental Program Areas

a. For Marine Corps policy on water quality management, see chapter 20 of this Manual.

b. For Marine Corps policy on pollution prevention, see chapter 15 of this Manual.

c. For Marine Corps policy on hazardous waste (HW) management, see chapter 9 of this Manual.

d. For Marine Corps policy on emergency planning and response, see chapter 7 of this Manual.

4. Additionally, the Marine Corps must integrate environmental compliance for pesticides with occupational health and safety policies and regulations.

14103. FEDERAL STATUTES

1. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947, as Amended (7 United States Code (U.S.C.) 136 et seq.). FIFRA provides the principal means for preventing adverse effects on the environment from pesticides through product registration and applicator certification. The Environmental Protection Agency's (EPA's) registration of all pesticide products results in label instructions on each container for use, storage, and disposal. Label instructions are legally applicable to all users. Under FIFRA, the EPA must accept certain recalled pesticides for safe disposal. It is illegal to purchase, distribute, or use any pesticide in the Continental United States (CONUS) or Outside the Continental United States (OCONUS) subject to FIFRA jurisdiction that does not have an EPA registration number or for which registration has been canceled or suspended. It is also illegal to apply, store, or dispose of any pesticide or pesticide container in any manner inconsistent with applicable regulations. Although FIFRA does not delegate enforcement responsibilities for Federal facilities to the states, many states have established Memorandums of Understanding (MOUs) with the DOD regarding the procurement, use, and onsite inspection of pesticides on Marine Corps installations. All pesticides must be applied by appropriately

certified personnel except when used for personal relief (defined in paragraph 14105.14). Under FIFRA:

a. The pesticide label, regulated by EPA, establishes directions for use, precautions for preventing adverse environmental effects, and disposal requirements. Failure to adhere to the labeling requirements or using the substance in a manner inconsistent with the product label is a violation of Federal law.

b. EPA approves Federal and State agency plans for training and certification of pesticide applicators.

c. Records of all pesticide applications must be retained per reference (c), Standard Subject Identification Code (SSIC) 5090.4; such records must be available for inspection by State or EPA representatives.

2. Resource Conservation and Recovery Act (RCRA) of 1976, as Amended (42 U.S.C. 6901 et seq.). RCRA outlines the HW Management requirements for the disposing of excess or waste pesticides and for equipment and containers contaminated by pesticides. RCRA regulations identify the criteria, standards, and requirements for proper disposal of excess pesticides, pesticide containers, and the waste resulting from the cleanup of pesticide spills (see chapter 9 of this Manual).

3. Federal Water Pollution Control Act of 1972, as Amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.). This Act provides for protection of surface waters from contamination by pesticides in wastewater and runoff. Control is exercised through stringent effluent limitations imposed through the National Pollutant Discharge Elimination System permitting program and the Storm Water Program (see chapter 20 of this Manual).

4. Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). EPCRA provides for protecting and notifying communities in the event of a release of a toxic chemical. The list of toxic chemicals requiring notification includes several pesticides. The Marine Corps must comply with specific provisions of EPCRA (found in sections 301-313) as required by Executive Order (E.O.) 13423, "Strengthening Federal

Environmental, Energy, and Transportation Management," January 24, 2007, and implementing instructions (see chapter 7 of this Manual).

5. Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. 2601 et seq.). This Act requires the EPA to regulate and control harmful chemical and toxic substances in commercial use. Congress enacted TSCA to reduce unreasonable risks from chemicals to human health and the environment. Section 6 of TSCA authorizes the EPA to regulate hazardous chemical substances and mixtures.

6. Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.). The ESA provides for protecting threatened and endangered species of fish, wildlife, and plants, and their habitats. The Act requires Federal agencies to ensure that no agency action is likely to jeopardize the continued existence of threatened or endangered species (T&E). Under ESA, the EPA is required to ensure that pesticide use is not likely to jeopardize endangered species or to adversely affect critical habitats. Endangered species and critical habitat protection is implemented through the pesticide labeling process and the issuance of state specific bulletins.

7. Migratory Bird Treaty Act (MBTA) of 1918, as Amended (16 U.S.C. 703 et seq.). This Act protects migratory birds and their nests and eggs from being hunted, captured, purchased, or traded. The Act requires a United States Fish and Wildlife Service (USFWS) permit be obtained before any action that would lead to direct death of migratory birds, including the use of pesticides to manage bird populations other than starlings, English house finches (house sparrows), and pigeons.

8. Federal Noxious Weed Act of 1974 (7 U.S.C. 2814). This Act prescribes integrated management systems to control or contain non-indigenous weeds that injure or have the potential to injure the interests of agriculture and commerce, wildlife resources, or the public health.

9. National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.). NEPA specifies requirements for the aerial application of pesticides, as well as the filing of environmental impact statements on pesticide decisions.

10. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601 et seq.). CERCLA authorizes Federal action to respond to the release, or

substantial threat of release, into the environment of hazardous substances, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare. Section 107(i) exempts application of pesticide products registered under FIFRA from CERCLA requirements.

11. Federal Facility Compliance Act (FFCA) of 1992 (Public Law 102-386). FFCA waives immunity for Federal facilities under solid and hazardous waste laws, CERCLA, and RCRA by allowing states to fine and penalize them for violations. This is applicable only to pesticides that are HWS, or are managed or disposed of as HWS requiring management under RCRA. See chapter 9 of this Manual.

12. Food Quality Protection Act of 1996 (Public Law 104-170). The Act amends FIFRA and the Food, Drug and Cosmetic Act. The Food Quality Protection Act contains language directly applicable to the DOD Pest Management Program by defining "maintenance applicator" and establishing a requirement for minimum training, defining vector and public health pesticide, defining the term IPM, and promoting IPM through procurement and regulatory policies.

13. Occupational Safety and Health Act (OSHA) of 1970 (29 U.S.C 651 et seq.). OSHA establishes safety and health standards to ensure that every worker (including pesticide applicators) in the nation enjoys safe and healthful working conditions. OSHA is made applicable to Federal facilities through E.O. 12196, "Occupational Safety and Health Programs for Federal Employees," February 26, 1980, and E.O. 13446, "Continuance of Certain Federal Advisory Committees and Amendments to and Revocation of Other Executive Orders," September 28, 2007.

14104. REQUIREMENTS

1. DOD Pest Management Program. See enclosure 4 of reference (a) for complete information on specific DOD requirements. Installations must:

a. Develop, maintain, annually review, and revise their pest management plans consistent with the program elements in enclosure 4 of reference (a) and with reference (d) (see Technical Guidance definition in paragraph 14105.29).

b. Implement pest management programs approved by pest management consultants (PMCs) and performed by certified

pesticide applicators in accordance with the pest management plan written for each installation.

c. Establish pest management self-help programs for military housing when cost-effective and when IPM monitoring indicates a need for a self-help program.

d. Have all pesticide applications to Marine Corps installations be performed only by properly trained and certified personnel in accordance with reference (e), authorized by reference (a) or by State-certified applicators.

e. Use pesticides in CONUS in accordance with applicable laws, including reference (f), and OCONUS consistent with applicable international agreements, Status of Force Agreements, Final Governing Standards (FGS) issued for the host nations, or where no such FGS have been issued, the criteria in reference (g).

f. Use only pesticides that have been approved by a DOD PMC. Consideration should be given to locally purchased pesticides to ensure conformance with State management plans for groundwater protection and to facilitate use of recyclable pesticide containers when appropriate pesticides are not available in the Federal supply system. Pesticides may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that the assignment of a National Stock Number (NSN) is not practical.

g. Maintain complete daily pesticide application and pest management operations records as required by section 136i-1 of reference (f), using Department of Defense (DD) Form 1532-1 or a computer-generated equivalent. Produce a monthly summary, using DD Form 1532 or computer-generated equivalent, to provide data for regulatory, DOD, Federal, State, or local agency data calls; and for Marine Corps program review and oversight. Report Control Symbol, DD-6250-02, is assigned to this reporting requirement. Retain these records per reference (c), SSIC 5090.4

h. Use pest management contracts when more cost-effective than in-house services. Ensure that firms and their employees, performing contract pest management work on Marine Corps installations and in support of Marine Corps operations overseas, comply with all certification, licensing, and registration requirements of the state or country where the work

is performed. Ensure that the technical portions of contracts involving pest management reflect IPM methodology and are reviewed and approved by a DOD PMC before solicitation.

i. Have pest control performance assessment representatives (PCPARs) who have been trained in pest management at DOD-sponsored courses inspect pest management operations and pesticide applications performed by contractors.

j. Report pest management operations and pesticide applications performed by contractors as required in paragraph 14104.1g.

2. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s), and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

14105. TERMS AND DEFINITIONS

1. Applied Biology Program. A network of Naval Facilities (NAVFAC) PMCs in the Environmental Business Line that assist Navy and Marine Corps installations with reference (f) and FGS-based compliance and provide IPM solutions that protect operations, war-fighters, quality of life, property, material and the environment from the adverse effects of living organisms.

2. Certifying Officials. Professional DOD pest management personnel who are designated in writing by the Service Components to the Executive Director, Armed Forces Pest Management Board (AFPMB), who review and certify that qualifications of DOD applicators meet the DOD standards in reference (e), authorized by reference (a).

3. Component Senior PMC. The professional DOD pest management individual designated in writing by the Service Components to the Executive Director, AFPMB, who is the primary point of contact for the Component's pest management program, including technical (TG) guidance, management oversight, and information requirements.

4. Direct Supervision. Supervision that includes being at the specific location where pest management work is conducted, providing instruction and control, and maintaining a line-of-sight view of the work performed. Certain circumstances may

temporarily remove the line-of-sight view of the application of pesticide from the supervisor such as topographic constraints, vegetation constraints, or building structural constraints. Under these temporary circumstances, the supervisor must be responsible for the actions of the pesticide applicators. (see paragraph 14105.16e).

5. Disease Vector. Any animal capable of transmitting the causative agent of a human disease; serving as an intermediate or reservoir host of a pathogenic organism; or producing human discomfort or injury, including (but not limited to) mosquitoes, flies, ticks, mites, other insects, snails, and rodents. It is recognized that certain disease vectors are predominately economic pests that as conditions change may require management or control as a disease vector.

6. Disinfection. The procedure of killing or removing insects from ships or aircraft to prevent their importation into another port or country.

7. IPM. A planned program, incorporating continuous monitoring, education, 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 (effective, economical, and environmentally sound) methods, including education, habitat modification, biological control, genetic control, cultural control, mechanical control, physical control, regulatory control, and where necessary, the judicious use of least-hazardous pesticides.

8. IPM Coordinator. The individual officially designated by the installation commander to coordinate and oversee the installation pest management program and installation IPM plan. IPM coordinators must be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

9. Material Safety Data Sheet (MSDS). A document (OSHA form 174, or equivalent) that accompanies a pesticide product, providing the handler with chemical information on ingredients, handling instructions, potential hazards, and manufacturer address and emergency contact information.

10. Monitoring. Thorough inspections or surveys conducted on a regular basis to determine the presence and prevalence of pests or disease vectors.

11. Nuisance Pests. Insects, other arthropods, and other organisms that do not cause economic damage or adversely affect human health, but which cause minor annoyance on occasion.

12. Onsite Supervision. Supervision that includes being physically located on the installation, but not necessarily at the specific work site, during the work performance and able to be contacted and to be present at the work site within 30 minutes.

13. PCPAR (Formerly known as Pest Control Quality Assurance Evaluators). 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.

14. Personal Relief. Pest management control efforts made by Marine Corps personnel or their family members at their own expense for the control of pests in accordance with DOD and Marine Corps pest management policy.

15. Pesticide. Any substance or mixture of substances, including biological control agents, that may prevent, destroy, repel, or mitigate pests and are specifically labeled for use by the EPA. Also, any substance or mixture of substances used as a plant regulator, defoliant, desiccant, disinfectant, or biocide. (See paragraph 14105.26). Note: The AFPMB does not review or approve disinfectants or biocides.

16. Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides by others.

a. Certified Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides and who has been authorized to do so by successfully completing a training program approved by the EPA, followed by formal certification by the DOD or a state. OCONUS, the DOD provisions described in subsection 2.5 of reference (a) apply to individuals who apply pesticides or supervise the use of pesticides.

b. DOD-Certified Pesticide Applicators. DOD military or civilian personnel certified in accordance with reference (e), authorized by reference (a).

c. Installation Pesticide Applicators. DOD employees or contract personnel whose job responsibilities involve the application of pesticides on DOD installations and property.

d. State-Certified Pesticide Applicators. Persons certified in accordance with reference (f) by a state with an EPA-approved certification plan.

e. Uncertified Installation Pesticide Applicators. Marine Corps employees who are not certified under the DOD or State plan during an apprenticeship period not exceeding two years and who must apply pesticides under the supervision of a DOD or State-certified applicator.

17. Pesticide Cancellation. An action by the EPA that may limit the use of a pesticide. The EPA often issues instructions with the pesticide cancellations providing information on the proper disposition of cancelled pesticides.

18. Pesticide Facility. The building and areas designated for handling and storing pesticides.

19. Pest Management. The prevention and control of disease vectors and pests that may adversely affect the Marine Corps mission or military operations; human health and well-being; or structures, materiel, or property.

20. Pest Management Materiel. Equipment or pesticides used to monitor, prevent, or control pests and disease vectors. Equipment items include, but are not limited to, all pesticide dispersal equipment, traps, nets, and pest-attracting or pest-repelling devices.

21. Pest Management Plan. A long-range, comprehensive installation planning and operational document that establishes the strategy and methods for conducting a safe, effective, and environmentally sound IPM program. Written pest management plans are required as a means of establishing and implementing an installation pest management program.

22. Pests. Arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, and other organisms (except for human or animal disease-causing

organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

23. PMC. Professional DOD pest management personnel located at Component Headquarters, field operating agencies, major commands, facilities engineering field divisions or activities, or area support activities who provide technical and management guidance for the conduct of installation pest management operations. Some PMCs may be designated by their DOD component as certifying officials.

24. Professional Pest Management Personnel. DOD military officers commissioned in the Medical Service or Biomedical Sciences Corps or DOD civilian personnel with college degrees in biological or agricultural sciences who are in a current assignment that includes pest management responsibilities exercised regularly. DOD civilian employees also must meet Office of Personnel Management qualification standards. Based on assignment, some professional pest management personnel are PMCs.

25. Registered Pesticide. A pesticide registered by the EPA for sale and use within the United States.

26. Restricted-Use Pesticide. A pesticide that the Administrator of the EPA (in accordance with reference (f)) or a State regulatory agency determines to have the potential to cause unreasonable and adverse effects on the environment or human health when applied in accordance with its directions for use and therefore requires additional regulatory restrictions.

27. Surveillance. Thorough inspections or surveys made before or after pest management treatments to determine the presence and prevalence of pests or disease vectors.

28. TG. TG prepared by the AFPMB on specific pest management and disease vector control topics. TGs are available from the AFPMB, Defense Pest Management Information Analysis Center, Forest Glen Section/Walter Reed Army Medical Center, Washington, DC 20307-5001.

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 2: MARINE CORPS POLICY

14200. GENERAL. Marine Corps policy is to comply with the DOD requirements set forth in reference (a) and to employ an IPM program that minimizes pesticide use and that ensures the protection of human health and the environment where pesticide use is necessary. MOUs between the DOD and a state or locality for the use of pesticides may also apply. The policy and guidance in reference (b) are incorporated by reference.

1. Establish and maintain safe, effective, and environmentally sound IPM programs to prevent or control pests and disease vectors that may adversely impact readiness or military operations by affecting the health of personnel or by damaging structures, materiel, or property.
2. Ensure that pest management programs achieve, maintain, and monitor compliance with all applicable E.O.s and applicable Federal, State, and local statutory and regulatory requirements.
3. Incorporate sustainable IPM philosophy, strategies, and techniques into all vector control and pest management planning, training, and operations, including installation pest management plans and other written guidance to reduce pesticide risk and prevent pollution.

14201. IPM PROGRAM

1. IPM must be based on seven steps that are routine procedures for addressing each pest problem:
 - a. Identify and assess pest or disease vector problems.
 - b. Develop a written management plan or strategy that emphasizes natural controls and nonchemical methods to deal with pest and disease vector problems.
 - c. Establish an action threshold for each pest and disease vector problem to define when corrective action must be implemented.

d. Use a monitoring procedure, such as inspection, trapping, or surveillance, for each pest and disease vector.

e. Apply corrective action when a threshold is reached for any pest or disease vector.

f. Use a documentation system to catalogue monitoring information and to document management problems.

g. Verify and evaluate procedures to ensure that the IPM program is meeting stated risk reduction measures and that information exists to redesign the IPM plan where required.

2. The written IPM plan or strategy must be a comprehensive document as outlined in reference (a).

14202. INSTALLATION PEST MANAGEMENT PLANS. Each installation must have a pest management plan as described in reference (a). The plan must list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, materiel, or property. Installations that have more than 0.5 productive work-years of pest management work must have their own plan. Installations with less than 0.5 productive work-years must have an individual plan, or be included in a supporting installation's pest management plan. Professional pest management personnel or certified pesticide applicators must manage these installation programs. Plans must be retained per reference (c), SSIC 5090.4. For more information on Pest Management Plans, see appendix F-1.

14203. INSTALLATION CONSULTATIVE SUPPORT, PROGRAM REVIEWS, AND AUDITS

1. Command Program Reviews. To ensure adequate oversight of Marine Corps Pest Management Programs, PMCs or designated pest management professionals will conduct onsite reviews of installation pest management programs at least every 36 months, normally as part of the Marine Corps Environmental Compliance Evaluation (ECE) Program, with the following exceptions:

a. Installations requiring less than 0.5 work-years of pest management services must be reviewed at the discretion of the cognizant PMC.

b. Installations that receive pest management support from another installation must be reviewed during the review of the supporting installation.

c. Installations with documented pest management problems, such as deficiencies from environmental compliance audits, State inspections, or Federal inspections, should be reviewed annually until the deficiencies are resolved.

d. Onsite review requirements can be met by formal program reviews, ECEs, and/or assistance visits.

2. Installations must notify the appropriate PMC whenever Federal, State, or local regulators ask to inspect pest management operations.

14204. TRAINING AND CERTIFICATION OF PEST MANAGEMENT PERSONNEL.
For requirements relating to the training and certification of pest management personnel, see appendix F-2.

14205. PESTICIDES AND PEST MANAGEMENT EQUIPMENT

1. Procurement

a. The AFPMB must approve all introduction, stockage, and deletion of pest management materiel managed by the Defense Logistics Agency (DLA) for use in DOD programs. See reference (a) for procedural information on the acquiring of pest management equipment and pesticides.

b. Marine Corps installations must not procure or acquire pest management materiel that has not been recommended by the AFPMB or approved by the cognizant Marine Corps PMC. NSNs must not be assigned to pest management materiel that has not been approved by the AFPMB. Upon approval by the appropriate PMC, pest management materiel may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that assignment of an NSN is not practical.

2. Pesticide Labeling. Marine Corps installations must ensure that EPA-approved labels are on all pesticide containers. If required, items such as Supply Department labels must be placed so as not to obscure the pesticide label. Copies of pesticide labels must be maintained at a central location and made available to interested departments (e.g. Fire, Safety). A copy of MSDS and pesticide label(s) for every pesticide product in the inventory for the installation must be available at all pesticide facilities.

3. Pesticide Storage Facilities. The design of pesticide storage facilities must comply with standards described in reference (h). Existing facilities must comply with all applicable regulatory standards and will, where feasible, be modified to meet the standards for new pesticide storage facilities. Installations must prohibit the discharge of any wastewater from any pesticide mixing, or equipment cleanup area. Rinsate from triple-rinsed containers must be applied to the application site in accordance with the pesticide label. HW and storage requirements apply, in accordance with OSHA (see chapter 9 of this Manual).

4. Pesticide Disposal and Spill Management. Installation commanders must ensure that installation pest management programs are managed so that pesticides do not become HWs. The installation pest management coordinator must ensure that excess EPA-registered pesticides are either returned to the DLA Materials Return Program, transferred to a DOD installation able to use the materiel, or transferred to the servicing Defense Reutilization and Marketing Office. The appropriate DOD PMC will, if requested, provide assistance in identifying installations where usable pesticides could be applied. When the EPA publishes a proposed pesticide regulatory action that involves pesticide label suspension or cancellation affecting the DOD, installations must comply with administrative procedures developed between the DLA and the AFPMB. Installations must use the guidance in reference (i) for pesticide disposal. The installation IPM Plan must address a plan for pesticide spill management, coordinated with the installation's hazardous material (HM)/HW programs, and included in the installation's Oil and Hazardous Substance spill contingency plans (see chapter 9 of this Manual). Marine Corps personnel must follow the guidance in reference (j). 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 must be responsible for providing their own spill kits.

5. Pesticide Safety. To ensure the safe use of pesticides, Marine Corps personnel must handle and apply pesticides in accordance with the product's label directions and references (k) and (l). Marine Corps policy prohibits construction of buildings with heating, ventilation, and air-conditioning (HVAC) ducts located in and below the floor to prevent accidental contamination of the ducts with termiticides. Similarly, Marine Corps policy prohibits post-construction treatment of structures with HVAC ducts without a waiver from Marine Corps PMC.

6. Electrically Operated Devices. Except as noted in reference (1), Marine Corps personnel must not use electromagnetic exclusion or control devices, ultrasonic repellent or control devices, and outdoor devices for electrocuting flying insects on Marine Corps installations. However, indoor devices for electrocuting flying insects can be used when selected, purchased, located, and used in accordance with reference (m). Pest surveillance traps and monitoring equipment, such as non-electrocuting mosquito light traps, may be used as integral tools for IPM programs.

7. Paints and Coatings Containing Pesticides and other Biocides. The Marine Corps explicitly prohibits the use of paints containing insecticides on Marine Corps property. This guidance 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 antifouling compounds or coatings may be applied to protect the surfaces of watercraft.

8. Preventive or Scheduled Pesticide Treatments. The Marine Corps explicitly prohibits the use of regularly scheduled, periodic pesticide applications, except in situations where the installation pest management plan clearly documents that no other technology or approach is available to protect personnel or property of high value. Installations must not use preventive pesticide treatments unless the appropriate PMC has given approval based upon current surveillance information or records documenting past disease vector or pest problems that require this approach.

14206. PEST MANAGEMENT CONTRACTING

1. Background. The Marine Corps must use pest management contracts when cost-effective or when advantageous for non-routine, large-scale, or emergency services, especially when specialized equipment or expertise is needed. Contractors must comply with the regulatory requirements of the state in which the work will be performed regarding the certification, licensing, and registration of pest management companies and

their employees. OCONUS contractors must comply with the FGS/Japan Environmental Governing Standards (JEGS) or reference (g) of the host country. Pest control records will be maintained per reference (c), SSIC 4200.1b, as appropriate.

2. Review and Approval. PMCs must review and approve contract documents for pest management operations, including augmentation contracts to ensure that appropriate pest management standards and IPM are specified. Contracting offices must award augmentation contracts only when the respective PMC has verified that the contract will provide necessary services beyond the capability of any in-house staff. Installations that lack expertise in pest management should request the services of a DOD PMC to develop the technical portions of pest management contracts in accordance with reference (n). PMCs must act as technical consultants during the performance of contracted work.

3. Quality Assurance. Installation commanders must base PCPAR staffing decisions on the following factors:

a. The number of pest management operations requiring 100 percent inspection.

b. The number of different functions being performed simultaneously.

c. The scope of the contract including required productive work-years.

d. The level of monitoring or surveillance required for each operation.

14207. SPECIALIZED PEST MANAGEMENT OPERATIONS

1. Aerial Application of Pesticides. Documentation for aerial application projects must be kept in accordance with DOD and Marine Corps environmental requirements including compliance with the requirements of reference (o). A designated PMC at the major command level or higher, who is certified in the aerial application pest control category, approves all proposed pest management projects that involve the aerial application of pesticides. Approval must be obtained before aerial application operations commence. Marine Corps PMCs must collaborate, as appropriate, with the 910th Airlift Wing (Air Force Reserve) during the review and approval process for aerial spray projects to be completed by the 910th. Installation commanders must

ensure that installation personnel update documentation for project approval if subsequent aerial application operations are planned.

2. Disinfection of Military Aircraft. Marine Corps personnel must disinfect military aircraft for disease vectors and agricultural pests only when:

a. Required by a foreign nation as a prerequisite to entry as specified in reference (p).

b. Mandated by the United States Department of Health and Human Services or the United States Department of Agriculture (USDA).

c. Directed by a command-level or higher authority who has determined that the point of embarkment has active vector-borne disease, consistent with references (q) and (r).

d. No passengers are on board (except when mandated by reference (p)).

3. Forest Pests. Marine Corps commanders must cooperate with the USDA, Forest Service, on applicable pest management programs, including annual USDA funding for forest insect and disease suppression projects on Marine Corps-controlled land in accordance with reference (s); see also reference (t).

4. Medically Important Pests. The Marine Corps must ensure that responsibilities for surveillance and control of medically important insects and other arthropods are clearly delineated in installation pest management plans and operational plans. Specific guidance on the surveillance and control of Lyme disease vectors is found in reference (u).

5. Nuisance Pests. Installation pest management personnel must not apply pesticides or other control procedures for nuisance pests unless such measures have been approved by the appropriate PMC.

6. Pesticide Applications in the Range of Endangered Species. The Marine Corps must comply with regulations, including those issued under the reference (v), which requires Federal agencies to ensure that their actions will not jeopardize T&E or associated habitat. Installation commanders must ensure that their installation pest management plans consider ETS. To prevent consultations before every pesticide application or

operation in the habitat of an ETS, pertinent sections of installation pest management plan must be submitted to the regional USFWS office for review and comment. After initial coordination, only changes to the plan need to be forwarded to the USFWS for review. Further coordination with the USFWS is not required unless the conditions of the pesticide applications are changed as indicated by county bulletins, pesticide labels, ETS status, or land use. If the USFWS arrives at a finding of "may affect" the ETS, and if the pesticide application is considered a firm Marine Corps requirement by the Marine Corps installation commander and cognizant pest management professional, the Marine Corps installation commander must request a formal consultation with USFWS. In addition to ETS consultation requirements, DOD pest management plans must comply with USFWS limitations on pesticide usage. OCONUS installations must comply with the FGS/JEGS and reference (g).

7. Pests in Health Care Facilities. Installation commanders must ensure that pest management in health care facilities is conducted according to the guidance in reference (w).

8. Pest Management in Child Care and Food Service Facilities. Installation commanders must ensure that responsibilities for surveillance and control of insects and other arthropods in child care and food service facilities are clearly delineated in installation pest management plans and operations.

9. Pest Management in Military Quarters and Housing

a. Background. Installation commanders must ensure that residents of military quarters and housing practice good sanitation and correct minor nuisance pest problems. Per reference (b), PPV housing is subject to the same requirements as Base operated housing. PPV housing contracts and lease agreements must include appropriate pest management provisions, and must be reviewed for approval by the respective PMC. Quarters and housing occupants are responsible for controlling pests such as cockroaches, household infesting ants, and mice not originating in other quarters. The control of medically important pests, including venomous arthropods, which could affect human health, and structural pests which could damage property, must not be an occupant's responsibility.

b. Installation Role

(1) Installation commanders must ensure that installation pest management services are provided in military

housing only when the pest threatens Government property or the occupants' health and when the occupants have been unable to control the pests through self-help efforts. Exceptions must only be made with the concurrence of the appropriate PMC.

(2) Installation commanders may allow residents of military housing to contract with licensed pest management companies at their own expense.

c. Self-Help Program

(1) Installation commanders must establish installation self-help pest management for military housing when cost-effective and when IPM monitoring indicates the need for a self-help program. Self-help pest management materials issued to occupants of military housing may include cockroach and ant baits and/or traps, mouse traps, glue boards, and general-use pesticide aerosols with crack and crevice devices as recommended by the cognizant PMC. Liquid pesticides should not be issued. The office designated to manage the installation's self-help program should coordinate procurement and the storage of pest management materials with the installation pest management shop, HM manager, and the DLA Supply Center.

(2) Installation commanders must ensure that self-help personnel provide written instructions and appropriate precautions, beyond those on pesticide labels, to military quarters' and housing occupants to ensure proper pesticide application and safety.

(3) If pesticides are issued to occupants, records must be maintained as described in paragraph 14104.1g. These records should enable installation self-help personnel to validate the occupant's attempts to control target pests before providing installation pest management services. PMCs should review these records during annual reviews to evaluate the efficiency of the installation's self-help program.

10. Pest Management at Closing Installations. Because pests may cause serious damage to unused facilities, commanders must ensure that PMCs provide guidance needed to protect all closing or closed facilities from pests from the beginning of deactivation until property disposal.

11. Quarantinable Pests. The Joint Service, Quarantine Regulations of the Armed Forces contains policy for quarantine regulations applicable to the Armed Forces.

12. Stored Products Pests. Installation commanders must implement measures to minimize insect and vertebrate pest damage to subsistence, clothing and textiles, medical, and other infestible stored materiel according to reference (x). Commanders must ensure that the fumigation of subsistence stocks follows the guidance provided in reference (y). Guidance for protecting Meal, Ready-to-Eat Rations is available from the PMCs. Reference (z) provides pest management guidance on infestible stored products.

13. Turf and Ornamental Pests. Installation commanders must implement measures to prevent unacceptable damage to shade trees, ornamental plantings, and turf (including golf courses) by insects, diseases, and weeds. Further, they must ensure that pesticide applications, if required, are based on the specific identification of the target pest by trained personnel. The pest management plan must identify recurring infestations. Installation commanders must ensure that the installation pest management plan describes the use of IPM for turf and ornamental pests, and environmentally and economically beneficial land management practices, such as the use of native plants to reduce pesticide use.

14. Undesirable Plants. Installation commanders must develop programs to comply with reference (aa). Installation commanders must:

a. Designate an office or person adequately trained in the management of undesirable plant species to develop and coordinate the installation undesirable plant management program.

b. Plan, program, and budget to achieve, maintain, and monitor compliance with reference (aa).

c. Ensure that installations complete and carry out cooperative agreements with State agencies regarding the management of undesirable plant species on installations.

d. Establish integrated management systems to control or contain undesirable plant species targeted under cooperative agreements. Reference (aa) does not require the commanders to carry out programs on installations unless similar programs are being implemented on State or private lands in the vicinity of the installation.

15. Vertebrate Pests. Installation commanders must manage vertebrate pests in accordance with the Memorandum of Agreement between the DOD and USDA, Animal Plant Health Inspection Service, Animal Damage Control and:

a. Implement vertebrate pest management programs including wildlife aircraft strike hazard reduction programs to prevent interference with operations, destruction of real property, and adverse impacts on health and morale.

b. Cooperate with Federal, State, and local agencies that have implemented animal damage control programs on adjacent public and private lands.

c. Identify the potential for secondary and nontarget effects to other organisms and design programs to preclude or minimize the risks.

d. Obtain all applicable Federal, State, and local permits.

e. Use guidance in reference (ab), for conducting feral cat control programs.

16. Weed Control. Installation commanders must ensure that weed control is performed according to references (ac) and (t), on Marine Corps installations. Herbicides will not be used in war except as provided for in reference (ad).

17. Wood-Destroying Organisms. Installation commanders must ensure that:

a. PMCs review construction, repair, and termite control contract specifications for the proper protection of wood where wood-destroying fungi and insects are present, and specify that termiticides, when needed, are applied at the highest EPA-labeled concentration and application rate.

b. DOD-certified pesticide applicators or PCPAR's trained in pest management inspect contract applications of pesticides for the control of termites and other wood-destroying organisms.

c. Trained personnel inspect wooden buildings and structures in the range of termites annually in USDA geographic Region 1 or if Formosan or drywood termites are present; biennially in USDA Region 2; or triennially in Region 3, as determined by the cognizant pest management professional.

Installation commanders must follow the guidance in reference (m), for these inspections.

18. Wood Preservation. Reference (ae) provides information on wood preservation. Commanders must ensure that DOD pest management professionals review construction specifications and procurement contracts to minimize losses to real property and materiel by specifying:

a. Proper use of wood products treated with preservatives (pesticides) where required to protect against losses caused by wood-destroying fungi and insects.

b. Inspection of treated wood products, performed by trained installation personnel. This inspection must require at a minimum:

(1) The examination of treated wood products to determine the presence of the American Lumber Standard Committee accredited inspection agency quality marking. Quality markings indicate conformance with the appropriate American Wood Preservers' Association and American National Standard Institute standards. Quality markings indicate that the product has been tested by the agency indicated, the date it was tested, the type of use (above ground, ground contact, or marine contact suited), and the minimum amount of chemical preservative present. Unmarked material shall be tested by an independent third party. Certificates of conformance from the treating company must not be accepted in place of physical inspection and testing.

(2) Random or planned sampling and testing.

c. Programs to protect waterfront structures from decay and marine borers.

14208. PEST MANAGEMENT AND DISEASE VECTOR CONTROL DURING MILITARY CONTINGENCY OPERATIONS, READINESS TRAINING EXERCISES, AND DEPLOYMENTS

1. Complying with the DOD Pest Management Program. Military, civilian personnel, and contractors responsible for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments must apply pesticides consistent with the policies and procedures described in reference (a).

2. Application. The application of pesticides for pest management and disease vector control during military, contingency operations, readiness training exercises, and deployments must be under the overall direction of personnel certified in accordance with reference (e), authorized by reference (a). Individuals who apply pesticides in these situations must be certified in accordance with reference (e), authorized by reference (a), or must be under the direct or onsite supervision of individuals certified in accordance with reference (e), authorized by reference (a). Shipboard independent duty technicians and other military personnel who have received special training for limited site application of preselected pesticides during military operations or deployments are exempt from the certification requirement. However, these individuals must be fully trained, including hands-on training for these specific applications. Commanders must develop specific site training programs for these individuals and a means to document who has received this training. At a minimum, the training must include the safe use and proper application of the limited, preselected pesticides for the specific site for which these individuals are trained.

3. Contractors. Contractors who apply pesticides in these situations must comply with the FGS/JEGS and reference (g) of the host country.

4. Recordkeeping. Installation commanders must ensure that pesticide use in these situations is recorded completely and accurately and maintained per reference (c), SSIC 5090.4.

14209. REPORTS AND RECORDS

1. Recordkeeping. Marine Corps must maintain on site complete, daily records of pesticide applications and nonchemical pest management operations using DD Form 1532-1 or a computer-generated equivalent. Disposition of these records is not authorized; retain records until notified of approved disposition. These records must account for all shop operations and must provide an historic record of pest management operations and pesticide applications for each building, structure, or outdoor site.

a. Records must include information on kinds, amounts, uses, dates, places of application, applicators names, and certification numbers.

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b. The record must include all pesticide applications performed on the installation, including work done on golf courses, by nonappropriated fund activities, by contract services, and as part of outleases and land management and forestry programs, as well as work performed by installation pest management shops.

2. Pest Management Report. DD Form 1532, Pest Management Report or a computer-generated equivalent, must be produced monthly using DD Form 1532-1 information and must be forwarded at least quarterly to major command headquarters for review and oversight. Report Control Symbol DD-6250-02 has been assigned to this reporting requirement.

3. Consultants. PMCs must use these data to evaluate the efficiency of the overall installation pest management program and pest management operations.

4. Exclusions. Pesticides applied by installation personnel for their own relief are excluded from the recordkeeping requirement.

5. NAVFAC Engineering Command. Many of the functions and records supporting Marine Corps installation pesticide programs are performed, prepared, and maintained by the supporting NAVFAC Applied Biology Program with NAVFAC Entomologist support.

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 3: RESPONSIBILITIES

14300. CMC (LF)

1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in reference (a).
2. Emphasize IPM techniques in pest management programs as a means to reduce pesticide risk and prevent pollution.
3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.
4. Maintain accurate and complete reporting and recordkeeping of pest management operations and pesticide use per reference (c), SSIC 5090.4.
5. Ensure that actions taken under the policies outlined in this chapter are consistent with DOD environmental security specifications.
6. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.
7. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with State and local governments, and with host-nation agencies involved with pest management when human health is an issue.
8. Ensure that the Marine Corps PMCs review installation pest management programs on site at least every 36 months as part of the ECE program.
9. Designate Marine Corps senior PMCs as the primary points of contact for the Marine Corps pest management program and for membership on the AFPMB in support of the Defense Environmental Security Council, and inform the Executive Director, AFPMB, of these designated consultants.

10. Designate PMCs, as certifying officials under reference (e), authorized by reference (a), to certify the competency of the Marine Corps pesticide applicators; establish procedures for designating and certifying specific DOD PMCs in aerial application pest control to approve pest management projects requiring the aerial application of pesticides; and inform the Executive Director, AFPMB, of these designated consultants.
11. Implement pest management practices and answer data calls for information on pesticides from the Deputy Under Secretary of Defense, Environmental Security.
12. Cooperate with State and local government agencies involved with pest management.
13. Participate in the development of the Defense Environmental Security Corporate Information Management (DESCIM) process for pest management and use the pest management information system when fielded.
14. Monitor and track the use of IPM and reduction of pesticide use in installation pest management programs.
15. Ensure that each installation has a pest management plan and that the Marine Corps PMCs maintain the program through technical assistance, program review, and program oversight.
16. Ensure that installations receive state-of-the-art technical assistance in IPM. Ensure that pest management professionals who are designated PMCs are available on request to provide technical assistance for the pesticide portion of ECEs and to provide follow-up assistance to ECEs.
17. Comply with reference (b).
18. Provide support to Marine Corps installations, commands, units, and tenants by interpreting Federal, State, local, and overseas pest management regulatory requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
19. Conduct special environmental compliance and protection studies with regard to pest management to assist in establishing policy or initiating actions.

14301. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS
INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE AND ALL
INSTALLATIONS, UNITS, AND MARINE FORCES RESERVE (MARFORRES),
INCLUDING SHIPS, STATIONS, AND DEPLOYED PERSONNEL WHERE PEST
MANAGEMENT OPERATIONS ARE PERFORMED

1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in reference (a).
2. Emphasize IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.
3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.
4. Maintain accurate and complete reporting and recordkeeping of pest management operations and pesticide use.
5. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, State, and local statutory and regulatory requirements for pest management.
6. Ensure that commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.
7. Ensure that any pesticide applications, excluding arthropod skin and clothing repellents, performed during military operations are recorded using DD Form 1532-1, Pest Management Maintenance Report, or a computer-generated equivalent. These records must be retained per reference (c), SSIC 5090.4.
8. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.
9. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with State and local governments, and with host-nation agencies involved with pest management when human health is an issue.

10. Ensure that the Marine Corps PMCs review installation pest management programs on site at least every 36 months as part of ECEs, and annually review installation pest management plans for adherence to the DOD specifications described in reference (a).

11. Establish procedures to ensure that recommendations from onsite pest management program reviews and annual reviews of pest management plans will result in appropriate corrective action.

12. Monitor pesticides available for purchase in Marine Corps commissaries and exchanges to ensure the pesticides available for sale are least-hazardous pesticides that are compatible with DOD IPM programs and are pesticides that comply with applicable Federal, State, and local laws. Marine Corps commissaries and exchanges OCONUS must comply with the FGSS/JEGSS and reference (g) of the host country.

13. Cooperate with State and local government agencies involved with pest management.

14. Participate in the development of the DESCIM process for pest management and use the pest management information system when fielded.

15. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure the effective implementation of pest management programs at all organizational levels.

16. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.

17. Monitor the use of IPM and the reduction of pesticide use in installation pest management programs.

18. Ensure that each installation has a pest management plan and that the Marine Corps PMCs maintain the program through technical assistance, program review, and program oversight. Installation commanders must:

a. Plan and budget for the development and maintenance of the pest management plan.

b. Ensure that qualified personnel develop and update the pest management plan annually.

c. Designate a DOD-certified or State-certified pesticide applicator as the pest management coordinator to implement the plan.

d. Ensure that the pest management coordinator formally coordinates appropriate portions of the pest management plan with the senior medical officer, environmental coordinator, and senior engineering officer and ensure that these individuals sign the cover sheet of the pest management plan.

e. Ensure that appropriate portions of the pest management plan are reviewed by the natural resources program manager for consistency with the natural resources management plan.

f. Ensure that the pest management coordinator forwards the pest management plan to the cognizant PMC for review, technical approval, and signature on the cover sheet.

g. Approve and sign the pest management plan for implementation.

h. Ensure implementation of the pest management plan and oversight of the installation pest management program by the pest management coordinator.

i. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant component PMC.

19. Comply with reference (b).

20. Coordinate these functions with the supporting Naval Facility Engineering Command (NAVFACENGCOM) Applied Biology section as appropriate.

21. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for pesticide pollution prevention management that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with pesticide pollution prevention management requirements. Pay appropriate Federal, State, and local fees. Ensure that the

environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

14302. ALL INSTALLATIONS, UNITS, AND MARFORRES, INCLUDING SHIPS, STATIONS, AND DEPLOYED PERSONNEL WHERE PEST MANAGEMENT OPERATIONS ARE PERFORMED

1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in reference (a).
2. Emphasize IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.
3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.
4. Maintain accurate and complete reporting and recordkeeping of pest management operations and pesticide use.
5. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, State, and local statutory and regulatory requirements for pest management.
6. Ensure that commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.
7. Ensure that any pesticide applications, excluding arthropod skin and clothing repellents, performed during military operations are recorded using DD Form 1532-1, Pest Management Maintenance Report, or a computer-generated equivalent. Maintain these records per reference (c), SSIC 5090.4.
8. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.
9. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with State

and local governments, and with host-nation agencies involved with pest management when human health is an issue.

10. Ensure that the Marine Corps PMCs review installation pest management programs on site at least every 36 months as part of ECEs. Installation pest management plans must be reviewed annually for adherence to the specifications in reference (a).

11. Establish procedures to ensure that recommendations from onsite pest management program reviews and annual reviews of pest management plans will result in appropriate corrective action.

12. Monitor pesticides available for purchase in Marine Corps commissaries and exchanges to ensure that the pesticides available for sale are least-hazardous pesticides that are compatible with DOD IPM programs and are pesticides that comply with applicable Federal, State, and local laws. Marine Corps commissaries and exchanges OCONUS must comply with the FGS/JEGS and reference (g) of the host country.

13. Cooperate with State and local government agencies involved with pest management.

14. Participate in the development of the DESCIM process for pest management and use the pest management information system when fielded.

15. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure the effective implementation of pest management programs at all organizational levels.

16. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.

17. Monitor the use of IPM and reduction of pesticide use in installation pest management programs.

18. Ensure that each installation has a pest management plan and that the Marine Corps PMCs maintain the program through technical assistance, program review, and program oversight. Installation commanders must:

a. Plan and budget for the development and maintenance of the pest management plan.

b. Ensure that qualified personnel develop and update the pest management plan annually.

c. Designate a DOD-certified or State-certified pesticide applicator as the pest management coordinator to implement the plan.

d. Ensure that the pest management coordinator formally coordinates appropriate portions of the pest management plan with the senior medical officer, environmental coordinator, and senior engineering officer and ensure that these individuals sign the cover sheet of the pest management plan.

e. Ensure that appropriate portions of the pest management plan are reviewed by the natural resources program manager for consistency with the natural resources management plan.

f. Ensure that the pest management coordinator forwards the pest management plan to the cognizant component PMC for review, technical approval, and signature on the cover sheet.

g. Approve and sign the pest management plan for implementation.

h. Ensure the implementation of the pest management plan and oversight of the installation pest management program by the pest management coordinator.

i. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant component PMC.

19. Comply with reference (b).

20. Many of these functions are performed by the supporting NAVFACENGCOM Applied Biology section.

REFERENCES

- (a) DOD Instruction 4150.07, "DOD Pest Management Program," May 29, 2008
- (b) OPNAVINST 6250.4B
- (c) SECNAV 5210.1
- (d) AFPMB Technical Guidance 18, "Installation Pest Management Program Guide," March 2003
- (e) DOD Directive 4150.07-M, "DOD Pest Management Training: The DOD Plan for the Certification of Pesticide Applicators," December 12, 2008
- (f) 7 U.S.C. 136-136y
- (g) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (h) AFPMB Technical Information Memorandum No. 17, "Military Handbook - Design of Pest Management Facilities," November 1991
- (i) AFPMB Technical Guidance 21, "Pesticide Disposal Guide for Pest Control Shops," July 2002
- (j) AFPMB Technical Information Memorandum No. 15, "Pesticide Spill Prevention and Management," June 1992
- (k) AFPMB Technical Information Manual No. 14, "Personal Protective Equipment for Pest Management Personnel," March 1992
- (l) AFPMB Technical Guidance 16, "Pesticide Fires: Prevention, Control, and Cleanup," June 1981
- (m) AFPMB Technical Guide No. 29, "Integrated Pest Management (IPM) in and Around Buildings," July 2003
- (n) AFPMB Technical Guide No. 39, "Guidelines for Preparing DOD Pest Control Contracts Using Integrated Pest Management," February 1997
- (o) 42 U.S.C. 4321
- (p) DOD Directive 4500.54-G, "DOD Foreign Clearance Guide (FCG)," January 5, 1992 (NOTAL)

(q) Army Regulation 40-12/AFJI 48-104, "Quarantine Regulations of the Armed Forces," January 24, 1992

(r) OPNAVINST 6210.2

(s) Memorandum of Agreement FSM 1533.31, "Forest Insect and Disease Suppression Agreement," dtd Dec 90

(t) AFM 91-19/TM 5-629/NAVFAC MO-314, "Weed Control and Plant Growth Regulation," May 24, 1989

(u) AFPMB Technical Guidance 26, "Tick-Borne Diseases: Vector Surveillance and Control," February 2006

(v) 16 U.S.C. 1531-1544

(w) AFPMB Technical Guidance 20, "Pest Management Operations in Medical Treatment Facilities," November 2005

(x) AFPMB Technical Guidance 27, "Stored-Product Pest Monitoring Methods," May 2005

(y) AFPMB Technical Guidance 11, "Hydrogen Phosphide Fumigation with Aluminum Phosphide," November 1998

(z) DLA Regulation 4145.31, "Integrated Stored Products Pest Management Program," June 20, 2002

(aa) 7 U.S.C. 2801

(ab) AFPMB Technical Guidance 37, "Guidelines for Reducing Feral/Stray Cat Populations on Military Installations in the United States," January 1996

(ac) 16 U.S.C. 4701-4751

(ad) Executive Order 11850, "Renunciation of Certain Uses in War of Chemical Herbicides and Riot Control Agents," April 8, 1975

(ae) NAVFAC MO-312

CHAPTER 15

POLLUTION PREVENTION

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CHAPTER 15

POLLUTION PREVENTION

SECTION 1: INTRODUCTION

15100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with pollution prevention (P2) and Toxic Release Inventory (TRI) reporting requirements under reference (a) and reference (b), as set forth by references (c) and (d), and in accordance with Department of Defense (DOD) policy and guidance. The P2 program shall be aligned with, and integrated into, appropriate elements of the Marine Corps Environmental Management System (EMS), to ensure a consistent approach and avoid potential duplication of effort.

15101. APPLICABILITY. See paragraph 1101.

15102. BACKGROUND

1. Laws. In addition to references (a) and (b), the following statutes contain P2 requirements: references (e), (f), (g), (h), (i), (j), (k), and (l).

2. Executive Orders (E.O.s). The following E.O.s require pollution prevention activities: references (c) and (d); and reference (m).

3. Relationship of P2 to Other Environmental Program Areas. P2 is a cross-cutting program with relevance to most other environmental program areas.

a. For Alternatively-Fueled Vehicle (AFV) and energy conservation requirements, see chapter 6 of this Manual.

b. For P2 requirements pertaining to emergency planning and response, see chapter 7 of this Manual.

c. For Marine Corps policy on meeting Resource Conservation and Recovery Act (RCRA) hazardous waste (HW) minimization requirements, see chapter 9 of this Manual.

d. For a discussion on National Environmental Policy Act documentation relating to pollution prevention planning, see chapter 12 of this Manual.

e. For Marine Corps policy on pesticide P2, see chapter 14 of this Manual.

f. For Marine Corps water conservation policies, see chapter 16 of this Manual.

g. For Marine Corps policy on solid waste (SW) reduction and recycling, see chapter 17 of this Manual.

h. For nonpoint source P2 requirements, see chapter 20 of this Manual.

i. For Marine Corps policy on ozone-depleting substances (ODSs), see reference (n).

15103. FEDERAL STATUTES

1. The Pollution Prevention Act (PPA) of 1990 (42 U.S.C. 13101 et seq.). This Act establishes the national policy that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

2. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as Amended (42 U.S.C. 9601 et seq.). This Act is intended to provide funding and enforcement authority for cleaning up waste disposal sites and for responding to hazardous substance (HS) spills. CERCLA establishes a comprehensive response program for past hazardous waste (HW) activities and the planning and response framework for HS releases.

3. The Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). This Act, which is title III of the Superfund Amendments and Reauthorization Act, encourages and supports emergency planning and requires that the public receive timely and comprehensive information about possible or potential hazards associated with toxic chemical (TC) releases. Most notably, specific sections of EPCRA require immediate notification of releases of extremely hazardous substances (EHSs) and HSs defined under CERCLA to State and local emergency response planners. EPCRA requires State and

local coordination in planning response actions to chemical emergencies. The Act also requires the submission of information on chemical inventories and releases.

4. Energy Policy Act (EPACT) of 1992 (Public Law 102-486). EPACT seeks to enhance the Nation's long-term energy security by reducing dependency on imported oil and improving energy efficiency and reducing air emissions from fossil fuels. EPACT establishes a Federal leadership strategy that encourages automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and AFVs. Under EPACT, Federal agencies must acquire increasing numbers of AFVs, reduce energy consumption, and increase energy efficiency.

5. Clean Air Act (CAA) of 1970, as Amended (42 U.S.C. 7401 et seq.). The 1990 Amendments to the CAA mandate pollution prevention measures, such as the use of clean fuels and AFVs.

6. RCRA of 1976 (42 U.S.C. 6901 et seq.). The 1984 Hazardous and Solid Waste Amendments to RCRA encourage P2 by requiring HW generators to certify that they have developed programs capable of reducing the volume, quantity, and toxicity of their waste as part of their biennial report. RCRA also requires Federal agencies to establish green procurement programs.

7. Clean Water Act (CWA) of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). The 1987 Amendments to the CWA establish the regulation of storm water discharges from industrial facilities and require states to establish nonpoint source pollution management programs that identify best management practices for reducing nonpoint source pollution.

8. Energy Independence and Security Act (EISA) of 2007 (Public Law 110-140). This Act seeks to move the United States toward greater energy independence and security; to increase the production of clean renewable fuels; to protect consumers; to increase the efficiency of products, buildings, and vehicles; to promote research on and deploy greenhouse gas capture and storage options; and to improve the energy performance of the Federal Government. The Act requires Federal agencies to: reduce petroleum consumption and increase alternative fuel consumption for Federal fleet vehicles, increase energy and water efficiency in Federal buildings, and promote high-performance green Federal buildings, the procurement of energy efficient products, and their inherent environmental benefits.

15104. REQUIREMENTS

1. E.O. 13423, January 24, 2007, and Instructions for
Implementing E.O. 13423, March 29, 2007

a. Reference (c) requires Federal agencies to conduct their facility management and acquisition activities so that, as much as possible, the quantity of TCs and hazardous chemicals (HCs) and materials acquired, used, or disposed of, is eliminated or reduced; that SW diversion is increased; and that facilities maintain cost-effective waste prevention and recycling programs.

b. Reference (d) requires Federal agencies to develop written goals and support actions to identify and reduce the release and use of toxic and hazardous chemicals, including TCs, HSS, ODSs, and other pollutants that may result in significant harm to human health or the environment.

c. Reference (c) requires Federal agencies and applicable facilities to continue to comply with the provisions set forth in section 301 through 313 of reference (a), section 6607 of reference (b), all implementing regulations, and future amendments to these authorities. In addition, as required by section 3(e) of reference (c), Federal agencies must include provisions in their contracts to require contractors to provide information needed by their facilities to comply with references (a), (b), and (c).

d. The implementing instructions of reference (c) also require the DOD to incorporate design, construction, operation, and maintenance practices that support sustainable high performance building goals for new construction to support increase in the use of green materials, protect and conserve water, improve indoor air quality, encourage the use of renewable energy sources, and optimize energy efficiency.

2. PPA

a. Reference (b) establishes the following environmental management hierarchy (EMH):

- (1) Source reduction.
- (2) Recycling.
- (3) Treatment.
- (4) Disposal.

b. Source reduction activities are the most desirable option as they often reduce the amount of non-product output generated by a manufacturing process and result in lower life-cycle costs. In addition, source reduction reduces the volume and toxicity of pollution versus simply transferring it from one medium to another. Source reduction generally includes "in-process recycling" or "reuse," but not "out-of-process recycling."

3. Defense Acquisition and Mandatory Procedures for Major Acquisition Programs and Major Automated Information Systems Acquisition Programs. See reference (o) for information on policy, responsibilities, and procedures for integrating pollution prevention requirements into all aspects of DOD acquisition programs, including weapons systems acquisition programs. DOD Service Acquisition Executives, Program Executive Officers, and Program Managers must consider using P2 as an integral element of systems, system components, and associated support items in all program phases (entire system life-cycle), including the revision of standardized documents; military specifications and standards; technical manuals, orders, and bulletins; and other related documents.

4. Environment, Safety, and Occupational Health (ESOH). See reference (p) for information on policies, procedures, and responsibilities for evaluating all activities for current and emerging ESOH resource requirements and making prudent investments in initiatives that support P2.

5. DOD P2 Requirements

a. Comply with applicable Federal, State, and local environmental laws, regulations, and standards as well as with relevant E.O.s. Installations located outside the United States

should comply with applicable E.O.s; international agreements; Federal statutes with extraterritorial effect; and with either the Final Governing Standards (FGSs), Japan Environmental Governing Standards (JEGSSs), or reference (q) when no FGS or JEGS has been issued.

b. Reduce the use of hazardous materials (HMs), the generation or release of pollutants, and the adverse effects on human health and the environment caused by DOD activities.

c. Reduce pollution through improvements in energy and water efficiency, the use of alternative fuels, and other activities that improve resource utilization.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

15105. TERMS AND DEFINITIONS

1. AFV. Passenger cars or trucks (light-duty vehicles) and heavy-duty trucks or buses that have been designed or modified to operate on alternative fuels as defined in subpart (g)(2) of reference (r).

2. Article. A manufactured item that is formed to a specific shape or design during manufacture and has functions dependent in whole or in part upon its shape or design during end-use and which does not release, or otherwise result in exposure to, a TC under normal conditions of use.

3. Authorized Use List (AUL). The list of all HM necessary to support the requirements of a command, facility, or activity, developed per DOD specifications.

4. Environmentally Preferable. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, product, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service (reference (d)).

5. EMH. EMH is a national policy established by reference (b) that "pollution should be prevented or reduced at the source

whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

6. Environmental Quality Classes. These environmental compliance classes are designated by the DOD as described in chapter 3 of this Manual.

7. Facility. All buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned or operated by the same person, otherwise known as the "host" or the "fenceline owner." For the purposes of section 304 of reference (a), the term includes motor vehicles, rolling stock, and aircraft.

8. Green Procurement. As defined by DOD Green Purchasing Program policy, green procurement is the purchase of environmentally preferable products and services in accordance with Federally-mandated 'green' procurement preference programs.

9. HC. A chemical that is a physical or health hazard as defined in reference (s).

10. HM

a. In general, any material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. Included in this definition are all EHSs, HCs, HSs, and TCs.

b. For the following list of HMs, consult other hazard-specific guidance (instructions or directives) that takes precedence over this Manual: 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.

11. Hazardous Materials Consolidation Program (HCP). The Marine Corps-wide program to achieve life-cycle control and management of HM through the application of sound management

practices that minimize the types and quantities of HM procured, stored, distributed, and used to accomplish mission requirements at commands and installations.

12. HS. Any material that is regulated as HM per section 173.2 of reference (t); requires a material safety data sheet (MSDS) per reference (s); or which during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have the potential to meet the definition of HW as defined by subparts A, B, C, or D of reference (u).

13. HW. A SW or combination of SWs 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.

b. Pose a substantial hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Note that State regulations may be more stringent and take precedence over Federal regulations.

14. P2. Pollution prevention, referring to "source reduction," and recycling as defined in reference (b) and other practices that reduce or eliminate the creation of pollutants through:

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

b. Protection of natural resources by conservation (see the definition of "Source Reduction" below).

c. Examples of P2 techniques include:

(1) Input substitution.

(2) Product reformulation.

(3) Process redesign/modification.

(4) Improved operation and maintenance.

(5) Reuse (in-process recycling).

15. Pollution/Pollutants. Refers to all nonproduct outputs, regardless of any recycling or treatment that will or may reasonably be anticipated to, cause deleterious effects to the public health or the environment. All nonproduct outputs, regardless of any recycling, treatment, or management, that may prevent or mitigate releases into the environment.

16. Pollution Prevention Approach to Compliance (PACE). Marine Corps philosophy to promote the implementation of P2 techniques while reducing the life-cycle cost of environmental compliance efforts as the preferred manner of attaining and maintaining environmental compliance.

17. Recycling. If pollution generation cannot be prevented, then strategies that minimize the amount of waste generated should be implemented, such as recycling. These activities may include collection, separation, and processing, by which products or other materials are recovered from the SW stream for use in the form of raw materials in the manufacturing of new products other than fuel for producing heat or power by combustion (reference (d)). Recycling also includes using, reusing, or reclaiming materials, as well as processes that regenerate a material or recover a usable product from it.

18. Source Reduction. Source reduction, as defined in reference (b), is any practice that:

a. Reduces the amount of any HS, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal.

b. Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

c. The term includes equipment or technology modification; process or procedure modification; reformulation or redesign of products; substitution of raw materials; and improvements in housekeeping, maintenance, training, or inventory control. Source reduction does not entail any form of waste management (e.g., recycling, treatment, and disposal).

19. Source Separation. The separation of recyclable materials at their point of generation by the generator.

20. TC. A chemical as defined in subpart c of reference (v).
Any substance listed in reference (w).

21. Waste Minimization

a. Source reduction and the following types of recycling:

(1) Beneficial use/reuse.

(2) Reclamation.

b. Waste minimization does not include recycling activities
that constitute disposal or burning for energy recovery.

CHAPTER 15

POLLUTION PREVENTION

SECTION 2: MARINE CORPS POLICY

15200. GENERAL. The Marine Corps will employ P2 to eliminate or minimize environmental and other life-cycle costs and to reduce or eliminate the generation of pollution. Where cost-effective, Marine Corps installations must implement source separation for recycling and develop a single authorized qualified recycling program (QRP). See chapters 3 and 17 of this Manual for more information on QRPs.

15201. PROCEDURES. To achieve P2 goals and accomplish the provisions outlined in DOD policy, Marine Corps installations will align and integrate P2 into appropriate elements of the Marine Corps EMS, and:

1. Implement and maintain HCPs in accordance with the HCP Implementation Guide to reduce the amount of HM used and HW generated by up-front HM control in procurement, supply, and use. The HCP strives to reduce the amount of HM used and HW generated through HM life-cycle control and the management of HM. The goals of the HCP are to reduce unnecessary risks and costs associated with the disposal of excess or expired shelf-life HM, protect the environment, ensure safety, and enhance readiness. The HCP employs sound HM management practices, including establishing and enforcing HM AULs.
2. Establish methods for substituting less or non-HM whenever possible. .
3. Develop and incorporate new technology or materials that have a reduced impact upon the environment, are safer and healthier, or result in reduced emissions.
4. Promote the use of environmentally preferable products and services.
5. Emphasize P2, including improvements in energy and resource use, as the alternative of "first choice" in achieving compliance with applicable environmental requirements and E.O.s.
6. Incorporate P2 at installations by seeking, identifying, planning, implementing, and reviewing P2 solutions for all

activities across the installation with real or potential impacts to the environment and other sensitive resources.

7. Incorporate P2 at installations into all phases of acquisition, operations, maintenance, support, and the ultimate disposal of weapon systems over the system life-cycle.

8. Instill knowledge and understanding in all personnel (military and civilian) across the installation of P2 requirements through comprehensive education, training, career development, and awareness programs. The potential benefits of a cost-effective P2 program (including a reduced compliance burden, reduced costs of compliance, improved health and safety of personnel and the environment, and, ultimately, enhanced mission capability) accrue to all installation organizations and personnel. Effective P2 programs rely on input from, and the cooperation and coordination of, all organizations and personnel.

9. Promote P2 through positive relations and partnerships with Federal, State, Native American tribal, and local government officials, as well as host country, nongovernmental organizations, and other private and public stakeholders.

10. Develop, demonstrate, and implement innovative P2 technologies and business practices.

11. Use the EMH to develop solutions to environmental compliance issues.

12. Reduce weapons systems life-cycle cost by avoiding the use of HM.

13. Plan, program, and budget to achieve these policies, using the environmental quality classes (defined in chapter 3 of this Manual) to prioritize environmental projects for funding and the following DOD definitions for environmental compliance and P2:

a. Environmental compliance includes all activities and projects that utilize end-of-pipe treatment or disposal methods to meet applicable environmental requirements.

b. Compliance-type requirements that are satisfied by source reduction (pollution elimination or reduction), pollutant minimization, or recycling approaches are P2 requirements and shall be funded as "P2."

14. Ensure, where cost effective, that all installations and activities have, or participate in, QRPs, and that these recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space. See chapters 3 and 17 of this Manual for more information on QRPs.

15. Ensure that P2 planning activities are conducted in coordination with planners from other functional organizations at the installations (including, but not limited to, facilities, logistics, and health and safety).

16. Identify, plan, design, implement, and monitor cost effective P2 solutions to promote the Marine Corps' policy of continual improvement in its environmental compliance and protection program.

17. Monitor new construction and renovation projects to ensure Sustainable Building Practices, which include consideration of P2, are incorporated into design, construction, and maintenance activities in accordance with reference (c).

15202. TRAINING. Marine Corps installations must provide specific and general awareness P2 training, as appropriate to successfully integrate P2 into all functional areas. At a minimum, general awareness training should encourage all members of the Marine Corps to participate in P2 activities and programs. Examples of specific P2 training include training in reference (a), TRI reporting, green procurement, and P2 planning and implementation, to include, for example, housekeeping practices, process modifications, or how to conduct a pollution prevention opportunity assessment (PPOA). P2 training needs and activities shall be integrated into the Comprehensive Environmental Training and Education Program (CETEP), as described in chapter 5 of this Manual.

15203. PLANNING

1. All Marine Corps installations are required to have a P2 plan that addresses the necessary installation actions for reducing pollution from all sources and to all media. Installation P2 plans must be developed in accordance with applicable regulatory requirements and the Marine Corps Pollution Prevention Planning Guide, and fully integrated with, and implemented through, the appropriate elements and procedures of the Marine Corps EMS to ensure a consistent approach and avoid potential duplication of effort. The P2 plan may be a

stand alone management plan which aligns with the EMS manual or it may be incorporated into the relevant elements and terminology of the installation EMS manual. The plan should be reviewed at least annually as part of the EMS management review, and updated as appropriate. The P2 plans should include pollution information for the baseline years, PPOAs, investment strategies, and P2 techniques such as HM consolidation, recycling, improved control technologies, and material sharing programs. Plans should be based on a comprehensive understanding of total chemical use at the installation and of mission-supporting activities undertaken across the installation that may impact the environment and/or other sensitive resources. The P2 plan should incorporate or reference other required plans related to P2 or pollution reduction, for instance: a HW minimization plan, a storm water P2 plan, a SW management plan, and an ODS phase-out plan.

2. Investment/implementation options selected in the P2 plans should be evaluated in consideration of prioritization criteria consistent with the Marine Corps EMS and reflect the following priorities:

- a. Life-cycle cost-effectiveness.
- b. Compliance (e.g., those P2 projects that help achieve or maintain compliance will receive high priority).
- c. Ranking in the environmental management hierarchy (e.g., source reduction is preferable to recycling).
- d. Achieving Marine Corps P2 goals, and EMS objectives and targets.
- e. Ease of implementation.
- f. Proven technologies.

15204. COMPLYING WITH EPCRA SECTION 313. All Marine Corps installations in the customs territory of the United States must comply with section 313 of reference (a) in accordance with DOD policy and guidance, available from the Defense Environmental Network Information Exchange (DENIX) website.

1. TRI Report Submittals. All Marine Corps installations required to submit a TRI Report Form R to Environmental Protection Agency (EPA), must use the EPA TRI reporting software to prepare electronic format submittals. A copy of the TRI

Report Form R electronic format submittals shall be provided to the CMC (LFL) concurrent with their submission to EPA. Report Control Symbol, DD-5090-04, is assigned to this reporting requirement.

2. Other EPCRA Requirements. Marine Corps policy and planning for ensuring compliance with sections 301-304 and 311-312 of reference (a) are described in chapter 7 of this Manual.

15205. PACE

1. Background. Rising costs and other considerations have compelled the Marine Corps to reevaluate its approach to compliance. Traditionally, environmental projects have focused on costly end-of-the-pipe solutions (i.e., treatment or disposal). Implementing the PACE philosophy will help reduce the life-cycle cost of environmental compliance, while meeting current and future compliance requirements.

2. Project Reviews. As part of each environmental requirement submission via CompTRAK, an installation will indicate in the environmental project submission whether the project employs P2 solutions by checking the PACE box on the Project screen. Projects that contribute to the Marine Corps goal of increasing P2 investments to meet compliance requirements will have high funding priority.

15206. OUTREACH

1. Policy. Marine Corps installations should aggressively seek out new partners and strengthen existing relationships outside the Marine Corps, including industries, regulators, universities, communities, and nongovernmental organizations. The goals of such partnerships are to share information technologies and to inform and educate those partners about Marine Corps efforts to increase P2 investments and to meet all applicable compliance requirements.

2. Guidance. Guidance for seeking partnerships and relationships is included in the Marine Corps Pollution Prevention Planning Guide.

CHAPTER 15

POLLUTION PREVENTION

SECTION 3: RESPONSIBILITIES

15300. CMC (LF)

1. Develop and implement Marine Corps P2 policy and guidance, implement applicable P2 requirements, and align and integrate P2 into appropriate elements of the Marine Corps EMS.
2. Identify P2 opportunities that can be implemented at some or all Marine Corps installations and facilitate the transfer of P2 technology throughout the Marine Corps.
3. Develop and maintain installation P2 planning guidance.
4. Promote the development of P2 technologies and tools, and assist in the implementation of P2 efforts at Marine Corps installations.
5. Program, budget, allocate, and prioritize funds for facility installation P2 projects based on life-cycle cost and environmental compliance criteria and in accordance with DOD guidance and fiscal policies.
6. Track the progress of the Marine Corps in achieving P2 goals.
7. In conjunction with the Office of the Assistant Secretary of the Navy, Research, Development and Acquisition, develop cooperative and commercially proven solutions for environmental facilities or services (in the United States and overseas) where economically advantageous and consistent with mission requirements. Include the use of acquisition authority and cross-service agreements in accordance with the DOD policy on mutual logistic support as appropriate.
8. Develop and implement a methodology whereby installations and commands employ the EMH and life-cycle cost considerations in developing environmental projects.
9. Coordinate with Marine Corps organizations/commands, including the CMC Logistics, Plans, Policies, and Strategic Mobility(LP), CMC Safety Division (SD); Marine Corps Combat Development Command (MCCDC) Quantico; and Marine Corps Systems

Command (MARCORSYSCOM) in reviewing material substitution opportunities.

10. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by assisting in the interpretation of and compliance with Federal, State, local, and overseas P2 program regulatory requirements to ensure consistent application of Marine Corps policy as set forth in this Manual.

15301. CMC (LP)

1. Issue and institutionalize concepts of the Marine Corps HCP for centralized management and control of HM at the command, installation, or activity level, with the objectives of minimizing HM inventories and maximizing the reutilization of HM. Ensure that the HCP concept is incorporated into reference (x), and that this manual on HM is widely publicized.

2. As a management tool for implementing an installation HCP, promote the use of automated HM and HW tracking and environmental reporting software, and ensure that interfaces are developed, as appropriate, between all HM management, environmental reporting, and supply and logistics systems.

3. Ensure Marine Corps HM management policies incorporate HCP concepts and procedures, including applicable HM shelf-life management requirements, and ensure implementation by commands, installations, and activities are effective, in accordance with reference (y).

4. Coordinate with the CMC (LF), CMC (SD), MCCDC Quantico, and MARCORSYSCOM in reviewing material substitution opportunities.

15302. CMC (SD). Coordinate with the CMC (LF), CMC (LP), and MARCORSYSCOM in reviewing material substitution opportunities, as appropriate.

15303. MCCDC QUANTICO

1. The Director, Doctrine Division (C 42), must incorporate P2 practices and the HCP concepts and procedures into doctrine applicable to the supporting elements.

2. The Director, Training and Education Division (C 46), must incorporate P2 practices to include source reduction initiatives and the HCP concepts and procedures into appropriate Marine Corps individual training standards.

3. The Director, Requirements Division (C 44), must incorporate P2 practices into combat service support requirement formulations and ensure that the use of HM, if a valid requirement, is supported and justified in mission need statements or operational requirement documents.

15304. COMMANDER MARINE CORPS SYSTEMS COMMAND, COMMANDER MARINE CORPS LOGISTICS COMMAND

1. Develop policy and guidance for ensuring that P2 is incorporated and that P2 considerations are integrated into all acquisition phases and across the entire life-cycle (from concept exploration through system demilitarization and disposal) of all weapons systems acquisition programs, in accordance with the DOD specifications described in reference (o). P2 activities for fielded weapon systems not included within the scope of an active acquisition program must be conducted in accordance with appropriate DOD policy.

2. Ensure that all Program Executive Officers and Program Managers incorporate P2 into all phases of weapon system acquisition (life-cycle) management, and that all acquisition personnel receive appropriate P2 acquisition education and training.

3. Develop and implement Marine Corps policy and guidance for integrating P2 requirements into all aspects of the Marine Corps Acquisition Programs.

4. Develop and implement HM elimination, reduction, or substitution processes for all systems and operations under their cognizance. These processes must include the identification, evaluation, and use of environmentally preferable materials and services that meet the Government's needs.

5. Develop and implement a green procurement and acquisition program in accordance with references (d) and (g).

6. Revise all Marine Corps-owned standardized documents that have been designated for retention to eliminate, or reduce HM references and/or to replace those references with less HM to

the extent technically feasible and consistent with mission requirements.

7. Establish methods to minimize or eliminate new HM entry into the supply system through a review of specifications, standards, commercial item descriptions, purchase descriptions, and supply support requests, etc. Coordinate with the preparing activity to maximize the elimination of HM requirements in the aforementioned documents.

8. If non-HM substitutes do not exist, maximize the use of substitutes with the least hazardous characteristics to protect human health and minimize potential environmental impacts.

9. Ensure that an MSDS is obtained and reported for all HM acquisitions, procurements, or re-procurements.

15305. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS
INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Develop and implement a P2 program and plan in accordance with applicable regulatory requirements and the Marine Corps Pollution Prevention Planning Guide. Align and integrate the P2 program and plan with appropriate elements of the installation EMS. Support evaluations that assess the degree to which P2 policies and goals are successfully implemented and accomplished.

2. Establish and implement procedures to control and manage HM using methods to track and minimize the types, variety, and quantities of HM procured, stored, used, and ultimately disposed, via an HCP. HCP management procedures must include centralized HM information management and material reutilization, development, and enforcement of an HM AUL to prevent unauthorized HM procurement and use and centralized HM storage and issuance to an extent which does not inhibit or conflict with installation or activity mission requirements. HCP goals include reducing unnecessary risks and costs from HM shelf-life expiration, protecting the environment from the disposal of excess or overage HM, and enhancing worker safety and ultimately mission readiness.

3. Comply with all applicable EPCRA requirements.

4. Evaluate P2 decisions by economic analysis techniques, matching the magnitude of the decision being made and

considering cost and intangible factors, as applicable, and in accordance with the installation EMS.

5. Employ the EMH and life-cycle cost analysis as environmental project planning tools, with a particular focus on developing P2 solutions to environmental compliance issues, i.e., PACE. Life-cycle cost analysis should be commensurate with project scope, compliance significance, and potential environmental benefit; should be assessed and initiated at the earliest instance and updated when appropriate; and must be provided as an exhibit to support environmental project budget submissions.

6. Provide specific and general awareness training to support P2 program objectives using the CETEP.

7. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with P2 requirements, submitting project documentation and funding requests to the CMC (LFL) and the CMC Logistics Facilities Branch (LFF).

8. Monitor new construction and renovation projects to ensure Sustainable Building Practices, which include consideration of P2, are incorporated into design, construction, and maintenance activities, and applicable environmental quality standards are met, in accordance with reference (c).

REFERENCES

- (a) 42 U.S.C. 11001 et seq.
- (b) 42 U.S.C. 6601 et seq.
- (c) Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management," January 24, 2007
- (d) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (e) Public Law 102-386, "Federal Facilities Compliance Act of 1992," October 6, 1992
- (f) 42 U.S.C. 9601-9675
- (g) 42 U.S.C. 6901 et seq.
- (h) 42 U.S.C. 7401 et seq.
- (i) Public Law 109-58, "Energy Policy Act of 2005," August 8, 2005
- (j) Public Law 110-140, "Energy Independence and Security Act of 2007," December 19, 2007
- (k) 42 U.S.C. 300f et seq.
- (l) 33 U.S.C. 1251 et seq.
- (m) Executive Order 12948, "Amendment to Executive Order No. 12898," January 30, 1995
- (n) MCO 5090.1
- (o) DOD Directive 5000.01, "The Defense Acquisition System," May 12, 2003
- (p) DOD Directive 4715.1E, "Environment, Safety, and Occupational Health (ESOH)," March 19, 2005
- (q) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (r) 42 U.S.C. 6374

- (s) 29 CFR 1910
- (t) 49 CFR 173
- (u) 40 CFR 261
- (v) 42 U.S.C. 11023
- (w) 40 CFR 372
- (x) MCO P4450.12A
- (y) MCO 4450.13A

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

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CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 1: INTRODUCTION

16100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for the protection and conservation of drinking water and irrigation water resources.

16101. APPLICABILITY. See paragraph 1101 regarding applicability of Federal, State, and local laws, regulations, and ordinances to USMC active and reserve installations and activities.

16102. BACKGROUND

1. Congress first enacted reference (a) in 1974 as an amendment to reference (b). Significant revisions to reference (a) were enacted in 1986 and 1996. Under reference (a), the U.S. Environmental Protection Agency (EPA) sets Federal standards for public water systems (PWSs) to provide safe drinking water to its consumers. In addition, reference (a) protects drinking water sources via Source Water Protection (SWP) (which includes wellhead and surface water protection) and Underground Injection Control (UIC) Program requirements. In 2002, reference (a) was amended by reference (c) to require certain PWSs to perform Vulnerability Assessments (VAs) and prepare or update Emergency Response Plans (ERPs). States and local authorities may also dictate drinking water standards that can be more stringent than Federal requirements. The Navy and Department of Defense (DOD) set drinking water policies that may also apply to Marine Corps water systems. The 1996 amendments to reference (a) waived sovereign immunity for the payment of fines and penalties imposed by Federal, State, or local agencies for violations (reference (d)). Additionally, EPA may assess administrative penalties of up to \$25,000 per day per Safe Drinking Water Act (SDWA) violation.

16103. FEDERAL STATUTES

1. SDWA of 1974, as Amended in 1986 and 1996 (42 U.S.C. sections 300(f)-300(j)). The major provisions of the SDWA establish requirements for:

a. National Primary Drinking Water Regulations (NPDWRs) for contaminants that may have an adverse affect on human health, and National Secondary Drinking Water Regulations (NSDWRs) for contaminants that may adversely affect the aesthetic qualities of drinking water. NPDWRs are Federally enforceable, while NSDWRs are intended to be used by states as guidelines.

b. Water system monitoring, reporting, recordkeeping, public notification, and operator certification.

c. Unregulated contaminant monitoring and regulatory determination.

d. Protecting underground sources of drinking water via a UIC Program, Sole Source Aquifer designations, State Wellhead Protection (WHP) Programs, and State Source Water Assessment Programs (SWAPs). The SDWA also required EPA to develop water conservation plan guidelines for various sizes of PWSs. The Federal regulations that implement the majority of SDWA requirements can be found in Title 40 Code of Federal Regulations (CFR), parts 141 through 149.

2. Energy Policy Act (EPACT) of 1992 (Public Law 102-486)

a. This Act amended and updated the Energy Policy and Conservation Act and the National Energy Conservation Policy Act. The statements of purpose were revised to include a policy on water conservation.

b. Relevant statutory requirements of EPACT include:

(1) Section 123 establishes maximum water use standards for plumbing fixtures.

(2) Section 152 requires Federal agencies to install in Federal buildings owned by the United States, all energy and water conservation measures with payback periods of less than 10 years.

(3) Section 152 also authorizes Federal agencies to participate in programs established for water conservation.

Additionally, it encourages Federal agencies to enter into negotiations with water utilities to design cost-effective water demand management and conservation incentive programs to address the unique needs of facilities used by these agencies.

3. Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188). Sections 401 through 403 of this Act amended the SDWA to protect drinking water systems from terrorist attacks and other intentional acts.

a. Section 401 requires all community water systems (CWSs) serving more than 3,300 people to conduct water system VAs and develop or revise ERPs accordingly.

b. Section 402 requires EPA to review current and future methods to prevent, detect, and respond to the intentional introduction of chemical, biological, or radiological contaminants into CWSs and its water sources.

c. Section 403 significantly increases the fines and penalties under the SDWA for tampering with PWSs.

4. Executive Order (E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, January 24, 2007). E.O. 13423 requires Federal agencies to reduce water consumption intensity through life-cycle cost effective measures. Federal agencies are required to reduce water consumption by certain percentages by fiscal year (FY) 2015.

16104. REQUIREMENTS

1. General. Marine Corps water systems must comply with all applicable Federal, State, and local drinking water laws and regulations, and related Navy and DOD policies. Federal, State, and local drinking water requirements generally apply to PWSs, but do not apply to non-PWSs. A PWS is a system that provides piped water for human consumption and has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A PWS can be further classified as a CWS, nontransient noncommunity water system (NTNCWS), or transient noncommunity water system (TNCWS) (see Figure 16-1). SDWA requirements for a PWS are dependent on system classification, population served by the system, and/or

source water type (i.e., ground water (GW), surface water (SW), or ground water under the direct influence of surface water (GWUDI)). EPA sets primary drinking water standards known as NPDWRs for PWSs. These NPDWRs apply to most Marine Corps PWSs with the exception of consecutive PWSs that meet all of the following four criteria (section 3 of reference (e)):

- a. Consists only of distribution and storage facilities (and does not have any collection and treatment facilities).
- b. Obtains all of its water from, but is not owned or operated by, a PWS subject to reference (e).
- c. Does not sell water to any person.
- d. Is not a carrier which conveys passengers in interstate commerce.
- e. Although these consecutive PWSs are not subject to reference (e), states may establish monitoring requirements for these systems (section 29 in reference (e)). Marine Corps PWSs and activities must also meet other applicable SDWA requirements, including those for UIC, SWP, and VAs/ERPs.

2. Regulatory Requirements. This section summarizes the relevant implementing regulations of reference (a) found in references (e) and (f).

a. NPDWRs, Reference (e). Reference (e) contains legally enforceable drinking water standards that generally apply to PWSs. NPDWR standards are established for the following groups of contaminants: inorganic chemicals, organic chemicals, microorganisms, disinfectants, disinfection byproducts (DBPs), and radionuclides. For each contaminant, EPA sets a maximum contaminant level (MCL), action level (AL) for lead and copper, maximum residual disinfectant level (MRDL) for disinfectants, or treatment technique (TT). Reference (a) also requires EPA to establish non-enforceable maximum contaminant level goals (MCLGs) for contaminants, or in the case of disinfectants, maximum residual disinfectant level goals (MRDLGs). A table listing all contaminants and standards can be viewed at <http://www.epa.gov/safewater/mcl.html>. In addition to MCLs, ALs, MRDLs, TTs, and associated contaminant level goals, reference (e) specifies monitoring, reporting, and recordkeeping requirements for each contaminant or group of contaminants.

(1) Arsenic Rule (reference (g)). In January 2001, EPA reduced the standard for arsenic from 50 parts per billion (ppb) to 10 ppb. Marine Corps CWSS and NTNCWSSs are required to comply with this standard and must incorporate specific health effects language in annual Consumer Confidence Reports (CCRs).

(2) Radionuclides Rule (reference (h)). In December of 2000, EPA updated standards for radionuclides in drinking water and set a new standard for uranium. The MCLs for these radionuclides are: combined radium 226/228 (5 picocuries per liter (pCi/L)); beta emitters (4 mrems); gross alpha standard (15 pCi/L); and uranium (30 micrograms per liter ($\mu\text{g/L}$)). These standards apply only to CWSSs.

(3) Microbial and Disinfection Byproducts Rules

(a) Surface Water Treatment Rule (SWTR) (sections 70 through 75 of reference (e)). The primary objective of this rule is to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires all PWSs using SW or GWUDI (collectively referred to as subpart H systems) to filter and disinfect source waters. Under certain criteria, the filtration requirement can be waived; however, there are no exceptions to the disinfection requirement. The SWTR established MCLGs for viruses, bacteria, and Giardia lamblia and TTs for filtered and unfiltered systems.

(b) Total Coliform Rule (TCR) (reference (i)). The TCR requires all PWSs to monitor for the presence of total coliforms in the distribution system. Total coliforms are used as an indicator for microbial pathogens and help to determine the adequacy of water treatment and the integrity of the distribution system. The presence of total coliforms in the distribution system indicates that fecal pathogens may be present. The TCR requires that systems detect coliforms in no more than five percent of samples taken each month. If any sample tests positive for total coliforms, the PWS must perform additional tests as outlined in section 21 in reference (e).

(c) Interim Enhanced Surface Water Treatment Rule (IESWTR) (reference (j)). This rule strengthens microbial protection by minimizing levels of Cryptosporidium in finished water. It also includes provisions to ensure that reduction of DBPs in the water system does not compromise microbial protection. The IESWTR applies to subpart H systems that serve at least 10,000 people. Under this rule, filtered systems have tighter TTs and unfiltered systems have watershed control

requirements for Cryptosporidium. The IESWTR also requires states to conduct sanitary surveys for subpart H systems of all sizes.

(d) Stage 1 Disinfectants and DBPs (D/DBP) Rule (reference (k)). This rule reduces exposure to several disinfectants and DBPs and applies to all CWSs and NTNCWSs that use a chemical disinfectant in any part of their system. MRDLs are established for the disinfectants chlorine, chloramine and chlorine dioxide, while MCLs are established for DBPs including total trihalomethanes (TTHMs), five haloacetic acids (HAA5), chlorite, and bromate. This rule also requires subpart H water systems that use conventional filtration treatment to remove specified percentages of organic materials (measured as total organic carbon) which may react with disinfectants to form DBPs. Removal must be achieved through a TT, unless a system meets alternative criteria.

(e) Filter Backwash Recycling Rule (FBRR) (reference (l)). This rule is intended to prevent microbes, such as Cryptosporidium, from passing through treatment systems and into finished drinking water during recycling practices. The FBRR applies to all subpart H systems that use direct or conventional filtration processes and recycle spent filter backwash water, sludge thickener supernatant, or liquids from dewatering processes. The FBRR requires that spent filter backwash water, thickener supernatant, and liquids from dewatering processes are returned to a location such that all processes of a system's conventional or direct filtration are employed. Affected systems may apply to the state for approval to recycle at an alternate location.

(f) Long-Term 1 Enhanced Surface Water Treatment Rule (ESWTR) (reference (m)). This rule extends the requirements under the IESWTR to subpart H systems that serve less than 10,000 people. Similar to the IESWTR, the Long-Term 1 ESWTR increases protection against Cryptosporidium and other disease-causing microbes and addresses risk trade-offs with reducing DBPs.

(g) Long-Term 2 ESWTR (reference (n)). In January 2006, EPA published the Long-Term 2 ESWTR to supplement prior surface water treatment rules by further reducing Cryptosporidium in drinking water systems. The rule targets highly vulnerable surface water systems, requiring these systems to further reduce Cryptosporidium levels in drinking water through treatment. Like prior SWTRs, the Long-Term 2 ESWTR

applies to all subpart H systems and addresses risk trade-offs with the control of DBPs. It does not apply to consecutive water systems that purchase all of their water from a PWS regulated under reference (e).

(h) Stage 2 D/DBP Rule (reference (o)). EPA published the Stage 2 D/DBP Rule to further reduce DBP levels in the distribution system. The Stage 2 DBPR is designed to reduce peak DBP levels in the distribution system. This is accomplished via changes in compliance monitoring locations and in compliance calculations for TTHM and HAA5. The existing MCLs for TTHM (80 µg/L) and for HAA5 (60 µg/L) remain the same under the Stage 2 DBPR. The rule applies to CWSs and NTNCWSs that add a disinfectant (other than ultraviolet light (UV)) or that deliver water that has been treated with a disinfectant (other than UV).

(i) Groundwater Rule (GWR) (reference (p)). EPA published the GWR to reduce the risk of exposure to fecal contamination that may be present in PWSs that use GW sources. The rule applies to all GW systems and uses a risk-targeted strategy to identify GW systems that are at high risk for fecal contamination. The rule also specifies when corrective action (which may include disinfection) is required to protect consumers from bacteria and viruses. There are four major requirements of the GWR:

1. Periodic sanitary surveys performed by states.
2. Source water monitoring performed by PWSs.
3. Corrective action for systems with a significant deficiency or source water fecal contamination (as determined by the sanitary surveys or monitoring results).
4. Compliance monitoring to ensure the reliability of treatment technologies.

(4) Radon Proposed Rule (reference (q)). In November 1999, EPA proposed regulations to protect people from exposure to radon. As proposed, the rule would use a multimedia approach to reduce radon risks in indoor air, while protecting public health from the highest levels of radon in drinking water. EPA is proposing an alternative maximum contaminant level (AMCL) of 4000 pCi/L for radon-222 in drinking water and requirements for multimedia mitigation (MMM) programs to address radon-222 in

indoor air. EPA is also proposing a more stringent radon MCL of 300 pCi/L in states that choose not to implement a CWS MMM program. CWSs may comply with the less stringent AMCL if they are located in states that develop an EPA-approved MMM program, or in the absence of a State program, develop a State-approved CWS MMM program.

(5) Lead and Copper Rule (LCR) (reference (r)). The LCR was developed to reduce lead and copper levels at consumers' taps, primarily through corrosion control. LCR requirements are codified in subpart I of reference (e). Under the LCR, Marine Corps CWSs and NTNCWSs are required to conduct routine lead and copper monitoring and perform additional requirements, as triggered by a lead and copper exceedance. A lead and copper exceedance triggers additional water quality parameter and source water monitoring. Based on monitoring results, systems may be required to install corrosion control treatment and/or perform source water treatment. A lead AL exceedance also triggers public education requirements. Should prescribed treatment options fail to bring levels below the ALs, lead service lines may require replacement. The lead and copper AL is exceeded if the concentration of lead or copper in more than 10 percent of tap water samples collected during any monitoring period is greater than 0.015 milligrams per liter (mg/L) lead or 1.3 mg/L copper, respectively. In January 2000 and October 2007, EPA published revisions to the LCR (references (s) and (t)). Minor revisions were made in January 2000 to streamline LCR requirements, promote consistent national implementation, and reduce the reporting burden for water systems. It did not change the basic requirements of the LCR. The October 2007 revisions changed the following LCR requirements:

(a) Monitoring. Prevents systems above the lead AL from remaining on a reduced monitoring schedule.

(b) Water treatment. Requires systems to provide advanced notice and obtain primacy agency approval for planned changes to the source water or treatment process.

(c) Public awareness and education. Changes the content and delivery method/timeframe for public education material and incorporates educational statements on lead in annual CCRs. Also requires systems to notify consumers of tap water monitoring results.

(d) Lead service line replacements. Requires systems to re-test previously "tested-out" lines when resuming lead service line replacement programs.

(6) Prohibition on Lead Pipes, Solder, and Flux. In addition to the LCR, subpart E of reference (e) prohibits the use of lead pipe, solder, or flux in the installation or repair of any PWS or any plumbing in residential or nonresidential facilities providing water for human consumption. Solders and flux are considered to be lead free if they contain less than 0.2 percent lead; pipes and fittings are considered to be lead free if they contain less than 8.0 percent lead.

(7) Unregulated Contaminant Monitoring Rule (UCMR) (references (u), (v), and (w)). Reference (d) requires that, at least once every five years, EPA issue a list of unregulated contaminants to be monitored by certain PWSs (sections_300g-1 and 300j-4 of reference (a)). EPA uses the data generated from this monitoring effort to determine whether a particular contaminant(s) requires drinking water standards. Standards and criteria for monitoring unregulated contaminants are established through the UCMR. Generally, Marine Corps CWSs and NTNCWSs serving more than 10,000 people (large systems) and a representative sample of small CWSs and NTNCWSs (as selected by EPA) are required to monitor for the presence of unregulated contaminants and report results to EPA.

(8) Public Notification Rule (PNR) (reference (x)). The PNR is codified in subpart Q of reference (e) and requires all PWSs to notify consumers of violations related to contaminant MCLs, MRDLs, TTs, monitoring requirements, or testing procedures. Public notices are also used to announce the availability of UCMR monitoring results and any variances or exemptions issued to the PWS. The PNR establishes three tiers of public notices based on the severity of a violation. A Tier 1 public notice must be issued within 24 hours for violations that pose acute health risks due to short-term exposure. A Tier 2 notice is issued within 30 days for other violations and situations that may pose a serious, but not immediate adverse health effect. A Tier 3 notice is required within one year for violations and situations not included under Tier 1 or 2.

(9) CCRs. Subpart O of reference (e) requires CWSs to prepare and provide to their consumers annual reports on the quality of the water delivered by the system. The reports must be delivered by July 1 each year and contain data collected during, or prior to, the previous calendar year. CCR

requirements, including report contents, health effects language for certain contaminants, and delivery requirements, are outlined in section 151 in reference (e).

(10) Reporting Requirements. Reference (e) requires PWSs to report to the state, all required testing and analytical results within the shorter of the time frames below (section 31 of reference (e)). Reporting requirements for lead and copper are specified under section 90 of reference (e).

(a) The first 10 days following the month in which the result is received.

(b) Within the first 10 days following the end of the required monitoring period, as stipulated by the state.

(11) Recordkeeping Requirements. The NPDWR also requires PWSs to maintain the following records (section 33 in reference (e)):

(a) Microbiological and turbidity analyses and required monitoring plans per reference (y), Standard Subject Identification Code (SSIC) 5090.1a and b.

(b) Chemical analyses and required monitoring plans per reference (y), SSIC 5090.1b.

(c) Records of actions taken to correct NPDWR violations.

(d) Copies of reports, summaries, or correspondence related to sanitary surveys.

(e) Records of variances or exemptions granted to the system.

(f) Copies of public notices issued and certifications of notices. Records mentioned in paragraph 16104.2a(11)(c) through (f) must also be retained per reference (y), SSIC 5090.4.

(g) Recordkeeping requirements for lead and copper can be found in section 91 of reference (e). These records must also be retained per reference (y), SSIC Code 5090.5. Marine Corps installations must provide copies of required records to EPA or state as per applicable regulations.

(12) Use of Non-Centralized Treatment Devices. Subpart J of reference (e) specifies the criteria and procedures that PWSs must comply with before they can use point-of-entry treatment devices to achieve compliance with any MCL. Subpart J also prohibits PWSs from using bottled water to achieve compliance with any MCL. Bottled water may be used only on a temporary basis to avoid an unreasonable risk to human health.

b. NSDWRs, reference (z). Reference (z) establishes secondary MCLs and monitoring requirements for contaminants that may affect the taste, odor, or appearance of drinking water. These regulations are not Federally enforceable, but are intended as guidelines for states that may promulgate their own regulations. Each Marine Corps installation should contact their respective state to determine whether the state has enforceable secondary MCLs. If the state enforces reference (z), then Marine Corps activities shall comply. A table listing all NSDWR contaminants and standards can be viewed at <http://www.epa.gov/safewater/mcl.html>.

c. UIC Program, references (aa) through (ab). The UIC Program controls the injection of wastes via a UIC well into GW. An injection well is a bored, drilled, or driven shaft; a dug hole; or an improved sinkhole that is deeper than it is wide and is used to emplace fluids beneath the earth's surface.

(1) There are five classes of UIC wells covered under the UIC Program. A description of these well classes can be found at <http://www.epa.gov/OGWDW/uic/wells.html>. Class V wells are the types most commonly found at Marine Corps installations. Examples of Class V wells include certain septic system wells and cesspools, storm drainage wells, dry wells used for waste disposal, and heat pump wells used to circulate groundwater for heating office buildings. These types of wells are generally authorized by rule (section 24 of reference (aa)), provided that Marine Corps installations submit inventory information and comply with all other applicable UIC conditions (section 84 of reference (aa)). However, all Class V large-capacity cesspools (serving 20 or more people per day) and Class V motor vehicle waste disposal wells in a GW protection area or sensitive GW area are banned.

(2) Prohibitions. Federal requirements prohibit any underground injection of fluids, except as authorized by permit or rule issued under the UIC Program (section 11 of reference (aa)). UIC regulations also prohibit owners or operators from constructing, operating, maintaining, converting, plugging,

abandoning, or conducting any injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any NPDWR or adversely affect human health (section 12 of reference (aa)). Generally, the new construction of a Class IV (hazardous waste (HW)) well is prohibited and any increase in the amount of HW or change in HW type injected into an existing Class IV well is also prohibited (section 13 of reference (aa)).

d. Sole Source Aquifer Designation, reference (f). Part 149 provides the criteria for identifying and designating critical aquifer protection areas. All Federal projects proposed on a designated sole source aquifer area are subject to EPA review to ensure that these projects do not result in, or contribute to, conditions which would create a significant hazard to public health (see reference (ac)).

3. Statutory and E.O. Requirements

a. Water Conservation Program

(1) The EPACT requires Federal agencies to install in Government-owned buildings, water conservation measures with payback periods of less than 10 years. Consequently, Marine Corps installations must include these measures in the designs of all quarters and building military construction, repair, and rehabilitation projects.

(2) Reference (ad) requires Federal agencies to reduce water consumption intensity through life-cycle cost-effective measures by two percent annually through the end of FY 2015 or 16 percent between FYs 2008 and 2015.

b. Operator Certification. Reference (d) requires states to develop operator certification programs (section 300g-8 of reference (a)). Specifically, these programs must establish minimum standards for certification and re-certification of CWS and NTNCWS operators.

c. Water System VAs. Reference (c) required CWSs serving more than 3,300 people to conduct a water system VA and prepare or revise ERPs, based on the results of the VA. Although the dates for completing these VAs have passed, the DOD and Navy have set policies for all other PWSs to conduct VAs and prepare/update ERPs (see paragraph 16207 of this document).

d. Source Water Protection. Reference (d) required states to submit SWAPs to EPA for approval (section 300j-13 in reference (a)). A State SWAP delineates source water protection areas, inventories significant contaminants in these areas, and determines the susceptibility of each public water supply to contamination. Prior to reference (d), states were required to develop WHP Programs to protect wellhead areas from contamination (section 300h-7 in reference (a)). The WHP Program may be used as a basis for the State SWAP (section 300j-13 in reference (a)). A state may require a Marine Corps PWS that uses GW to develop its own WHP area to protect GW supply. Section 1428(h) of reference (a) requires all Federal agencies, having jurisdiction over any potential source of contaminants identified by a State WHP program to comply with all requirements of the State and local programs.

4. Other Requirements. State primacy agencies also oversee water system cross-connection control programs to ensure compliance with primary and secondary drinking water standards. Cross-connections are the links through which contaminants can enter a potable system and apply to building interior domestic plumbing systems, fire protection plumbing systems, and exterior water distribution systems. State programs for cross-connection control set policy, procedures, and instructions, for installing, repairing, maintaining, inspecting, and testing backflow preventers.

16105. TERMS AND DEFINITIONS

1. AL. The concentration of lead or copper in water specified in section 80(c) of reference (e) that determines, in some cases, the treatment requirements that a water system must meet to control lead and copper (reference (e)).

2. Aquifer. A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring (reference (f)).

3. CWS. A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents (reference (e)).

4. Consecutive System. A PWS that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems (reference (e)).

5. Contaminant. Any physical, chemical, biological, or radiological substance or matter in water (reference (e)).
6. Conventional Filtration Treatment. A series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal (reference (e)).
8. Direct Filtration. A series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal (reference (e)).
9. Disinfectant. Any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms (reference (e)).
10. Fluid. Any material or substance which flows or moves, whether as a semisolid, liquid, sludge, gas, or in any other form or state (reference (aa)).
11. Generator. Any person, by site location, whose act or process produces HW identified or listed in reference (ae) (reference (aa)).
12. Groundwater. Water below the land surface in a zone of saturation (reference (aa)).
13. Groundwater Under the Influence of Surface Water. Any water beneath the surface of the ground with:
 - a. Significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as Giardia lamblia (reference (e)).
 - b. Significant and rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions (reference (e)).
14. Injection Well. A well into which fluids are injected (reference (aa)).
15. Lead Service Line. A service line made of lead which connects the water main to the building inlet and any lead

pigtail, gooseneck, or other fitting which is connected to such lead line (reference (e)).

16. MCL. The maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user, except in cases where the maximum permissible level is measured at the point of entry to the distribution system (reference (e)).

17. MCLG. The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. Maximum contaminant level goals are nonenforceable health goals (reference (e)).

18. MRDL. A level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a PWS is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a PWS is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as maximum contaminant levels under section 1412 of reference (a). There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in section 65 of reference (e), operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level, and for a period necessary, to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections (reference (e)).

19. MRDLG. The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants (reference (e)).

20. Noncommunity Water System. A PWS that is not a community water system (reference (e)).

21. NTNCWS. A PWS, known as a nontransient, noncommunity water system, that is not a community water system and that regularly serves at least 25 of the same persons for over 6 months per year (reference (e)).

22. Optimal Corrosion Control Treatment. For the purpose of subpart I, the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while insuring that the treatment does not cause the water system to violate any national primary drinking water regulations (reference (e)).

23. Owner or Operator. The owner or operator of any activity or facility subject to regulation under the UIC program (reference (aa)).

24. Permit. An authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of the UIC program. The permit includes "area" permit and "emergency" permit, but does not include UIC authorization by rule or any permit which has not yet been the subject of final agency action, such as a draft permit (reference (aa)).

25. Person. An individual; corporation; company; association; partnership; municipality; or Federal, State, or tribal agency (reference (e)).

26. Point-of-Entry Treatment Device. A treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building (reference (e)).

27. Potable Water. Water that has been examined and treated to meet the proper standards and declared by responsible authorities to be fit for drinking.

28. PWS. A system for the provision of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. This term includes:

a. Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system (reference (e)).

b. Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system (reference (e)).

29. Sanitary Survey. An onsite review of the water source, facilities, equipment, operation, and maintenance of a PWS for the purpose of evaluating the adequacy of such source, facilities, equipment, operation, and maintenance for producing and distributing safe drinking water (reference (e)).

30. Subpart H Systems. PWSs using surface water or ground water under the direct influence of surface water as a source that are subject to the requirements of subpart H of this part (reference (e)).

31. Supplier of Water. Any person who owns or operates a public PWS (reference (e)).

32. Surface Water. All water which is open to the atmosphere and subject to surface runoff (reference (e)).

33. Total Organic Carbon (TOC). TOC in mg/L measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two significant figures (reference (e)).

34. TTHM. The sum of the concentration in mg/L of the trihalomethane compounds (trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform)), rounded to two significant figures (reference (e)).

35. Underground Injection Control. The regulation of the injection of fluids into the subsurface through a well to protect groundwater for potential use as drinking water (reference (aa)).

36. Virus. A virus of fecal origin which is infectious to humans by waterborne transmission (reference (e)).

37. Well. A bored, drilled, or driven shaft; or a dug hole, whose depth is greater than the largest surface dimension (reference (aa)).

38. Wellhead Protection Area. The surface and subsurface area surrounding a water well or well field supplying a PWS through

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which contaminants are reasonably likely to move and to reach such water well or well field (reference (a), section 1428(e)).

39. Wholesale System. A PWS that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another PWS. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems (reference (e)).

40. Year-Round Resident. For purposes of applicability to Marine Corps installations, a year-round resident is defined as an installation resident or year-round employee who is regularly served (eight or more hours daily) by the water system. State definitions will apply in cases where the definitions differ.

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 2: MARINE CORPS POLICY

16200. GENERAL

1. Marine Corps installations will comply with all applicable Federal, State, and local drinking water laws, regulations, executive orders and Marine Corps, Navy, and DOD policies. This Marine Corps policy provides additional drinking water requirements. Refer also to reference (af) for additional policy and guidance.

2. The use of a regional or municipal public water supply will be the preferred drinking water supply method whenever an analysis of life-cycle costs and environmental impacts indicates that the use of such supply is more beneficial, economically and environmentally, than constructing, upgrading, and operating a water collection and treatment facility. Economic components used in the analysis should include any capital cost contributions to the municipality for a prorated share of system capacity; continuing user fees and surcharges; treatment costs; and Marine Corps facility capital, operation, and maintenance costs (including expenses for permit fees; monitoring; utilities; equipment repair and replacement; solids handling and disposal; chemical usage; and personnel staffing, training, and certification). The environmental analysis should include SW and GW quality and quantity issues; threatened and endangered species impacts; and archaeological, cultural, and natural resources issues.

3. The development, expansion, and operation of Marine Corps-owned drinking water collection, treatment, storage, and distribution facilities are authorized whenever a municipal system or other alternatives are not available or cost-effective.

4. A Marine Corps PWS that purchases all of its water from a PWS subject to reference (e), does not operate collection or treatment facilities of its own, and does not "sell water" to another entity, generally, is not subject to section 3 of reference (e). Installations that purchase water from a PWS and subsequently distribute it to onsite activities or to any person or entity outside the community may be subject to reference (e). Contact the Primacy agency to determine whether compliance with

all or part of reference (e) is required. Refer to reference (ag). Installations that rechlorinate or fluoridate water purchased from a PWS may be considered to be operating a treatment process and may be required to comply with reference (e). To avoid having to comply with all provisions of reference (e) except with those pertaining to microbiological contaminants, coliform monitoring, and disinfection or fluoride monitoring, the installation should request an exemption from the state. Marine Corps installations that qualify for an exemption from PWS permitting shall apply, in writing, to the Primacy agency for an exemption. In some cases, regulators issue a permit when it is not required.

16201. MONITORING

1. Marine Corps installations that own and operate a consecutive PWS subject to full or partial exemption from regulatory monitoring requirements under reference (e), sections 3 or 29, respectively, shall submit a letter to the Primacy agency explaining the degree to which exemption criteria are applicable and request the exact requirements to be imposed on the consecutive PWS. The Primacy agency's response letter shall be permanently retained in Marine Corps files.

2. Marine Corps PWSs will, at a minimum, accomplish the monitoring described below. This monitoring is required regardless of variance or exemptions from regulatory monitoring requirements. Sampling and testing shall comply with reference (af) requirements.

a. Bacteriological Monitoring. Marine Corps PWSs shall perform bacteriological monitoring as specified in the TCR (section 21 of reference (e)). The use of EPA-approved kits by training personnel is acceptable for total coliform analyses. However, if a sample tests positive, follow up analysis must be accomplished using a certified laboratory.

b. Asbestos. All Marine Corps water systems with asbestos cement pipes shall monitor for asbestos. At a minimum, one sample shall be taken every three years.

c. Lead in Priority Areas. All Marine Corps 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.

These records must be retained per reference (y), SSIC 5090.5. If initial screening results exceed 20 ppb in 250-mL samples, installations shall use full protocol sampling on affected outlets. If full protocol sampling exceeds 20 ppb, they shall secure the affected water outlets from service and institute permanent corrective measures. The following references provide program information including rationale and sampling protocols: references (ah) and (ai). A copy of all test results shall be made available for all schools, day care centers, and medical facilities where testing has been conducted. A notice of availability of the testing results shall be sent to the parents or legal guardians of children attending the affected school.

d. Lead and Copper in Water Systems. Marine Corps consecutive PWSs that serve family housing and were not included in the primary system sampling pool (at the time the primary system performed LCR 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 LCR procedures. This requirement can be waived if Marine Corps installations operating consecutive PWSs document that their water supplier passed its LCR 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.

e. Review of Primary PWS Records. Marine Corps consecutive PWSs shall, at least once a year, review the monitoring reports of the primary PWS. Installations shall use these reports, and other sources of information, to determine the risk of water quality deterioration within the distribution system. Installations shall ensure that water quality has not degraded above the MCL for parameters within the distribution system.

16202. CCRS. Marine Corps consecutive CWSs shall obtain a copy of their water suppliers CCR and amend this report with information on any additional testing or exceedances and then distribute to consumers. For exceedances, only report data based on certified laboratory results. A good faith effort shall be made to ensure that all consumers are aware of the CCR and additional information. Recommended methods of report delivery include mailing to each housing unit, publishing in the command newspaper, posting on a website, and posting in conspicuous locations in each building on the installation. For more guidance, see reference (aj).

16203. RECORDKEEPING. Marine Corps installations shall maintain records as follows:

1. Bacteriological results: five years, per reference (y), SSIC Code 5090.1a.
2. Chemical results: 10 years, per reference (y), SSIC Code 5090.1b.
3. Lead/copper testing results: 12 years, per reference (y), SSIC Code 5090.5.
4. Actions taken to correct violations, per reference (y), SSIC Code 5090.4.
5. Sanitary Survey reports, per reference (y), SSIC Code 5090.4.
6. Variance or exemption records, per reference (y), SSIC Code 5090.4.
7. Water treatment plant and/or distribution system operating records, per reference (y), SSIC Code 5090.4.
8. Cross-connection inspection records, per reference (y), SSIC Code 5090.4.
9. CCRs, per reference (y), SSIC Code 5090.4.

16204. SANITARY SURVEYS. In many instances, a state may require treatment plants or PWSs that are experiencing compliance problems, particularly with microbial pathogens, to perform a sanitary survey. The State regulatory agency will usually perform the survey. If the state allows, the installation can use a service provider of choice to complete the survey. In the absence of a State requirement, all Marine Corps PWSs shall perform a sanitary survey every five years.

1. Survey Requirements. For treatment plants, the survey should include the following:

- a. Verification and re-evaluation of vulnerability assessments, watershed protection programs, and WHPs, as applicable.
- b. Examination of the source water physical components and condition.

c. Schematic diagrams of the treatment process and examination and evaluation of the adequacy and appropriateness of all elements of the current treatment process, including an assessment of operational flows versus treatment process rated capacity and, where appropriate, CT assessment (CT is defined in section 2 of reference (e)).

d. 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.

e. Evaluation of the ability of the treatment plant to respond to changes in raw water fluctuations.

f. Evaluation of the treatment plant's emergency power supply and security measures.

2. Distribution System Sanitary Survey Review. The sanitary survey for the distribution system should include a review of the operations and maintenance program to address 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 replacement.
- e. If applicable, an effective corrosion control program.
- f. A comprehensive cross-connection control program.
- g. An aggressive valve and hydrant exercise program.
- h. An adequate water quality monitoring program that achieves compliance with the appropriate regulations and provides for effective water quality control.
- i. An adequate flushing program, preferably a Unidirectional Flushing program that is implemented on a yearly basis.

16205. OPERATION AND MAINTENANCE. Marine Corps installations that own and/or operate water systems (public and nonpublic, permitted and non-permitted) shall develop and implement an operation and maintenance program. Minimum requirements of the program are to meet the requirements of section 63(d)(3) in reference (e), and include the proper implementation and documentation of:

1. Emergency and preventive maintenance.
2. System disinfection after maintenance work is performed.
3. Scheduled flushing of the system.
4. Reduction of water quality problems, as needed.
5. Implementation and documentation of a valve exercise and maintenance program.
6. Proper operation and maintenance of storage tanks.
7. Maintenance of current water distribution maps.
8. Documentation of location and dates of water line breakage.
9. Documentation of emergency operations procedures required as a result of events such as earthquakes, hurricanes, chemical releases, and terrorist activities. Determination of response roles and responsibilities as well as contingency plans for providing potable water to the Marine Corps installation. Reference (ak) provides guidance on emergency planning.

16206. CROSS-CONNECTION CONTROL

1. All installations that own or operate a water system shall develop and implement a Cross-Connection Control and Backflow Prevention Program. At a minimum, the Cross-Connection Control and Backflow Prevention Program shall include procedures and mechanisms to:

- a. Find and eliminate existing cross-connections and prevent new cross-connections.
- b. When cross-connections cannot be eliminated, install, inspect, and test backflow preventers.

c. Keep an inventory of all existing backflow preventers.

d. 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 six months for high hazards and once every 12 months for low hazards by a certified inspector.

e. Promptly repair or replace defective backflow preventers.

2. The following documents provide guidance on cross-connection control and backflow prevention:

a. Naval Facilities Engineering Service Center (reference (al)).

b. EPA document (reference (am)).

16207. WATER SYSTEM VAs AND ERPs. DOD and Navy policies require all Marine Corps drinking water systems serving more than 25 consumers to complete an initial VA and ERP. Systems subject to this requirement include consecutive and unregulated systems in the U.S. and its possessions and territories, small community and non-community PWSs in the U.S. and its possessions and territories, and overseas systems that produce water or are provided water by a local supplier. All Marine Corps PWSs shall, at a minimum, address the assessment areas established under section 401 of reference (c), as follows:

1. A review of pipes and constructed conveyances.

2. Physical barriers.

3. Water collection, pretreatment, treatment, storage, and distribution facilities.

4. Electronic, computer, or other automated systems which are utilized by the PWS.

5. Use, storage, or handling of various chemicals.

6. Operation and maintenance of the system.

16208. UIC PROGRAM. Marine Corps installations must not operate or inject fluids into Class I, II, III, or IV injection wells. Marine Corps installations must properly close all class

V injection wells which are not essential to mission requirements in order to eliminate potential sources of GW contamination and prevent illicit disposal of hazardous substances.

16209. WATER CONSERVATION. As required by reference (ad), Marine Corps installations must reduce water consumption by two percent each year through FY 2015 using life-cycle cost effective measures. Further guidance is provided in reference (an) and in reference (af).

16210. CONSUMPTIVE USE PERMITS. In coordination with legal and technical staff at the claimant and appropriate regional commander, installations that withdraw GW shall:

1. Document historical water use.
2. Determine reasonable foreseeable future water uses.
3. Evaluate water rights laws.
4. Determine, on a case by case basis, whether the installation should obtain a consumptive use permit.
5. When applying for a consumptive use permit, ensure that restrictions will not impact mission requirements.

16211. PERCHLORATE

1. Marine Corps Perchlorate Sampling and Management Policy. The policy was issued in April 2006 and required all Marine Corps-owned PWSs (including consecutive systems) that sampled for inorganic analytes pursuant to regulatory requirements to sample for perchlorate using either EPA method 331.0 or 332.0 for a minimum of two consecutive quarters. This policy required that the first round of sampling be completed by 31 July 2006 and validated results be reported to Headquarters Marine Corps (CMC (LFL)) by 30 September 2006. Where confirmed analytic results indicated the presence of perchlorate in finished drinking water at any level above the method reporting limit for the analytic method used, installations should have notified CMC (LFL) for further actions. If analytical results did not indicate the presence of perchlorate, no further sampling or action was required, except as required by State or local regulations.

2. Marine Corps permanent facilities overseas were also subject to this perchlorate sampling and management policy if they were

already conducting drinking water sampling per host nation or other overseas requirements.

3. Refer also to references (ao), (ap), and (aq).

4. Since the issuance of the 2006 Headquarters Marine Corps and DOD perchlorate policies, some states have established MCLs or Public Health Goals for perchlorate in drinking water. Marine Corps-owned PWSs shall comply with any Federal, State, or local enforceable perchlorate drinking water standards.

16212. TRAINING

1. General. All Marine Corps personnel involved in the drinking water systems and water conservation shall receive appropriate environmental training. Refer to reference (af) for guidance.

2. Water Treatment and Distribution System Operators. Installations shall ensure their water treatment and distribution system operators are trained and certified per applicable Federal, State, and local regulations. Training should include the following elements:

- a. Basic water plant and/or distribution system design.
- b. Basic water plant and/or distribution system operation.
- c. Basic maintenance and calibration of plant controls and equipment.
- d. Water plant and/or distribution systems treatment principles, including chemical storage and handling.
- e. Water sampling and analysis.
- f. Water plant and/or distribution system documentation and reporting requirements.
- g. Cross-connection control and backflow prevention.

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 3: RESPONSIBILITIES

16300. CMC (LF)

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to drinking water systems and water conservation and uniformly apply Marine Corps policy as set forth in this Manual.
2. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies as required.
3. Conduct special environmental compliance and protection studies with regard to drinking water systems and water conservation management to assist in establishing policy or initiating actions.
4. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to drinking water systems and water conservation regulations.
5. Track Marine Corps progress toward meeting established drinking water quality and water conservation goals.

16301. CHIEF BUREAU OF MEDICINE AND SURGERY

1. Revise instructions and other appropriate documents to reflect health concerns and health-related requirements for drinking water systems.
2. Provide health-related advice to Marine Corps commanders for carrying out their responsibilities for drinking water quality and the water supply system.

16302. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for drinking water systems that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and

budget for personnel, equipment, materials, training, and monitoring required to comply with drinking water systems and water conservation requirements. Pay appropriate Federal, State, and local fees. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

2. Ensure that all required Federal, State, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all drinking water systems and water conservation projects.

3. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an environmental compliance and protection standard operating procedures document to implement all environmental requirements or by writing a separate base order to implement specifications of this chapter alone.

4. Identify and submit to the CMC (LF) nonrecurring projects and funding required to make drinking water systems, potential contamination sources within WHP areas, and underground injection wells compliant with applicable existing and emerging regulations, requirements, and permits. Program and budget for sufficient personnel, equipment, materials, training, and monitoring resources required to effectively operate, maintain, and repair drinking water systems in compliance with drinking water program requirements. With command counsel concurrence, pay related Federal, State, and local fees.

5. Operate and maintain adequate facilities to produce, store, and distribute drinking water in the quantities required in compliance with reference (e) and applicable State standards, regulations, and requirements.

6. Ensure that management programs and controls exist to comply with applicable regulations; NPDWR, MCLs, and TTs; UIC permit conditions; and monitoring, recordkeeping, public notification, and reporting requirements for drinking water systems and underground injection wells.

7. Ensure compliance with all applicable water system operator certification requirements. Identify training and certification needs for Marine Corps operators of PWSs and allocate needed resources.

8. Oversee and provide resources for monitoring, recordkeeping, reporting, public notification practices, and the use of certified laboratories for analyses in compliance with EPA or EPA-approved State requirements. Retain copies of all records, reports, and public notices submitted to EPA, State, and local water district offices per the applicable SSIC in reference (y).

9. Submit annual CCRs to consumers and provide a copy to CMC (LFL).

10. Coordinate with appropriate EPA, State, and regional offices the review of all projects for the construction of new or upgraded drinking water system facilities and for the construction, modification, or closure of underground injection wells.

11. Implement corrosion control treatment, source water treatment, and/or lead service piping replacement as needed to comply with NPDWR requirements for the control of lead and copper in drinking water.

12. Ensure that a cross-connection control and backflow prevention program is developed and implemented. Properly inspect, operate, and maintain backflow prevention devices, altitude and pressure-reducing valves, water meters, water-saving devices, and water reuse and recycling systems.

13. Ensure that the installation has applied for, and obtained, all required Federal and State UIC permits. Comply with UIC requirements under reference (a). Inventory all class V wells and provide a copy of the inventory to the EPA or state, as appropriate.

14. Implement a multifaceted Marine Corps water conservation program that meets statutory and E.O. requirements. Execute water conservation studies to reduce water usage and generation of wastewater flows. Review the various uses of water at respective activities to ensure that all economically practical water conservation measures are taken. Ensure that all water conservation measures with payback periods of less than 10 years, as required by EPACT, are installed in Government-owned buildings.

15. Ensure that adequate access to drinking water system collection, treatment, storage, and disposal facilities, and underground injection wells, is provided to the EPA, State, and local regulatory agencies for the purpose of sampling water and

injected wastes, and for the inspection of operations and records.

16. Ensure that water systems serving 25 to 3,300 people perform a VA and develop/revise ERPs per DOD and Navy policies. Review the vulnerability assessment and emergency response plan every five years or when there is a change in the water source or system process.

REFERENCES

- (a) 42 U.S.C. 300f et seq.
- (b) 42 U.S.C. 201 et seq.
- (c) Public Law 107-188, "Public Health Security and Bioterrorism Preparedness and Response Act of 2002," June 12, 2002
- (d) Public Law 104-182, "Safe Drinking Water Act (SDWA) Amendments of 1996," August 6, 1996
- (e) 40 CFR 141
- (f) 40 CFR 149
- (g) Federal Register, Volume 66, page 6975, January 22, 2001
- (h) Federal Register, Volume 65, page 76708, December 7, 2000
- (i) Federal Register, Volume 54, page 27544, June 29, 1989
(NOTAL)
- (j) Federal Register, Volume 63, page 69478, December 16, 1998
- (k) Federal Register, Volume 63, page 69389, December 16, 1998
- (l) Federal Register, Volume 66, page 31085, June 8, 2001
- (m) Federal Register, Volume 67, page 1811, January 14, 2002
- (n) Federal Register, Volume 71, page 654, January 5, 2006
- (o) Federal Register, Volume 71, page 387, January 4, 2006
- (p) Federal Register, Volume 71, page 65574, November 8, 2006
- (q) Federal Register, Volume 64, page 59245, November 2, 1999
- (r) Federal Register, Volume 56, page 26460, June 7, 1991
- (s) Federal Register, Volume 65, page 1950, January 12, 2000
- (t) Federal Register, Volume 72, page 57782, October 10, 2007
- (u) Federal Register, Volume 64, page 50555, September 17, 1999

- (v) Federal Register, Volume 65, page 11371, March 2, 2000
- (w) Federal Register, Volume 66, page 2273, January 11, 2001
- (x) Federal Register, Volume 65, page 25982, May 4, 2000
- (y) SECNAV M-5210.1
- (z) 40 CFR 143
- (aa) 40 CFR 144
- (ab) 40 CFR 148
- (ac) EPA Office of Ground Water and Drinking Water, Fact Sheet: Designated Sole Source Aquifers - Nationally
- (ad) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (ae) 40 CFR 261
- (af) OPNAVINST 5090.1C
- (ag) Federal Register, Volume 68, page 74233, December 23, 2003
- (ah) EPA/812-B-94-002, "Lead in Drinking Water in Schools and Non-Residential Buildings," April 1994
- (ai) Naval Facilities Engineering Command, "Guidance for Sampling Water Coolers," May 1998
- (aj) DOD Services Steering Committee CCR Guidance Document, February 1999
- (ak) American Water Works Association Manual of Standard Practices, "Emergency Planning for Water Utility Management," Manual Number M19, Second Edition, 1984 (<http://www.awwa.org>)
- (al) UG-2029-ENV "Cross-Connection Control and Backflow Prevention Program Implementation at Navy Shore Facilities," (May 1998)
- (am) EPA 816-R-03-002, "Cross Connection Control Manual," February 2003

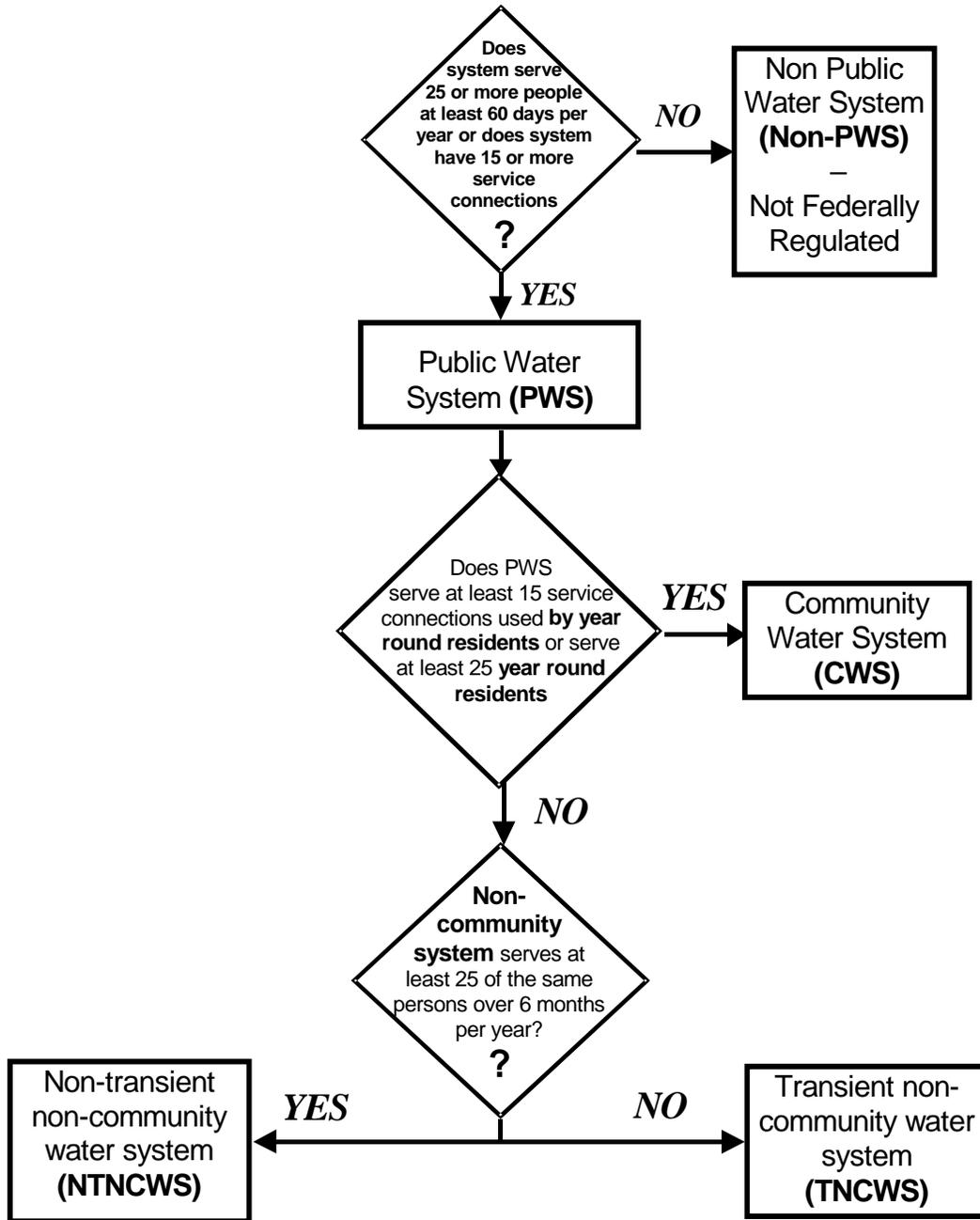
(an) Instructions for Implementing Executive Order 13423,
"Strengthening Federal Environmental, Energy, and Transportation
Management," March 29, 2007

(ao) DOD Perchlorate Handbook, August 2007
(<http://www.navylabs.navy.mil/Perchlorate.htm>)

(ap) DUSD Memorandum, "Actions in Response to Perchlorate
Releases," September 21, 2007

(aq) DUSD Memorandum, "Policy on DOD Required Actions Related to
Perchlorate," January 26, 2006

Water System Classification Flowchart^{1,2}



- (1) In accordance with Federal laws, State & local laws may be more stringent.
- (2) Does not address regulatory requirements of consecutive water systems. This is determined independently by each state.

Figure 16-1.--Water System Classification Flowchart

CHAPTER 17

SOLID WASTE (SW) MANAGEMENT AND RESOURCE RECOVERY

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CHAPTER 17

SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY

SECTION 1: INTRODUCTION

17100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory and procedural requirements for solid waste (SW) disposal, waste minimization, recycling, and resource recovery requirements.

17101. APPLICABILITY. See paragraph 1101.

17102. BACKGROUND. Reference (a), as amended by reference (b) in 1976, establishes requirements concerning the disposal and management of SW. Facilities are subject to subtitle D, SW rules of reference (b), if they perform, or are designed to perform, any of the following activities:

1. Thermally process 50 tons or more per day of municipal-type SW (reference (c)).
2. Store or collect residential, commercial, and institutional SW (reference (d)).
3. Source separate materials for recovery (reference (e)).
4. Purchase products that contain recycled materials (reference (f)).
5. Operate land disposal sites or use commercial off-site landfills for SW disposal (references (g) and (h)).
6. Generates solid waste recycling revenue (reference (i)).

17103. FEDERAL STATUTES

1. Solid Waste Disposal Act (SWDA) of 1965, as Amended in 1976 (42 U.S.C. 6901 et seq.). The SWDA requires that Federal installations comply with all Federal, State, and local requirements concerning the disposal and management of SW. These requirements include permitting, licensing, and reporting. The Act encourages the beneficial reuse of waste through recycling and burning for energy recovery. Additionally it requires the procurement, to the maximum extent possible, of Environmental Protection Agency (EPA) guideline products that contain recycled materials. This is outlined in the

Comprehensive Procurement Guide VI issued in August 2004 and authorized under the Resource Conservation and Recovery Act (RCRA) 6002.

2. Federal Facilities Compliance Act of 1992 amends the SWDA section 6001 (42 U.S.C. 6961). This law allows Federal and State regulators to enforce Federal, State, and local SW laws and regulations at Federal facilities.

3. RCRA of 1976 (42 U.S.C. 6901 et seq.). RCRA defines SW and identifies what SW is considered hazardous waste (HW), and sets strict requirements for the handling of HW. RCRA Subtitle C regulates HW, which is fully discussed in chapter 9. Subtitle D of RCRA focuses primarily on managing municipal and SW. The goals of subtitle D are to encourage State and local governments to plan, permit, regulate, implement, and enforce agencies to manage and dispose of household and industrial or commercial nonhazardous SWs in an environmentally sound manner. This includes the recycling of waste material and resource conservation. Subtitle D has mandatory technical standards for nonhazardous SW disposal facilities.

4. Clean Air Act (CAA) of 1970, as Amended (42 U.S.C. 7401 et seq.). Section 112 of the CAA authorizes the EPA to set emission standards for hazardous air pollutants. In 1973, a standard for the control of asbestos fibers was issued as part of the National Emissions Standards for Hazardous Air Pollutants. Regulations addressing asbestos disposal in SW landfills are included in the CAA, section VI, Special Pollutants.

5. Military Construction Codification Act of 1982 (Public Law 97-214). Section 6 of the Military Construction Codification Act contains a provision that allows net proceeds from the sale of recyclable materials to be used by Marine Corps installations having qualified recycling programs (QRPs) for certain purposes.

6. Federal Property and Administrative Services Act (FPAS) of 1949 (10 U.S.C. 484 et seq.). Section 203 of the FPAS contains provisions on the sale of recyclable materials.

7. Pollution Prevention Act (PPA) of 1990 (42 U.S.C. 13101 and 13102, s/s et seq.). This Act establishes the national policy that "pollution should be prevented at the source whenever feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible; pollution that cannot be prevented or recycled should be treated in an

environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

8. Executive Order (E.O.) 13423, "Strengthening Federal Environmental, Energy, and Transportation Management", January 24, 2007. E.O. 13423 revoked E.O. 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," September 14, 1998. E.O. 13423's goal is to integrate and improve existing practices and requirements into a strategic approach to enhance environmental performance and sustain our compliance with legal and regulatory requirements. E.O. 13423 sections 2(e), 3(a), 3(e), and 3(f) require agencies to increase SW diversion by December 21, 2010, maintain cost effective waste prevention and recycling programs, and implement sustainable practices for pollution and waste prevention and recycling. The goals also require agencies to meet the 35 percent recycling goal established by EPA, and ensure new and renewed contracts, permits, and any other legally binding obligations between an agency and a contractor, tenant, or concessionaire include responsibilities for meeting the intent of E.O. 13423.

9. Instructions for Implementing E.O. 13423, March 27, 2007, defines agency requirements for implementing the new E.O. 13423 and provides broad strategies for achieving them. The Solid Waste Diversion and Recycling section provides additional guidance on the proper retention of recycling revenue in accordance with Public Law 103-329, section 608.

10. The Department of Defense (DOD) Integrated (Non-Hazardous) Solid Waste Management Policy February 1, 2008, defines agency requirements for implementing the SW and recycling requirements of E.O. 13423. It requires DOD component installations to implement integrated solid waste management (ISWM) to achieve SW diversion goals.

While pollution prevention and source reduction remain the first considerations, ISWM is based on a more refined environmental management hierarchy (EMH) that employs a hierarchy of approaches and technologies for managing SW to maximize resource conservation and protect the environment. Generally, the higher in the hierarchy for the technology or process, the more benefits gained in efficiency and retained economic value. The ISWM hierarchy, from highest to lowest, is source reduction, reuse, donation, recycling, composting/mulching, incineration

for volume reduction with energy recovery, other forms of volume reduction, and landfilling.

The ISWM Policy requires SW managers to have a thorough understanding of the composition of the waste stream; be informed about reuse opportunities, composting technologies, and recyclable commodities markets through economic analysis and market research; know the available options for waste diversion or disposal; and understand associated costs and cost avoidance. Under the ISWM, installations must make every effort to find the most cost effective, energy efficient, least polluting ways to deal with the various items typically found in an installation's solid SW stream.

17104. REQUIREMENTS

1. SW Collection, Storage, and Disposal

a. Federal, State, and local requirements concerning collection, storage, and disposal apply to Marine Corps installations that:

(1) Generate SW, whether it is collected by the Marine Corps or by a nonmilitary collector. All SW generated must first be evaluated to determine if that waste is a HW in accordance with section 11 of reference (j). HW is discussed in detail in chapter 9 of this Manual.

(2) Dispose of SW on Marine Corps property, regardless of whether the waste is originated by the Marine Corps or other sources.

(3) Dispose of SW off Marine Corps property if the waste is generated by a Marine Corps installation and if the installation has direct management control over the disposal operation.

b. References (c), (d), (e), (f), (g), and (h) contain applicable Federal regulations for nonhazardous SW. Federal SW requirements have changed dramatically over the last several years, with most changes occurring in the following areas:

(1) Federal procurement of selected products containing recovered materials and postconsumer wastes including oil, paper, tires, and building insulation (reference (f)).

(2) Requirements for Municipal Solid Waste Landfills (MSWLFs) (reference (h)).

c. Marine Corps waste materials (including trash, rubbish, dunnage, garbage, construction debris, and liquid waste) must not be burned in open fires, except in limited situations after considering health and safety issues and with the approval of the appropriate State or local agencies and EPA regional office.

2. Thermal Processing of SW

a. Federal (reference (c)), State, and local requirements are applicable to thermal processing facilities designed to process 50 tons per day or more of SW. For practical purposes, these requirements apply to any facility designed to process, or which actually processes, an average of 2.1 tons per hour or more (section 100(a) in reference (c)).

b. Emissions must not exceed the existing air quality or emission standards established by EPA, State, or local agencies. All water discharged from a thermal processing facility must be treated sufficiently to meet applicable effluent limitation standards. All necessary permits must be obtained from the appropriate Federal, State, or local agencies.

c. Thermal processing residue must be disposed of in an environmentally acceptable manner. Land disposal of residues must be per EPA guidelines for the land disposal of SWs. The guidelines also apply to those nonhazardous wastes that cannot be thermally processed for reasons of health, safety, or technological limitation.

3. Marine Corps-Owned Land Disposal Sites. EPA promulgated requirements for MSWLFs which became effective on October 9, 1991 (reference (h)). The regulations address the design, location, construction, operation, closure, and postclosure of MSWLFs as follows:

a. MSWLFs and lateral expansions that stopped receiving SW on or before October 9, 1991, do not have to meet the requirements.

b. MSWLFs and lateral expansions that received SW after October 9, 1991, but stopped receiving SW on or before October 9, 1997, only have to meet the final cover requirements specified in section 60(a) of reference (h). The final cover must have been installed no later than six months after receipt

of the last wastes in accordance with section 60 of reference (h). If closure will exceed the six-month timeframe, an extension must be received from the state after the operator demonstrates that he has taken, and will continue to take, all steps to prevent exposure to human health and environment.

c. MSWLFs and lateral expansions that continue to receive wastes after October 9, 1993, must meet all of the requirements. Refer to section 1(f) of reference (h) for site- and condition-specific exemptions for MSWLFs that continue to receive SW.

4. Marine Corps-Owned Land Disposal Sites Receiving HW from Conditionally Exempt Small Quantity Generators (CESQGs). EPA promulgated revisions to existing criteria for SW disposal facilities and practices, for Nonmunicipal Nonhazardous Waste Disposal Units that receive CESQG hazardous waste (subpart B in reference (g)). MSWLFs that receive CESQG HW must comply with sections 7 through 13 and section 30 of reference (g) by January 1, 1998, and sections 21 through 28 of reference (g) by July 1, 1998. These regulations address location, groundwater monitoring, and corrective action. Any MSWLF that receives CESQG HW is also subject to sections 3-2, 3-3, 3-5, 3-6, 3-7, and 3-8(a), (b), and (d) of reference (g).

5. SW Resource Recovery

a. General. The philosophy underlying resource recovery is that material or energy recovery from waste is possible at a point downstream from the point of generation, and is an alternative to landfilling, incinerating, or otherwise disposing of the waste in a manner harmful to the environment or wasteful of natural resources.

b. Recyclable Materials Sales Programs. Only installations with a QRP may accumulate proceeds from the sale of recyclable materials.

(1) DOD policy requires all installations and commands to establish recycling programs and procedures that:

(a) Ensure, where cost-effective, that all installations and activities have, or participate in, QRPs and that these recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space.

(b) Ensure, where cost-effective, that contracts awarded after the effective date of this Manual, new or renewed, that provide for contractor operation of a Government-owned or -leased facility located within the United States, its territories, or possessions include provisions that obligate the contractor to participate in a recycling program. Participation by contractors operating government-owned or -leased facilities overseas where recycling programs are available is required.

(c) Ensure that QRP procedures address recyclable materials, excluded materials, and other QRP materials.

(d) Divert recyclable materials from the nonhazardous SW stream where economically feasible (where the cost of diversion less any proceeds is less than the cost of diversion). Individual types of recyclable materials that make up a substantial percentage of the nonhazardous waste stream should be included in recycling programs. Recyclable materials do not require formal screening as defined in reference (k) for reutilization, transfer, or donation.

(e) Establish controls that ensure excluded materials, including those listed in section 2(b)(3) of reference (i), are not sold through a QRP.

(f) Authorize installation commanders, as appropriate, to sell directly recyclable and other QRP materials or to consign them to the Defense Reutilization and Marketing Service for sale.

1. Installations must implement procedures ensuring that United States trade security control policies are followed in accordance with reference (l) prior to directly selling firing range-expended brass or mixed metals gleaned from firing range cleanup that do not require demilitarization and that are Munitions List Items (MLIs) or Strategic List Items (SLIs). Expended brass must be crushed, shredded, or otherwise destroyed prior to public sale.

2. Reuse Screening. Prior to selling other QRP materials directly, installations must implement procedures for local reuse screening to consider reutilization, transfer, and donation programs in accordance with reference (k).

3. Ensure that outside the United States, the disposition of recyclable and other QRP materials, derived from goods that have been imported duty-free, is accomplished

consistent with the provisions contained in status of forces, surplus, or excess property agreements or other international agreements with host nations.

(g) Ensure the distribution of proceeds from recycled material governed by reference (m).

1. Sale proceeds will be used first to cover the costs directly attributable to all installation recycling programs, including, but not limited to manpower, facilities, training, program awareness expenses, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for environmental compliance, pollution prevention, composting, alternative fuel vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plan. Any remaining proceeds may be transferred to the nonappropriated Marine Corps Community Services (MCCSs) account for any approved programs.

2. An accounting and control system must be established for a recycling program that provides detailed management and audit information, tracks quantity of material handled, calculates sales and handling costs for recycled material, and tracks expenditures made for appropriate projects and MCCS programs. Integrity of the audit trail will be a priority concern.

3. Ensure that appropriate management controls are in place for recyclable materials that may be hazardous, such as lead-acid batteries.

(2) A QRP can be established by a base or station order and must include the following program requirements:

(a) Designate through the commanding general/commanding officer (CG/CO), the managing entity. Potential managing units include: environmental affairs, facilities, or a similar staff entity.

(b) Ensure fiscal accountability for all funds received and disbursed as per reference (n) and appendix L in reference (o).

(c) Record maintenance regarding the quantity and types of materials sold for recycling.

(d) Develop a method of prioritizing projects/ activities to be funded from net proceeds. This process is usually accomplished by establishing a committee consisting of a cross section of installation organizations. This committee recommends priorities for the disbursement of revenues to the CG/CO.

(e) Ensure that the CMC (LF) reviews all projects funded with the proceeds of recycling sales.

(f) Implement the requirements in this Manual for the sale of recyclable material.

(g) Notify the Defense Reutilization and Marketing Office (DRMO) that the installation has a QRP implemented by base or station orders as established by the Military Construction Codification Act. An installation may notify DRMO and accumulate proceeds through the sale of recyclable materials during the period that a base or station order is being prepared.

(3) If Marine Corps installations with QRPs sell recyclable materials using DRMO, a cost analysis should be performed by the installation to determine whether better value can be achieved for the QRP by performing direct sales.

(4) Operate a composting program or participate in a regional composting program, if it is practicable to do so.

c. Source Separation for Materials Recovery. Reference (e) provides guidelines applicable to the source separation of residential, commercial, and institutional SWs. The following delineates the minimum resource recovery actions from SW through source separation. Minimum actions are required for high-grade paper generated by office facilities with over 100 office workers, for newspapers at residential facilities in which more than 500 families reside, and for corrugated containers generated at commercial establishments generating 10 or more tons of waste per month. Marine Corps installations must consider the specific methods and systems under recommended procedures (reference (e)) for implementing a source separation program.

(1) High-Grade Paper. In accordance with reference (e), waste high-grade paper generated at Marine Corps installations with over 100 office workers must be separated at the source of generation, separately collected, and sold for the purpose of recycling. Exceptions may be made only if analysis by the managing installation or DRMO determines that a market for recovered products is not available, or that compliance is not economical (see paragraph 17104.5c(4)). In situations where a Marine Corps office facility is a tenant activity, the host activity (or party leasing the property) is responsible for establishing a source separation program. The Marine Corps office facility must encourage the establishment of such programs and cooperate by separating high-grade paper.

(2) Residential Materials Recovery. Section 201 of reference (e) requires recovery of newspaper in large residential areas; recommends recovery of newspaper in small residential areas; and recommends recovery of glass, can, and mixed paper. Over 95 percent of Marine Corps family housing has been privatized as part of the Marine Corps Public-Private Venture (PPV) program which means that residential SW recovery may no longer be conducted by the base. PPV partners that operate and maintain the privatized housing can either dispose of the municipal waste in a private landfill or, if agreed upon by the base, in an installation-owned and operated landfill. If the PPV does not use the base landfill, Marine Corps policies do not apply. If the PPV partner uses the installation landfill, the base should ensure that agreements require the PPV to follow waste disposal practices that comply with Marine Corps Policy with respect to SW management. Any change in Marine Corps or local policy that would potentially result in additional cost to the PPV partnership using a base landfill will need to be coordinated with the partner in advance. The requirements for used newspaper for Marine Corps-owned family housing and for privatized housing for which the PPV partners use the base landfill are as follows:

(a) Installations must separate used newspapers generated in Marine Corps residential areas in which more than 500 families reside at the source of generation and sell them for recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical (see paragraph 17104.5c(4)).

(b) Extensive news releases to residents for motivation and coordination should precede and accompany the program. Subsequent guidance should indicate the need for the program, the specific collection days, how to prepare bundles for collection, and the use of bulk containers outside multi-family dwellings. Consideration must be given to the specific methods and systems recommended in current requirements for the implementation of newspaper source separation programs.

(3) Corrugated Container Waste. Installations generating 10 or more tons of waste corrugated containers per month must separately collect and sell waste corrugated containers for the purpose of recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical (see paragraph 17104.5c(4)).

(4) If Marine Corps installations make the determination not to source separate high-grade paper, residential materials, or corrugated containers, DRMO or the installations must prepare an analysis used in making the determination and maintain the analysis on file, which shall be reviewed and approved by the Secretary of the Navy. The decision to not recycle is valid only when a market analyses conducted by DRMO or the managing activity indicate that the recovered materials cannot be sold or disposed of economically because of a lack of market demand or the Secretary of Navy concludes that recycling is technically infeasible or inconsistent with stated national defense priorities. The following points are to be covered in the analysis:

(a) A description of alternative actions considered with emphasis on those alternatives that involve source separation for materials recovery.

(b) A description of ongoing actions which will be continued and new actions taken or proposed.

(c) An analysis in support of the action chosen including technical data, market studies, and policy considerations used in arriving at such a determination.

(d) An analysis of the applicable portions of the life-cycle costs associated with the operation, maintenance, closure, and postclosure of Marine Corps-owned SW landfills and the applicable costs of disposal by contract.

d. Resource Recovery Facilities

(1) Marine Corps installations must not compete with a locally available commercial recycling industry that offers a total SW resource recovery system as directed by reference (p). Installations should make every effort to use an established commercial industry.

(2) Marine Corps installations should consider constructing resource recovery facilities only after a thorough study has been made of alternative methods for processing SW.

e. Returnable Beverage Containers. Marine Corps installations must comply with State laws regarding beverage containers.

f. Records Requirements

(1) Federal regulations require the Marine Corps to determine what actions will be or have been adopted regarding source separation requirements. In situations when a decision is made not to source separate, the decision must be based on a fully supported analysis. If a source separation program is adopted, the sale of recyclable materials obtained as a result of the source separation or resource recovery guidelines or the sale of used petroleum products, less the cost of sales and handling, may be administered through the Defense Logistics Agency (DLA) and DRMO under the provisions of reference (k) or sold by the QRP per DOD policy. This procedure does not apply to waste materials turned over to voluntary organizations or civilian communities for recycling, or to military exchanges and commissary stores where the activity owns or leases its own processing equipment.

(2) DRMO must deposit 100 percent of recyclable material sales proceeds, net of cost obtained as a result of the source separation or resource recovery guidelines or the sale of used petroleum products, to the account designated by a managing activity that operates the QRP. The designated account number must appear on the Disposal Turn-in Document in order for DRMO to return the proceeds. Procedures governing the sale of recyclable materials must be consistent with section 203 of reference (q). Although the screening for utilization, transfer, and donation as described in reference (k) is not required prior to offering recyclable materials for sale, such screening may occur at the discretion of the DLA director.

g. Procurement. References (f), (r), and (s) contain the product areas that require green procurement, formally known as affirmative procurement. These products include paper and paper products, vehicular products, construction products, transportation products, park and recreation products, landscaping products, nonpaper office products, and miscellaneous products (e.g., pallets containing recovered material). Marine Corps installations must promote procurement of these and other recovered materials using EPA's Comprehensive Procurement Guidelines and EPA's Guidance on Acquisition of Environmentally Preferable Products and Services.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

17105. TERMS AND DEFINITIONS

1. Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

2. Integrated Solid Waste Management Hierarchy (ISWMH). National policy established by the PPA that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner." When assessing solutions to compliance requirements, installations and commands will employ ISWMH, emphasizing:

- a. Source reduction.
- b. Reuse.
- c. Donation.
- d. Recycling.
- e. Composting/mulching.
- f. Incineration for volume reduction with energy recovery.

- g. Other forms of volume reduction.
- h. Landfilling.

3. Excluded Materials. Excluded materials may not be sold through a QRP, and the proceeds from their sale will not be returned to a QRP. Excluded items include, but are not limited to:

- a. Government-furnished material.
- b. Precious metal-bearing scrap.
- c. HW (including household HW).
- d. Ozone depleting substances.
- e. Electrical components.
- f. Unopened containers of solvents, paints, or oil.
- g. Fuels.
- h. Material that can be sold (as is) as a usable item.
- i. Repairable items that may be used again for their original purposes or functions (e.g., used vehicles, vehicle parts, or machine parts).
- j. Ships, aircraft, weapons, and other material required to be demilitarized or destroyed, as well as scrap resulting from demilitarization.
- k. All MLIs or SLIs as defined in reference (k), except firing range-expended brass and mixed metals gleaned from firing range cleanup. MLI always takes precedence over SLI.
- l. Types of surplus personal property whose sales proceeds must be deposited to accounts other than a QRP per reference (i), Appendix B:
 - (1) Scrap generated from Naval Working Capital Fund (NWCF) activities.
 - (2) Usable personal property purchased by NWCF activities.

- (3) Property purchased with commissary surcharge funds.
- (4) Automatic data processing equipment owned by the General Services Administration.
- (5) Property purchased for the Military Assistance Program or purchased with Foreign Military Sales administrative funds.
- (6) Coast Guard property.
- (7) Property owned by nonappropriated fund activities.
- (8) Lost, abandoned, or unclaimed privately owned personal property.
- (9) Property owned by a country or international organization.
- (10) Bones, fats, and meat trimmings generated by a commissary.

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

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

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

5. Managing Activity. An administrative element assigned to manage the recycling program including personnel, funds, and equipment.

6. MSWLFs. A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under section 2 of reference (g). An MSWLF also may receive other types of RCRA subtitle D wastes, such as commercial SW, nonhazardous sludge, small quantity generator waste, and industrial SW. Such a landfill may be publicly or privately owned. An MSWLF may be a new MSWLF, an existing MSWLF, or a lateral expansion.

7. MLIs. MLIs are military items that are controlled by the Military Department and require special handling during disposal in order to prevent any unauthorized use by purchasers. These items are assigned demilitarization codes when they enter into the DOD inventory and the items range from major weapon systems (tanks) to key components of related weapon systems (spring mechanisms in fire arms).

8. Other QRP Materials. Materials that fit neither the definition of recyclable materials nor the definition of excluded materials are classified as other QRP materials.

9. QRP. An organized operation that diverts or recovers scrap or waste streams, and that identifies, segregates, and maintains the integrity of the recyclable materials in order to maintain or enhance the marketability of the materials.

10. Recovered Material. Waste materials and by-products that have been recovered or diverted from solid waste but such term does not include those materials and by-products generated from and commonly used within an original manufacturing process (reference (t)).

11. Recyclable Materials. Recyclable materials can include, but are not limited to: high quality paper and paper products, mixed paper, newspaper, cardboard, plastic, metal cans, glass, used oil (except when the oil is an HW), batteries, and tires. In addition, scrap (including ferrous and non-ferrous scrap), firing range-expanded brass, and mixed metals gleaned from firing range cleanup that do not require demilitarization and

that are MLIs or SLIs may be included in a QRP. Expended brass must be crushed, shredded, or otherwise destroyed prior to public sale.

12. Recycling. The series of activities, including collection, separation, and processing, by which products or materials are recovered from the SW stream for use in the form of raw materials in the manufacturing of new products other than fuel for producing heat or power by combustion (section 207 of reference (u)).

13. Resource Recovery. The process of recovering material or energy from SW.

14. Resource Recovery Facility. Any physical plant that processes nonhazardous, commercial, or institutional SW biologically, chemically, or physically, and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass, for resale or reuse.

15. SW. Any garbage, refuse, trash, rubbish, sludge, waste, or scrap from commercial, agricultural, industrial, or residential activities. This classification does not include any of those materials that are identified as HW.

16. Source Reduction. Source reduction, as defined in the PPA, is any practice that:

a. 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.

b. Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modification, process or procedure modification, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. Source reduction does not entail any form of waste management (e.g., recycling, treatment, and disposal).

17. Source Separation. The separation of recyclable materials at their point of generation by the generator.

18. SLI. These items, under the jurisdiction of the Export Administration Regulations, U.S. Department of Commerce, have

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been assigned a code letter "A" or "B" following the Export Control Classification Number on the Commerce Control List, reference (v), and include both military and commercial items. They are controlled due to national security, foreign policy controls, nuclear proliferation, missile technology, chemical and biological warfare, and short supply.

19. Waste Office Paper. Materials such as letterhead, copy paper, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts and cards. Classified wastes are explicitly excluded, except when applicable security directives allow their inclusion.

CHAPTER 17

SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY

SECTION 2: MARINE CORPS POLICY

17200. MARINE CORPS SW MANAGEMENT PROGRAMS

1. General

a. For disposal purposes, all SW generated at Marine Corps installations is considered property of the Government except in those situations when Marine Corps exchanges and commissary stores salvage and dispose of their recoverable resources. Marine Corps installations must strive to reduce SW generation. SW collection, disposal, and resource recovery programs at Marine Corps installations must be implemented in the most cost-effective and environmentally acceptable manner. Changing mission requirements and market conditions necessitate the periodic review of these operations as commercial facilities become available, or as the installation's industrial-type activities change. Marine Corps installations must comply with the guidance of reference (w) for SW collection, storage, and disposal; and with reference (x) for the establishment and/or disestablishment of resource recovery/source separation programs. Contractors on Marine Corps installations must dispose of their SW per their contract requirements.

b. The Marine Corps will design SW disposal programs as total systems that consider the relative economic advantages of the latest technology as well as the potential for resource recovery. The Marine Corps will also explore shredding, compacting, energy recovery, and similar processes; and develop installation Integrated SW Management Plans according to the following hierarchy:

- (1) Source reduction.
- (2) Reuse.
- (3) Donation.
- (4) Recycling.
- (5) Composting/Mulching.

(6) Incineration for volume reduction with energy recovery.

(7) Other forms of volume reduction.

(8) Landfilling.

c. All Marine Corps installations and commands must comply with DOD policy for recycling programs and procedures in accordance with reference (y).

2. Source Reduction. Marine Corps source reduction programs must incorporate the following, where feasible:

a. Composting to facilitate yard waste reduction.

b. Reducing excessive packaging, especially where packaging is used for attractive merchandising or convenience functions.

c. Procurement of materials that generate less waste.

d. Reducing waste generation in an office by:

(1) Reusing materials (e.g., file folders, paper clips, and interoffice routing envelopes).

(2) Dual-sided copying.

(3) Duplex printing.

(4) Using electronic mail instead of paper memos.

(5) Reducing mail and distribution lists.

e. Using General Supply Administration and DOD EMALL supply system for green products. This should be done in accordance with reference (z).

3. SW Resource Recovery

a. All Marine Corps installations, where cost-effective, must implement source separation for recycling and develop a single authorized QRP which has controls to ensure that excluded materials, including those listed in section 2(b)(3) of reference (i), and are not sold through the program. All Marine Corps commands/units and tenants must participate in the host activity's QRP. Materials for which proceeds can be obtained

must be sold through the host's QRP. Industrial funded activities must maintain separate accounting for recycled materials purchased with industrial funds.

b. All Marine Corps installations must establish an installation recycling program for the following purposes:

(1) To protect the environment and prevent the depletion of valuable natural resources.

(2) To comply with Federal, State, and local environmental laws and regulations.

(3) To reduce the volume of waste disposed in landfills.

(4) To reuse readily available resources.

(5) To avoid excessive costs for the disposal of SW by other means.

(6) To obtain proceeds from the sale of recyclable material.

c. Marine Corps installations, at a minimum, must segregate the following materials for recycling:

(1) Scrap metal.

(2) High-grade paper.

(3) Newspaper in large residential areas (more than 500 families).

(4) Corrugated containers from commercial establishments generating 10 or more tons of waste per month.

(5) Aluminum cans.

d. Consider exceptions to recycling these materials only in the following situations:

(1) When State or local regulations do not require recycling.

(2) When market analyses conducted by DRMO or the managing activity indicate that the recovered materials cannot be sold or disposed of economically because of a lack of market demand (see paragraph 17104.5c(4)).

(3) When the net costs exceed the net income plus avoided costs for disposal by another means.

e. Make no exceptions where environmental laws and regulations require specific materials to be recycled or removed from the waste stream.

f. Develop appropriate management controls for recyclable materials that may be hazardous, such as lead-acid batteries.

g. Prior to any source separation effort, request from DRMO an estimate of the market for recovered materials, including estimated returns from sales and the timing of market demand.

h. Screen QRP materials for reutilization, transfer, and donation prior to selling directly.

i. Consider the following additional materials in the development of recyclable material markets:

(1) Glass.

(2) Plastic.

(3) Newspaper from small housing areas.

(4) Scrap wood.

(5) Corrugated containers from commercial establishments generating less than 10 tons of waste per month.

(6) Other waste as market demand arises (e.g., carpet).

j. Ensure that United States trade security control policies are followed, prior to selling firing range-expanded brass or mixed metals gleaned from firing range cleanup that do not require demilitarization and that are MLIs or SLIs.

k. Update economic analysis and market determinations as market conditions change significantly, and maintain such records on file at the managing installation.

1. To maximize recycling, consider handling recyclable materials that are not profitable for a QRP through SW contracts where the cost in the contract to have the materials recycled is less than the cost in the contract to dispose of the material. Ensure that the contract includes record keeping of quantities and types of material recycled in this manner.

4. Marine Corps Records

a. To determine SW management requirements, each installation must retain records of disposed SW and materials recycled for the current year and the two preceding years, per reference (aa), Standard Subject Identification Code (SSIC) 11350.1.

(1) Each installation must determine what actions will be, or have been, taken to adopt source separation requirements. When an installation decides not to source separate, such a decision must be based on a fully supported analysis (see paragraph 17104.5c(4)).

(2) Each installation shall keep records for SW, including the actual weight, material and product type, the disposition (e.g., landfilled, incinerated), cost, and revenues. If the actual weight is not available, the volume can be estimated and converted to weight using accepted densities of various wastes.

(3) Each installation shall keep records for recycled wastes, including the actual weight, types (e.g., glass, metal), proceeds from the sale of recyclable materials, and avoided costs for disposal.

(4) Installations shall maintain records for the quantities of waste disposed and recycled by construction and demolition (C&D) contractors. C&D materials disposed of in Municipal Solid Waste landfills or C&D landfills are not considered recycled; however, materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's diversion rate. Materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's diversion rate. . Installations shall maintain these records per reference (aa) SSIC 4200.1b(1) and 4200.1b(2) as appropriate.

b. After establishing an organized QRP, or if recycling is concurrent with such program development, the installation must

determine whether to sell material directly or through their DRMO. If material is to be sold directly, the QRP procedures must address the identification of recyclable materials, excluded materials, and other QRP materials. The installation must coordinate with DRMO, when selling through DRMO, to determine whether the specific material to be sold actually is recyclable material. Refer disputes through the chain of command. Proceeds from sales, regardless of the type of sales transaction, are returned to the installation as described below:

(1) All Marine Corps installations, including those that operate under NWCF, may participate in the program.

(2) Deposit proceeds from the sale of recyclable materials at an installation with a QRP to account number **F3875.27 "Budget Clearing Account (suspense)" as instructed by reference (n) (and appendix L in reference (o)). Accumulated funds in account number **F3875.27 are not affected by fiscal year end, so that proceeds acquired during one fiscal year may be carried forward and merged with proceeds of subsequent fiscal years. The proceeds are segregated within the account through associations with the bureau control number (base unit identification code) to allow accounting as to the amounts collected and their disposition.

(3) Withdraw proceeds first from account number **F3875.27 to cover costs of operations, maintenance, and overhead for the processing and handling the recyclable materials (including the cost of any equipment purchases for recycling purposes). Military personnel must not be reimbursed from the proceeds of this account. If funds from account **F3875.27 are not sufficient to cover the costs of processing and handling these recyclable materials within a fiscal year, funds normally available for operations and maintenance will be used to cover the remainder.

(4) If a balance remains, not more than 50 percent of that balance may be used at the installation for projects for environmental compliance, energy conservation, and occupational safety and health activities. Construction projects are limited to 50 percent of the minor construction authority and must be paid for with proceeds from the sale of recyclable materials. Environmental compliance, energy conservation, and occupational safety and health projects must not be included in the normal minor construction program if sufficient recycling proceeds are available at the installation.

(5) Any remaining balance may be transferred to one or more of the local nonappropriated fund instrumentalities supporting MCCS activities at the installation as defined in existing Department of the Navy regulations.

(6) If the balance of an installation's proceeds remaining in account number **F3875.27 exceeds \$2 million at the end of a fiscal year, deposit the amount in excess of \$2 million into the U.S. Treasury as miscellaneous receipts.

5. The Environmental Portal (EPR Portal) Solid Waste Annual Data Call replaced the Solid Waste Pollution Prevention Annual Data Summary (SW P2ADS). All installations that generate more than one ton per day of SW shall submit their SW data per CMC guidance provided annually in September. The SW data for the previous fiscal year must be submitted via the EPR Portal each year in November to the Naval Facilities Engineering Service Center (NFESC) and to CMC (LFL-6) and CMC (LFF). The data call tracks the progress in meeting DOD Measures of Merit SW goals.

6. Technical Assistance. Naval Facilities (NAVFAC) Atlantic and NAVFAC Pacific (which are Echelon III level) and their subordinate Facilities Engineering commands at the Echelon IV level will provide technical assistance to Marine Corps installations upon request.

17201. MARINE CORPS INSTALLATIONS IN FOREIGN COUNTRIES. Outside the United States, the disposition of recyclable and other QRP materials derived from goods that have been imported duty free, is accomplished in accordance with the status of forces, surplus or excess property agreements, or other international agreements with host nations.

CHAPTER 17

SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY

SECTION 3: RESPONSIBILITIES

17300. CMC (LF)

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to SW management and resource recovery and uniformly apply Marine Corps policy as set forth in this Manual.
2. Ensure compliance for recycling programs and procedures in accordance with the specifications provided in reference (y).
3. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies, as required.
4. Conduct special environmental compliance and protection studies with regard to SW management to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to SW regulations.
6. Track Marine Corps progress toward meeting established SW minimization goals, using the EPR Portal data.

17301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit to CMC (LFL) and CMC (LFF) project documentation and funding requests for SW management and resource recovery facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with SW management and resource recovery requirements. Pay appropriate Federal, State, and local fees. Ensure that the EMH is employed, pollution prevention alternatives are evaluated, and life-cycle cost impacts are assessed, in evaluating and selecting projects that address compliance requirements.

2. Ensure that all required Federal, State, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all SW management and resource recovery projects.
3. Ensure that a base or station order is written implementing local SW management and resource recovery policies.
4. Establish source separation programs and resource recovery facilities as feasible, and implement their operation through base or station orders.
5. Determine whether QRP or recycling sales programs are applicable.
6. Obtain applicable State or local permits and licenses for the site location and operation of onsite landfills.
7. Ensure that SW is disposed of according to applicable Federal, State, and local requirements.
8. Develop a system (e.g., listing, dumpster markings) to notify all base and unit personnel of the types of SW that may be placed in SW collection containers, and ensure that only those acceptable wastes are placed in the containers.
9. Ensure that off-base landfills receiving Marine Corps SW are licensed and are operating under applicable permits and regulations.
10. Ensure that Marine Corps installations located in the United States and its territories and possessions comply with applicable Department of Agriculture inspection and disposal requirements if they receive garbage from vehicles and/or aircraft arriving from outside the United States. These regulations are designed to prevent the spread of plant pests and animal diseases.
11. Develop SW management plans, including source reduction and recycling programs and resource recovery facilities as required.
12. Ensure that recyclable material direct sales performed by the QRP are performed in accordance with applicable laws and guidance.
13. Submit SW data annually to NFESC and the CMC (LF) via the EPR Portal.

14. Ensure the base is taking necessary measure to meet the most current DOD SW reduction goals.

17302. CG/CO OF MARINE CORPS COMMAND/UNIT AND TENANT TRAINING

1. Cooperate with and encourage the organization, lessor, or host activity to implement SW management programs as outlined in this chapter.

REFERENCES

- (a) Public Law 89-272, "Solid Waste Disposal Act of 1965," October 20, 1965
- (b) 42 U.S.C. 6901 et seq.
- (c) 40 CFR 240
- (d) 40 CFR 243
- (e) 40 CFR 246
- (f) 40 CFR 247
- (g) 40 CFR 257
- (h) 40 CFR 258
- (i) 32 CFR 172
- (j) 40 CFR 262
- (k) DOD Directive 4160.21-M, "Defense Materiel Disposition Manual," August 18, 1997
- (l) DOD Directive 4160.21-M-1, "Defense Demilitarization Manual," October 21, 1991; Incorporating Change 1 - February 14, 1995
- (m) 10 U.S.C. 2577
- (n) MCO 7301.116
- (o) MCO 7300.21
- (p) SECNAVINST 4860.44, "Commercial and Industrial Type Activities"
- (q) 10 U.S.C. 484 et seq.
- (r) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (s) Executive Order 13423, "Implementing Instructions," March 27, 2007

(t) 42 U.S.C. 6903

(u) Executive Order 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," September 14, 1998

(v) 15 CFR 774

(w) MCO 4860.3

(x) NAVFAC P-442, "Economic Analysis Handbook"

(y) DOD Personal Property Disposal and Recycling: Guidance for Personal Property and Disposal and Recycling Operations, August 18, 1993

(z) Department of the Navy Green Procurement Program Implementation Guide, February 2009:

(aa) SECNAV M-5210.1

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CHAPTER 18

UNDERGROUND STORAGE TANKS

SECTION 1: INTRODUCTION

18100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for UST's containing petroleum products and hazardous substances (HS).

18101. APPLICABILITY. See paragraph 1101.

18102. BACKGROUND. The 1986 amendments to the Resource Conservation and Recovery Act (RCRA) included provisions to prevent releases from UST's, mandating a comprehensive regulatory program. An UST is defined as any combination of tank and underground pipes in which 10 percent or more of the volume of the tank is beneath the ground surface (including associated underground piping).

18103. FEDERAL STATUTES

1. Hazardous and Solid Waste Amendments (HSWA) of 1984 (Public Law 98-616)

a. The HSWA extended and strengthened the provisions of the Solid Waste Disposal Act (SWDA) as amended by RCRA. Subtitle C of RCRA regulates UST's that contain hazardous waste (HW). Subtitle I of the HSWA provides for the development and implementation of a comprehensive regulatory program for UST's containing HS's or petroleum products, and releases of those substances into the environment. HS's regulated under subtitle I include any substance listed in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

b. The HSWA requires that Federal installations comply with all Federal and applicable state and local requirements regarding UST's, including payment of registration fees and permit fees when such fees are not taxes.

c. Federal regulations outline procedures by which the Environmental Protection Agency (EPA) may approve state programs to replace the Federal UST requirements, if those state programs have standards that are no less stringent than the Federal requirements and provide adequate enforcement of those standards. States with an approved UST program will have primary enforcement responsibility in their states. Currently, most states have UST regulatory programs in place. Until the EPA approves a state program, installations must comply with all applicable provisions of both the Federal and state UST programs. After the EPA approves a state's program, installations must comply with applicable state requirements.

d. Section 9002 of RCRA bars installing unprotected tanks after May 7, 1985. All new UST's must meet corrosion protection requirements. In addition, the EPA or designated state agency must be notified of the presence of existing regulated UST's. Provisions in the new UST program required the EPA to develop regulations for new tanks including design, construction, installation, release detection, and compatibility standards. This rule was promulgated September 23, 1988, and became effective December 22, 1988 (40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks).

2. The Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499). Section 205 of SARA amended the SWDA by defining the term "petroleum" to mean petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (600 F and 14.7 pounds per square inch absolute (psia)). Also, section 205 of SARA added provisions related to state UST inventories and financial responsibility for UST owners (i.e., the EPA/state authority for corrective actions, the EPA/state cost recovery for remedial actions, and state/political subdivision rights to adopt and enforce more stringent requirements than Federal requirements on UST's).

18104. REQUIREMENTS

1. General Tank Standards and Operating Requirements. UST regulations applicable to Federal installations are found in 40 CFR 280, subparts A-G. A brief description of the requirements follows:

a. In 40 CFR 280, subpart A gives the definitions for the UST program and applicability of the regulations to each system.

b. For a tabular summary of the basic requirements and when they must be operative, see appendix G-1. Appendix G-2 provides information on responding to releases from UST's.

c. Federal UST regulations (40 CFR 280) apply to both existing (installed before December 1988) and new (installed after December 1988) tanks and the associated piping network. Tank standards stipulated under these regulations, including corrosion protection and spill/overflow prevention, are applicable immediately for new tanks or by December 22, 1998, via upgrade or retrofit for existing tanks. Tanks unable to meet Federal UST standards must be closed in compliance with 40 CFR 280, subpart G.

d. Wastewater treatment tank systems, UST's containing radioactive material (Atomic Energy Act of 1954), UST systems that are part of an emergency generator system at nuclear power generation facilities, airport hydrant fuel distribution systems, and UST systems with field-constructed tanks are deferred from the requirements of 40 CFR 280 except for subpart F governing release response and corrective action requirements.

e. Monitor transfer operations to ensure that spilling or overflowing does not occur.

f. Maintain and inspect corrosion protection measures, including cathodic protection, to ensure proper operation. A cathodic protection tester should perform cathodic protection maintenance activities.

g. UST systems must be made of, or lined with, materials compatible with substances stored in the UST system.

h. Conduct repairs to UST systems per a code of practice developed by a nationally recognized association or an independent testing laboratory; repairs may be made by the manufacturers' authorized representatives. Test repaired tanks operability for tightness and corrosion protection, and maintain records of all repairs for the remaining operating life of the UST system. Internal inspections of repaired tanks, using appropriate confined space entry procedures, may be permitted in lieu of tightness testing.

i. Maintain written records demonstrating compliance with operations and maintenance requirements.

j. The owner/operator must report all existing UST's and installation certifications for new UST systems to the proper agency. Owners/operators must also report releases, spills, and corrective actions planned in cleanup procedures.

2. Release Detection

a. The 40 CFR 280, subpart D identifies release detection requirements.

b. In addition to compliance with tank standards identified under 40 CFR 280.20 and 40 CFR 280.21, new, existing upgraded, and existing nonupgraded tanks and pipes must provide methods for release detection. Such requirements are to be phased in for existing tanks and piping systems, while new tanks and associated piping networks must provide methods for release detection upon installation. The schedule for phasing in release detection requirements regarding existing systems is based on the age of the tank and piping. The phase-in process began December 22, 1989, for tanks 25 years old or older (see appendix G-1). As of December 22, 1993, all piping systems and existing tanks must have complied with release detection requirements.

c. Specific types of release detection methods to be employed are defined in 40 CFR 280, subpart D (see appendix G-3). The owner/operator must choose from the options outlined in these regulations: release detection will consist of one of the monthly monitoring methods as defined under 40 CFR 280.43(d)-(h) or tank tightness testing in combination with monthly inventory control. Tank tightness testing is required annually for existing tanks not yet meeting upgrade requirements and can only be used to meet release detection requirements until December 22, 1998. Tank tightness testing at intervals of 5 years is allowed for new tanks or tanks upgraded with corrosion protection until December 22, 1998, or 10 years after installation/upgrade, whichever date is later. The employment of release detection methods required under 40 CFR 280, subpart D, are necessary for the life of the tank and piping system.

d. While the use of a release detection option that involves the use of tank tightness testing may appear to be the less difficult way to meet initial regulatory requirements, it may not be the most prudent. This is especially true if there are plans to upgrade tanks to meet long-term storage needs. It is wise in

such cases to consider the use of long-term monitoring methods, as opposed to tank tightness testing that is considered to be an interim release detection option only.

e. Maintain records documenting compliance with release detection requirements for 5 years, or a length of time to be determined by the applicable regulatory agency.

3. Release Reporting, Investigation, and Confirmation

a. 40 CFR 280, subpart E, outlines release reporting, investigation, and confirmation requirements.

b. A suspected release from a UST system must be reported to the state implementing agency within 24 hours. The following discoveries constitute a suspected release:

- (1) Sudden loss of product.
- (2) Erratic behavior of dispensing equipment.
- (3) Unexplained presence of water in a tank.

(4) Discovery of free product or vapor at the site or surrounding area, or when release detection methods indicate a release occurrence. Exceptions to the reporting requirement include: when tank system dispensing/pumping equipment is found to be defective but not leaking and can be replaced or repaired immediately; or in the case of inventory control, if the second month of data does not confirm the initial results; or when the monitoring device is found to be defective and is immediately repaired or replaced and recalibrated, and additional monitoring does not confirm the initial results. Follow the guidance in chapter 7 for reporting HS releases.

c. The regulatory agency may require off-site impact determinations under certain circumstances, such as those described in 40 CFR 280.51.

d. Suspected releases of regulated substances must be investigated and confirmed within 7 days by conducting a UST system test or another confirmation procedure established by the state. Further investigation is not required if a system test indicates a leak does not exist and no environmental contamination is present. If system testing indicates that no leak exists but environmental contamination is the cause for

suspecting a release, a site check, per 40 CFR 280.52(b), is required.

e. UST system spills or overfills must be immediately cleaned up and reported to the state within 24 hours for spills or overfills of:

(1) Over 25 gallons or if a petroleum sheen is present on nearby surface water for tanks containing petroleum products, and

(2) HS's exceeding reportable quantities under CERCLA.

f. If cleanup cannot be accomplished within 24 hours, immediately notify the regulatory agency.

g. Spills and overfills resulting in the release of petroleum that are less than 25 gallons must be contained immediately and cleaned up within 24 hours. If cleanup cannot be accomplished within 24 hours, immediately notify the regulatory agency.

4. Release Response and Corrective Action

a. 40 CFR 280, subpart F outlines release response and corrective action requirements.

b. Upon discovery of a confirmed or suspected release, owners and operators must notify the EPA and appropriate state agencies within 24 hours. Upon confirmation of a release, owner/operators must stop further release of the regulated substance from the UST system and identify and mitigate fire, explosion, and vapor hazards. Confirm the suspected release within 7 days of the initial discovery (40 CFR 280.52).

c. The following initial abatement measures are required for a confirmed release, as identified in 40 CFR 280.62:

(1) Remove as much of the regulated substance as necessary from the UST system to prevent further release;

(2) Remedy hazards posed by UST releases. Hazards include contaminated soils below ground level and migration of the regulated substance into surrounding soils and groundwater;

(3) Continue to monitor and mitigate any fire and safety hazards;

(4) Measure prudently for the presence and extent of releases around the UST site;

(5) Alleviate any hazards posed by contaminated soils and materials that were excavated or exposed as a result of any corrective or investigative activities. The owner/operator must comply with applicable Federal, state, and local regulations regarding disposal or treatment of these substances; and

(6) Report initial abatement steps within 20 days.

d. The EPA or state agency requires the submission of an initial site characterization report which includes at a minimum the determination of: the nature and extent of the release; the estimated quantity of the release; a free product assessment; and information on surrounding population, geology, water supply, wells, utilities, climate, and land use.

e. The site characterization report must be submitted to the regulatory agency within 45 days of release confirmation or another reasonable time as determined by the regulatory agency.

f. If free product is discovered, the owner/operator must begin abatement of it as soon as possible and to the maximum extent practicable. All free product abatement and disposal practices must comply with those listed in 40 CFR 280.64.

g. Investigate soil and groundwater contamination to determine the extent of the contamination plume. Submit the information obtained during the investigation to the proper regulatory agency. Submission of a corrective action plan to the appropriate regulatory agency may be required, with additional information on the condition and extent of contaminated soil, groundwater remediation actions, and demonstration that adequate protection to human health, safety, and the environment is being provided. The regulatory agency will review this corrective action plan to determine if it will adequately protect human health, safety, and the environment. The regulatory agency may approve the plan or make any modifications prior to implementation.

h. The regulatory agency must notify members of the public for each confirmed release that requires a corrective action plan and make the corrective action plan available to the public, upon request. Additionally, the public must be notified if the selected corrective action fails to meet the established cleanup goals.

5. Out-of-Service UST Systems and Closure

a. The regulations applicable to this section are located in 40 CFR 280, subpart G.

b. Temporary closure of a UST system requires continued operation and maintenance of corrosion protection and release detection measures. Continue to maintain corrosion protection even when the UST system is empty.

c. Temporary closure of 3 months or more requires that vent lines be left open and all other lines, pumps, manways, and ancillary equipment be capped and secured.

d. Temporary closure of more than 12 months requires permanent closure of the UST system if it does not meet either new UST performance standards or corrosion protection upgrading standards. The regulatory agency may grant an extension of the 12-month, temporary closure period.

e. Owners/operators must notify the implementing agency 30 days prior to the permanent closure or change-in-service of a UST. Continued use of a UST to store a nonregulated substance is considered a "change-in-service." UST's must be emptied and properly cleaned prior to permanent closure or change-in-service, and closed tanks must be removed or filled with an inert solid and all tank openings must be capped. Owners/operators must perform a site assessment on UST's which undergo permanent closure or change-in-service. The site assessment must measure for the presence of contaminants in the places where they most likely will be present and detected. UST's which use proper groundwater or external vapor monitoring systems, which are operating in accordance with the applicable requirements, do not need to perform a site assessment if no release is detected at closure/change-in-service.

f. Site assessment of an excavation zone and compliance with closure requirements may also apply to UST systems permanently closed before December 22, 1988, if the regulatory agency determines that the UST may pose a current or potential threat to human health, safety, or the environment.

g. Maintain records documenting compliance with closure requirements for a period of 3 years after closure.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for

achieving compliance with applicable Executive Orders, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

18105. TERMS AND DEFINITIONS

1. Aboveground Release. Any release of a regulated substance from a UST to the surface of the land or surface water. This includes, but is not limited to, release from the aboveground portion of a UST system and aboveground releases associated with overflow and transfer operations as the regulated substance moves to or from a UST system.
2. Ancillary Equipment. Any devices including, but not limited to, piping, fittings, flanges, valves, and pumps used to distribute, measure, or control the flow of regulated substances to and from a UST.
3. Cathodic Protection. A technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.
4. Cathodic Protection Tester. A person who can demonstrate understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, the person must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.
5. Connected Piping. All underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.
6. Corrosion Expert. A person who, by reason of thorough knowledge of physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be accredited or certified as

being qualified by the National Association of Corrosion Engineers, or must be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

7. Excavation Zone. The volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

8. Existing Tank System. A tank system used to contain an accumulation of regulated substances, or for which the installation has commenced on or before December 22, 1988. The installation is considered to have commenced if:

a. The owner or operator has obtained all Federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and

b. Either a continuous on-site physical construction or installation program has begun; or

c. The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction at the site or installation of the tank system to be completed within a reasonable time.

9. Flow-through Process Tank. A tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of material prior to their introduction into the production process or for the storage of finished products or byproducts from the production process.

10. Free Product. A regulated substance that is present as a nonaqueous phase liquid (i.e., liquid not dissolved in water).

11. HS UST System. Any UST system that contains an HS defined in section 101(14) of CERCLA (but not including any substance regulated as an HW under subtitle C of RCRA) or any mixture of such substances and petroleum in a UST system that does not constitute a petroleum UST system.

12. Heating Oil. Petroleum that is Nos. 1, 2, 4, and 5 (light and heavy), and 6 (technical grades), other residual fuel oils (including Navy Special Fuel Oil and Bunker C), and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces. Oil, as defined in 40 CFR 122.2, is oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, or oil refuse.
13. Hydraulic Lift Tank. A tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.
14. Liquid Trap. Sumps, well cellars, and other traps used in association with oil and gas production, and gathering and extraction operations (including gas production plants) for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.
15. New Tank System. A tank system that will be used to contain an accumulation of regulated substances and which installation commenced after 22 December 1988.
16. Operator. Any person in control of or having responsibility for the daily operation of a UST system.
17. Overfill Release. A release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.
18. Owner. In the case of an UST system in use on 8 November 1984 or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of a regulated substance; and, in the case of any UST system in use before 8 November 1984, but no longer in use on that date, any person who owned the UST immediately before the discontinuation of its use.
19. Petroleum. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (600 F and 14.7 psia).
20. Petroleum UST System. A UST system that contains petroleum or a mixture of petroleum with minimum quantities of other regulated substances. Such systems include those containing

motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

21. Regulated Substance

a. Any substance defined in section 101(14) of CERCLA, but not including any substance regulated as an HW under subtitle C of RCRA.

b. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (600 F and 14.7 psia).

c. The term "regulated substance" includes, but is not limited to, petroleum and petroleum-based substances consisting of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

22. Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. The term excludes:

a. Any release that results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons;

b. Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine;

c. Release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act. If such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of this Act, or for the purposes of section 104 of CERCLA, or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or section 302(a) of the Uranium Mill Tailings Radiation Control Act; and

d. The normal application of fertilizer.

23. Release Detection. Determining whether a release of a regulated substance has occurred from a UST system into the environment or into the interstitial space between the UST system and its secondary barrier or containment.
24. Septic Tank. A watertight, covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such a receptacle is distributed through the soil, and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.
25. Stormwater or Wastewater Collection System. Piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water runoff resulting from precipitation, or domestic, commercial, or industrial wastewater. The collection of stormwater and wastewater does not include treatment except where incidental to conveyance.
26. UST's. All tank systems containing regulated substances for which the tank volume, including piping, is 10 percent or more beneath the surface of the ground. The following tank systems are excluded from Federal UST regulations:
- a. Any UST system holding an HW listed or identified under subtitle C of RCRA, or a mixture of such an HW and other regulated substances.
 - b. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under sections 402 or 307(b) of the Clean Water Act.
 - c. Equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift tanks and electrical equipment tanks.
 - d. Any UST system that has a capacity of 110 gallons or less.
 - e. Any UST system that contains a minimum concentration of regulated substances.
 - f. Any UST emergency spill or overflow containment system that is expeditiously emptied after use.
 - g. Any residential tank containing motor fuel for noncommercial use with capacity of 1,100 gallons or less.

- h. Any tank storing heating oil for consumptive use on the premises.
 - i. Any tank system on or above the floor of underground areas, such as basements or tunnels.
 - j. Any septic tank, stormwater, or wastewater collection system.
 - k. Any flow-through process tank.
27. Upgrade. The addition or retrofit of a system with cathodic protection, lining, or spill and overfill controls to improve the ability of an UST system to prevent the release of product.
28. UST System or Tank System. The UST and any connected underground piping, underground ancillary equipment, and containment system, if any.
29. Wastewater Treatment Tank. A tank that is designed to receive and treat influent wastewater through physical, chemical, or biological methods.

CHAPTER 18

UNDERGROUND STORAGE TANKS

SECTION 2: MARINE CORPS POLICY

18200. COMPLIANCE WITH UNDERGROUND STORAGE TANK (UST) REQUIREMENTS. The Marine Corps UST program policy is to comply with all Federal and applicable state and local regulations pertaining to the operation and management of UST's. Additionally, Marine Corps installations must develop long-term management plans to establish procedures for achieving and maintaining compliance, as well as to prioritize corrective actions against environmental risk.

18201. COMPLIANCE WITH UNDERGROUND STORAGE TANK (UST) INVENTORY. One of the most important initial steps in meeting UST regulatory requirements is to develop adequate baseline data regarding an installation's tank population. Marine Corps installations must maintain a complete and accurate UST inventory. Complete inventories must have all applicable data elements listed for each system record. Update data elements to reflect significant changes in the UST condition, especially at critical points during the useful life of each UST (e.g., following installation, when upgraded or repaired, if a release occurs, at closure, etc.). Such information is necessary not only to develop and maintain a rational UST compliance strategy, but also to apply accurate, appropriate funding sources to required UST actions.

18202. COMPLIANCE WITH UNDERGROUND STORAGE TANK (UST) MANAGEMENT

1. Compliance with UST regulations is necessary to reduce environmental liability but results in far-reaching management and cost implications to the Marine Corps. A long-term approach to reducing UST-related liability and the associated costs requires the development of installation UST management plans. These require Marine Corps installations to look beyond the specific regulatory compliance tasks and consider a comprehensive approach to effectively reduce environmental risk stemming from storage needs.

2. The primary goal of the UST management plan is to design a strategy to achieve and maintain compliance with regulatory

requirements. An important secondary objective of the management plan is to allow installations to utilize UST systems as efficiently as possible, therefore reducing environmental risk while minimizing costs associated with compliance. Marine Corps UST management plans should include the following:

- a. A general UST inventory description and goal statement.
- b. A consolidation and reduction plan of existing UST systems to meet storage needs while minimizing environmental risk.
- c. An evaluation of alternate storage vessels such as aboveground tanks with proper spill prevention/containment or vaulted underground tanks to replace out-of-date UST's. Management plans should include economic considerations during the discussion of storage alternatives.
- d. A plan-of-action and milestones to replace/upgrade active UST's and to properly close abandoned UST's. Management plans should include a discussion of specific projects necessary to meet management goals.
- e. Procedures to ensure continued compliance into the future. Plans should include assignment of responsibilities to parties who will carry out compliance tasks such as inventory control, leak detection maintenance, corrosion protection maintenance, release reporting, and follow-up.
- f. A description of recordkeeping practices to be maintained on all aspects of UST management. Records must document the useful life of the UST and include installation, registration, maintenance, upgrades, closure, operator training, and release reporting from discovery through cleanup and UST closure.

3. In reference to the management of deferred UST systems, as defined in paragraph 18104.1d and 40 CFR 280.11 applies:

- a. No person may install an UST system listed in 40 CFR 280.10(c) for the purpose of storing regulated substances unless the UST system (whether of single- or double-wall construction):

- (1) Will prevent releases due to corrosion or structural failure for the operational life of the UST system.

- (2) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a

noncorrodible material, or designed in a manner to prevent the release of any stored substance; and

(3) Is constructed or lined with material that is compatible with the stored substance.

b. Notwithstanding paragraph 18202.3a of this section, an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life.

c. Owners and operators must maintain records that demonstrate compliance with the requirements of this paragraph for the remaining life of the tank.

18203. FUNDING CATEGORIES

1. Primary Funding Categories for UST Closures, Replacements, Upgrades

a. Operations and Maintenance. Includes centrally and/or locally managed funds for repair (M1/M2) and minor construction (R1/R2). Investigations and other engineering support use (P) funds. Refer to MCO P11000.5 (vol. IV) and chapter 3 of this Manual for further information.

b. Military Construction. Used for projects that exceed minor construction limits. Includes entire tank replacement for existing "contamination-free" sites or new tank construction complying with MCO P11000.12 (vol. II).

c. The Defense Logistics Agency, Defense Fuel Supply Center (DFSC). Used for projects that involve DFSC-owned fuel, DFSC funds can be used for environmentally related minor construction, major repair, and military construction projects, as well as certain recurring costs.

d. Defense Environmental Restoration Account (DERA). Used for the cleanup of environmental contamination from UST's. Eligibility for DERA funding is linked with initial leak detection required by the Federal regulations. If site contamination is discovered prior to or during the initial leak detection that occurred no later than 22 December 1993, the site investigation and cleanup are eligible for DERA funding. After initial leak detection is completed and has shown that a system

has not caused a release to the environment, any cleanup of subsequent site contamination caused by that system will not be eligible for DERA funds.

e. Base Realignment and Closure. Used only when UST projects are related to the closure or realignment of an installation.

f. Japanese Facility Improvement Program. Used only at Japanese installations when a UST action is related to a project approved by Japanese officials with the purpose of improving conditions for local citizens.

2. Primary Funding Categories for Release Detection and Maintenance. Release detection and regular maintenance is an ongoing compliance requirement for new and existing tank systems. Installation funding requests to address these requirements will compete with all other similar requests. Therefore, to ensure that adequate funds are available, each installation should budget needed funds locally.

3. Primary Funding Categories for Release Response. Anticipated studies such as site characterization for closing UST's should be budgeted for during development of the removal/replacement projects. Initial response abatement and free product removal actions are viewed as similar to emergency response. Therefore, resultant costs of these actions must be absorbed by local installation operating funds. Response to spills and releases of DFSC-owned fuel which occur after October 1992 may be funded by DFSC on a reimbursable basis.

18204. COMPLIANCE WITH UNDERGROUND STORAGE TANK (UST) CLOSURE DOCUMENTATION

1. The Marine Corps has permanently closed many UST's to date and will continue to do so in order to meet regulatory requirements and eliminate unneeded storage capacity. Proper documentation of UST removals and in-place closures is very important to ensure compliance, reduce environmental liability, avoid duplicative effort, and show progress and due diligence.

2. Marine Corps installations must record and maintain specific, detailed information for every UST taken out of service. Such information should be organized into a written UST closure report. Appendix G-4 outlines a typical UST closure report.

a. Release Reporting Requirements. Marine Corps personnel must contain and clean up all spills or leaks of any size. Marine Corps personnel must report within 24 hours all confirmed or suspected leaks based on monitoring, or spills and overfills of petroleum exceeding 25 gallons, to the EPA or proper state agency. Such releases must also be reported to the CMC (LF). Utilize the message format provided in appendix E.

b. Release Investigation and Confirmation. Immediate investigation should be initiated using the following methods (or others specified by the state or the EPA):

(1) Perform inventory control for an additional month (if inventory reconciliation is the reason for suspecting a leak).

(2) If a leak is still suspected, tank/pipe isolated tightness tests must be used to locate the leak.

(3) If the UST system fails a tightness test or if environmental monitoring was the original reason to suspect a release, personnel must perform a site check.

(4) Upon release confirmation, report this information to the appropriate regulatory agencies and proceed with release response and corrective action as outlined in 40 CFR 280.60 through 40 CFR 280.67, or equivalent state regulations.

c. Small leaks or spills can sometimes be cleaned up without removing the tank or pipeline. In many cases, loose joints and connections cause leaks while the general condition of the tank or pipeline is good. In such cases, the tank or pipeline can be repaired per 40 CFR 280.33 and returned to service.

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

CHAPTER 18

UNDERGROUND STORAGE TANKS

SECTION 3: RESPONSIBILITIES

18300. CMC (LF)

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to UST's and uniformly apply Marine Corps policy as set forth in the Manual.
2. Monitor installation compliance with upcoming UST upgrade requirements.
3. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
4. Conduct special environmental compliance and protection studies with regard to UST's to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to UST regulations.

18301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE (COMMARFORRES)

1. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for UST systems that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with UST requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all UST projects. Pay appropriate Federal, state, and local fees.

3. Ensure that notification forms for UST's are completed and forwarded to the EPA or the appropriate state agency. Ensure that an accurate UST inventory is maintained.
4. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements (see chapter 15).
5. Accomplish leak detection and product inventory requirements, recordkeeping, and operation of monitoring systems required by Federal, and applicable state, and local UST laws and regulations.
6. Comply with Federal, and applicable state, and local laws and regulations concerning the construction of new UST's, the upgrading of existing tanks, and the removal and closure of abandoned/unneeded tanks.
7. Identify resources required to meet the UST requirements in the Program Objective Memorandum, budget submittals, and the Annual Operational Plan.
8. Develop and implement a comprehensive, written UST management plan to facilitate compliance, and to reduce long-term costs associated with compliance.
9. When necessary, request technical assistance for UST management from the Naval Facilities Engineering Command Engineering Field Divisions/Activities or other available agencies for leak detection assistance, design assistance for new UST's, and estimation of resource requirements for corrective actions.
10. Ensure that coordination occurs as appropriate with the Safety Office in matters relating to UST cleaning and removals.
11. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an environmental compliance and protection standard operating procedures document to implement all environmental requirements or by writing a separate base order to implement specifications of this chapter alone.

CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCBS) MANAGEMENT

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CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCBS) MANAGEMENT

SECTION 1: INTRODUCTION

19100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with requirements under reference (a) for managing PCBs. Additionally, the requirements for managing PCBs under other environmental statutes are briefly addressed. Although this chapter deals primarily with the management of PCBs, it recognizes that occupational safety and health policies and regulations regarding work place exposure must be integrated into the management of PCBs to attain an effective program. Marine Corps installations must comply with all applicable Federal, State, and local regulatory requirements regarding PCB management.

19101. APPLICABILITY. See paragraph 1101 of this Manual.

19102. BACKGROUND. PCBs are either oily liquids or solids that are colorless to light yellow and can exist as a vapor in air. PCBs have been used as viable replacement for combustible insulating fluids, coolants, and lubricants, in transformers, capacitors, and other electrical equipment. PCBs have also been used in fluorescent light ballasts. PCBs are not naturally occurring; however, they are manufactured from a mixture of individual chlorinated compounds and had been marketed under the trade name Aroclor. The manufacture of PCBs was stopped in the United States in 1977. PCBs are regulated under reference (b) as part of reference (a). The PCB regulations and requirements apply to both PCB waste materials and PCBs that are still in use.

19103. FEDERAL STATUTES

1. Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. 2601 et seq.). This Act requires the U.S. Environmental Protection Agency (EPA) to regulate and control harmful chemical and toxic substances in commercial use. Congress enacted TSCA to reduce unreasonable risks from chemicals to human health, safety, and the environment. Section 2605 of TSCA provides the EPA with the authority to regulate hazardous chemical substances and mixtures with specific authority for PCB control provided in section 2605(e).

Regulations on the manufacturing, processing, distribution in commerce, and use of PCBs are found in 40 CFR 761. Most provisions of the regulations apply only if PCBs are present in concentrations above a specified level as follows:

a. PCBs at concentrations of less than 50 parts per million (ppm) or contaminated surfaces with PCB concentrations of 10 microgram per 100 centimeters squared ($\mu\text{g}/100 \text{ cm}^2$) or less;

b. PCBs at concentrations of 50 ppm or greater but less than 500 ppm or contaminated surfaces with PCB concentrations of greater than 10 $\mu\text{g} /100 \text{ cm}^2$ but less than 100 $\mu\text{g}/100 \text{ cm}^2$; and

c. PCBs at concentrations of 500 ppm or greater or contaminated surfaces with PCB concentrations of 100 $\mu\text{g}/100 \text{ cm}^2$ or greater. Some states, such as California, regulate PCBs more stringently than the Federal program, including the regulation of PCBs at concentrations less than 50 ppm or regulation of PCBs as hazardous waste (HW). TSCA regulations prohibit PCB manufacturing, processing, importation, and distribution in commerce. TSCA strictly regulates the marking, storage, and disposal of PCBs. TSCA also prohibits importation or exportation of PCBs of any concentrations, for disposal, without an exemption. Regulations issued under TSCA require PCB owners and generators to keep track of their equipment that contain PCBs through reporting activities, providing generator identification numbers, and manifesting PCB wastes. Although the manufacturing of new equipment using PCBs is prohibited, the regulations allow for the continued use of some PCB-containing equipment already in service through the end of its useful life, unless otherwise prohibited. Useful life is generally interpreted to be until equipment failure.

2. Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901 et seq.). RCRA was enacted as an amendment to the Solid Waste Disposal Act of 1965. RCRA has since been amended by several statutes, more recently, the Land Disposal Program Flexibility Act of 1996. Since TSCA includes toxic chemicals, there are several overlaps with the RCRA regulations. However, while TSCA provides the authority to regulate the disposal on a chemical-by-chemical basis, RCRA provides the authority with the disposal of the waste streams rather than the individual chemicals. PCBs are not considered HWs under Subtitle C of RCRA because they are regulated under TSCA. PCB wastes can become HWs if they are mixed with a listed HW or if they exhibit a characteristic of HW, with certain exemptions. The requirements under RCRA include the prohibition on land disposal of HW

containing certain concentrations of PCBs. Additional information on HW management is provided in chapter 9 of this Manual.

3. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended (42 U.S.C. 9601 et seq.). This Act was enacted to deal with health and environmental hazards caused by past HW management practices. As amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, the Act gives the Federal government authority to respond to chemical emergencies and to clean up uncontrolled or abandoned HW sites. Additionally, the Act requires EPA to promulgate revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP establishes the process for determining appropriate removal and remedial action for the Nation's most serious Superfund HW sites. The NCP specifies notification procedures and establishes the national framework for planning and responding to oil discharges and hazardous substance (HS) releases. Under CERCLA, substances determined to pose a threat to human health are placed on the Superfund National Priorities List (NPL) in order of potential threat. In the 2005 NPL, PCBs are ranked fifth on the list of 275 HSs. The NCP assigns responsibilities for contingency planning and response to various Federal agencies, including the DOD, and outlines State and local government and public and private interest group participation in these areas.

4. Other PCB-Related Statutes. The Clean Water Act (CWA) establishes the structure for restoring and maintaining the integrity of the Nation's waters and provides framework for all regulations related to the discharge of PCBs and other pollutants into the Nation's waterways. Section 307 defines a list of priority pollutants (including PCBs) for which EPA must establish ambient water quality criteria and effluent limitations. Chapter 20 of this Manual provides additional information. Under the Clean Air Act (CAA), EPA established National Emissions Standards for Hazardous Air Pollutants to protect the public and lists PCBs as one of 33 Hazardous Air Pollutants presenting the greatest threat to public health in urban areas. Therefore, PCB incinerators and other authorized PCB activities must be in

compliance with the requirements of the CAA. Chapter 6 of this Manual provides detail on the CAA. The Emergency Planning & Community Right-To-Know Act (EPCRA) requires that PCB releases are included in the Toxic Release Inventory database maintained by EPA to track the amount of PCBs and other chemicals that are emitted to the air and discharged to surface waters on an annual basis. Additional information on EPCRA are provided in chapter 7 of this Manual.

19104. REQUIREMENTS

1. Use/Reuse

a. Except as authorized in section 30 of reference (b), EPA bans the use of any PCB or PCB item, regardless of concentration, in any manner not totally enclosed (see section 20 in reference (b)).

b. PCB concentrations should be determined on a weight-per-weight basis for nonliquid and on a weight-per-volume basis for liquid, if the density of the liquid is also reported. PCB concentrations may also be established through the following methods:

- (1) Testing the equipment using specific methods.
- (2) Manufacturer's nameplate.
- (3) Service records.

c. No person may avoid any provision specifying a PCB concentration by diluting the PCBs, unless otherwise specifically provided.

d. PCB Concentration Assumptions for Use. The following assumptions may be used to determine PCB concentration without analytical testing:

(1) Transformers with less than three pounds (lb) (1.36 kilograms (kg)) of fluid, circuit breakers, reclosers, oil-filled cable, and rectifiers, whose PCB concentration is not established, are assumed to contain PCBs less than 50 ppm.

(2) Mineral oil-filled electrical equipment manufactured prior to 2 July 1979, and whose concentration is not established, is assumed to be PCB-Contaminated Electrical Equipment. If the electrical equipment was manufactured after 2

July 1979, it is assumed to contain less than 50 ppm PCB. All pole-top and pad-mounted distribution transformers manufactured before 2 July 1979 are assumed to be mineral oil-filled. If the date of manufacture is unknown, assume it to be PCB-Contaminated Electrical Equipment.

(3) A transformer manufactured prior to 2 July 1979 and containing 3 lb (1.36 kg) or more of fluid other than mineral oil and whose PCB concentration is not established, is assumed to be a PCB transformer. If either the date of manufacture or the type of dielectric fluid is unknown, it is assumed the transformer is a PCB transformer.

(4) Capacitors manufactured prior to 2 July 1979 whose PCB concentration is not established are assumed to contain 500 ppm or greater of PCBs. If a capacitor was manufactured after 2 July 1979, it is assumed to contain less than 50 ppm PCBs. If the date of manufacture is unknown, assume the capacitor contains 500 ppm or greater of PCBs.

e. Use Conditions for Nontotally Enclosed PCB. Per section 30 of reference (b), nontotally enclosed PCBs at any concentration may be used in transformers (other than railroad transformers) for purposes of servicing, including rebuilding these transformers for the remainder of their useful lives, if the following conditions are met:

(1) Marine Corps installations must not use or store for reuse large PCB capacitors, PCB transformers, or electromagnets that pose an exposure risk to human food or animal feed.

(2) As of 1 October 1990, installations may no longer use network PCB transformers with higher secondary voltages (i.e., secondary voltages equal to or greater than 480 volts, including 480/277 volt systems) in, or near, commercial buildings. Such PCB transformers must be reclassified to either PCB-contaminated or non-PCB status by refilling or being stored for disposal or disposed.

(3) As of 1 October, 1990, all higher secondary voltage radial PCB transformers and lower secondary voltage network PCB transformers used in, or near, commercial buildings must be equipped with electrical protection to avoid transformer failures caused by high-current faults. In addition to this protection, all radial PCB transformers with higher secondary voltages (i.e., 480 volts and above, including 480/277 volt systems) used in, or near, commercial buildings must have

electrical protection to avoid transformer failures caused by sustained low-current faults. Radial transformers that are not provided with electrical protection must have been removed from service by 1 October 1990. Lower secondary voltage network transformers (described above) that are not provided with electrical protection must have been removed from service by 1 October 1993.

(4) It is prohibited to install PCB transformers that have been placed into storage for reuse or that have been removed from another location in or near commercial buildings without retrofitting.

(5) Installations must register all PCB transformers (including pole-mounted PCB transformers and those stored for reuse) with any fire department on-base or off-base able to respond to a fire, and with the EPA.

2. Markings

a. Per section 40 of reference (b), mark as illustrated in Figures 19-1 or 19-2, the following PCB items in existence on or after 1 July 1978 that are in use or being removed from use:

(1) PCB containers.

(2) All PCB transformers and equipment containing PCB transformers.

(3) All PCB large high voltage capacitors (LHVCs) and equipment containing PCB LHVC should be marked individually. If one or more PCB LHVCs are installed in a protected location such as on a power pole, structure, or behind a fence, the pole, structure, or fence should be marked as illustrated in Figure 19-1, "LARGE PCB MARK - M_L" and procedures to identify the PCB LHVC should be maintained at the protected location.

(4) PCB large low voltage capacitors (LLVCs).

(5) Electric motors using PCB coolants, hydraulic systems, and heat transfer systems containing PCBs of concentrations between 50 and 500 ppm.

(6) PCB Article containers.

(7) Each storage area used to store PCBs and PCB items.

b. Marking PCB-contaminated electrical equipment is not required.

c. Mark each end and sides of each transport vehicle loaded with PCB containers that contain more than 45 kg (99.4 lb) of liquid PCBs at concentrations of 50 ppm or greater or with one or more PCB transformers.

d. Mark with the statement "No PCBs," each of the following items manufactured between 1 July 1978 and 1 July 1998 that do not contain PCBs:

(1) Fluorescent light ballasts.

(2) PCB LLVC.

(3) Small capacitors normally used in alternating current circuits.

e. Mark as illustrated in Figure 19-1, "LARGE PCB MARK - M_L", each PCB transformer location, including the vault door, machinery room door, fence, hallway, other means of access, and manhole covers.

3. Storage

a. Per the requirements in section 35 of reference (b), PCB Articles may be stored for reuse, in an area not designated as storage for disposal, if the following conditions are met:

(1) No more than five years after the date the PCB Article was originally removed from use or after 5 August 1998, if the PCB Article is properly marked as described in section 19104(2) of this Manual and records, such as date removed from use, future location and use, and date of any schedule repair and servicing, are maintained.

(2) More than five years if a request for an extension to the Regional EPA has been approved in writing.

b. Per section 65 of reference (b), the following requirements apply to the storage for disposal of PCBs or PCB items at concentrations of 50 ppm or greater:

(1) Any PCB waste should be stored for one year from the date it was removed from service for disposal. PCB waste may be stored for an additional one year (two years total) upon a request, justification, and written approval from the Regional EPA. The installation shall send a copy of the request and EPA approval to CMC (LF).

(2) The storage facility must have adequate roof and walls to prevent rainwater from reaching the stored PCBs and PCB items.

(3) The facility must have an adequate floor with a continuous six-inch-high curbing with a containment volume equal to at least two times the internal volume of the largest PCB article or PCB container or 25 percent of the total internal volume of all PCB articles or PCB containers.

(4) The facility cannot have drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area.

(5) The facility cannot be located at a site that is below the 100-year flood water elevation.

c. Per section 65(c) in reference (b), the following PCB items may be stored temporarily in an area that does not comply with requirements described in paragraph 19104(3)(b)(2) through (5) for up to 30 days from the date of their original removal from service:

(1) Non-leaking PCB articles and PCB equipment.

(2) Leaking PCB articles and PCB equipment if the PCB items are placed in a nonleaking PCB container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB items.

(3) PCB containers containing nonliquid PCBs such as contaminated soil, rags, and debris.

(4) PCB containers containing liquid PCBs at concentrations of 50 ppm or greater, provided a Spill Prevention, Control and Countermeasure Plan (SPCC) has been prepared for the temporary storage area and the liquid PCB waste is in packaging authorized in the Department of Transportation Hazardous Materials Regulations at reference (c) through (d).

Information on preparing an SPCC Plan is provided in chapter 7 of this Manual.

d. EPA requires that the date of removal from service be attached to all items in temporary storage.

e. Bulk PCB remediation waste or PCB bulk product waste may be stored at the clean-up site or site of generation for 180 days if conditions in 65(c)(9) of reference (b) are met.

f. All PCB items in storage should be checked for leaks at least every 30 days. Any PCB items discovered to be leaking should be transferred to a nonleaking container immediately. Any spilled or leaked material should be immediately cleaned up and disposed of in accordance with requirements.

4. PCB in Fluorescent Light Fixtures. Light ballasts are the primary electric components of fluorescent light fixtures and are generally composed of a transformer to reduce the incoming voltage, a small capacitor (which may contain PCBs), and possibly a thermal cut-off switch and/or safety fuse. The use of PCBs in ballasts manufactured prior to EPA's 1978 ban on PCBs is not regulated by EPA. All light ballasts manufactured since 1978 that do not contain PCBs should be marked by the manufacturer with the statement, "No PCBs." Light ballasts from the manufacturer labeled "No PCBs" are not regulated by reference (a). For those ballasts manufactured prior to 1978, or for those ballasts that contain no statement regarding PCB content, the installation should assume that they do contain PCBs or determine concentration using methods provided in section 20 of reference (b). The following are TSCA disposal requirements for fluorescent light ballast, depending on concentration:

a. Ballasts that are intact and nonleaking with PCB concentrations of 50 ppm or greater are considered PCB bulk product waste and do not require additional labeling. Manifesting is required for disposal. They may be disposed of in a TSCA incinerator or a TSCA/RCRA landfill.

b. Ballasts that are intact and nonleaking with PCB concentration less than 50 ppm do not require additional labeling or manifesting. They may be disposed as municipal solid waste.

c. Ballasts that are leaking at any PCB concentration (i.e., either less than or greater than 50 ppm) are considered

PCB bulk product waste and do not require additional labeling. However, manifesting is required for disposal. They may be disposed of in a TSCA incinerator or a TSCA/RCRA landfill.

5. Transportation. PCBs must be transported as specified in references (c) through (d). All PCB waste being transported within the United States must be accompanied with a manifest, which is signed by the generator and the transporter (see section 208 of reference (b) and section 19104 (8)(e).) In accordance with subpart F of reference (b), all transboundary shipments (i.e., import and export) for disposal of PCBs, 50 ppm or greater, are prohibited without an EPA exemption. Retrograde of U.S. manufactured PCBs from activities outside the United States is not considered export or import of PCBs under reference (a).

6. Disposal

a. Dispose of PCBs and PCB items with concentrations of 50 ppm or greater within one year of the date that they were determined to be PCB wastes. Disposal options and requirements are dependent on the type of PCB waste and are discussed in section 60 of reference (b).

b. For PCB liquids containing more than 50 ppm of PCBs, disposal is generally via high-temperature incinerators permitted by EPA. Certain PCB liquids (at concentrations greater than 50 ppm, but less than 500 ppm) may be disposed of in a chemical waste landfill or a high-efficiency boiler, provided specific EPA requirements are met.

c. PCB articles such as transformers, PCB capacitors, and hydraulic machines are generally cleaned with an appropriate solvent, and then incinerated. PCB containers must be emptied of fluid and rinsed with appropriate solvent before they can be incinerated or disposed in a municipal solid waste landfill or a chemical waste landfill.

d. The disposal of PCB remediation waste depends on the size of the site and the concentration at which the PCBs are found. Moderately-sized sites with low residual environmental impact from remedial activities may use self-implementing cleanup and disposal procedures without written EPA approval. Exceptions are discussed in section 61 of reference (b).

e. PCB Bulk Product Waste may be disposed of in a chemical waste or HW landfill, by incineration, or through

decontamination. section 62 of reference (b) identifies other methods of disposal for particular bulk waste that can be disposed of in a municipal landfill or nonmunicipal nonhazardous waste landfill. Materials should be analyzed to determine appropriate disposal methods and their leaching potential.

7. Emergency Response and Reporting

a. Immediately report any fire-related incidents involving PCB transformers to the National Response Center (NRC) by calling 800-424-8802. PCB transformer owners must take measures to contain and control any potential releases of PCBs and incomplete combustion products into water. Fires involving PCBs can generate extremely toxic reaction products (e.g., dioxins); therefore, if a fire starts, immediately evacuate the building.

b. Report spills that directly contaminate surface water, sewer, 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/HW, may have a more stringent reporting requirement. Failure to properly report such spills can result in both civil and criminal liability.

c. PCBs are hazardous substances under reference (a) and CERCLA, requiring spills to be reported as follows: a spill of a reportable quantity (RQ) of PCB (RQ = one lb) or greater must be reported to the appropriate response organizations and regulatory agencies within the required deadlines (see chapter 7 and appendix E of this Manual). Releases of a mixture containing PCBs must be reported only when the amount of the PCB component released exceeds the RQ. If the concentration of PCBs in the mixture is unknown, the release must be reported if the total amount of the mixture spilled is one lb or more (see section 125 in reference (b)).

8. Notification of PCB Waste Activity. Installations that handle PCB waste must notify EPA of such activities by filing EPA Form 7710-53 (section 205 of reference (b)). It is illegal for installations to process, store, dispose of, transport, or offer transportation of any PCB wastes without notifying EPA and obtaining an EPA identification number (see section 202 of reference (b)). Generators who were engaged in PCB waste handling activities on or prior to 5 February 1990 are exempted from notifying EPA. Exempt generators must use the generic identification number "40 CFR 761" or a number assigned to the activity by EPA or a state under RCRA.

9. PCB Recordkeeping and Reporting. Per section 180 of reference (b), the following recordkeeping and reporting requirements apply to PCBs and PCB items in use or projected for disposal:

a. Annual Records and Document Logs. Each installation using or storing at any one time at least 45 kg (99.2 lb) of PCBs in PCB containers, one or more PCB transformers, or 50 or more PCB LHVC or PCB LLVC, must maintain all annual records and a written annual document log of PCB waste disposal activities. These records and the log must be retained per reference (e), Standard Subject Identification Code (SSIC) 5090.2e.

(1) Annual records must include all signed manifests for the calendar year; records of inspection, maintenance, repairs and cleanups; and all Certificates of Disposal.

(2) The written annual document log must be completed by July 1 for the previous calendar year. The written annual document log must contain the following specific inventory information for each type of PCB item:

(a) Name, address, and EPA identification number of the facility and the calendar year covered by the annual document log.

(b) Manifest number of every manifest generated by the facility during the calendar year.

(c) Total number by specific type of PCB articles, PCB article containers, PCB containers, PCB transformers, and any PCBs and PCB items in PCB containers.

(d) Total weight in kg of PCBs in PCB article containers and PCB transformers, total weight in kg of contents of PCB containers and PCB article containers, and total weight of PCB LHVC or LLVC remaining in service at the facility at the end of the calendar year.

(e) A record of each telephone call or some form of verification must be kept to confirm receipt of PCBs transported by an independent transporter.

b. Manifesting PCB Wastes. A generator who relinquishes control over PCB wastes for commercial off-site disposal must prepare a manifest using EPA Form 8700-22 (including a continuation sheet if necessary), or the appropriate State

manifest. If the generator uses an independent transporter to ship the waste and the generator does not receive a signed copy of the manifest from the disposer or commercial storer within 35 days of shipment, then the generator should contact the transporter and/or disposer to determine the disposition of the waste. If the generator does not receive a manifest from the disposal facility within 45 days of shipment, then the generator must file an exception report with the EPA regional office. Copies of the manifests must be retained per reference (e), SSIC 5090.2a and per (section 208 in reference (b)).

c. Certificates of Disposal and One-Year Exception Reports. For each shipment of manifested PCB waste, the disposer is obligated to prepare a Certificate of Disposal that must be sent to the generator within 30 days of the date of disposal (section 218 of reference (b)). A generator who manifests PCBs or PCB items to a disposer of PCB waste must submit a One-Year Exception Report to the EPA regional administrator whenever the following criteria are met (section 215 in reference (b)):

(1) The generator has not received a Certificate of Disposal within 13 months from the date of removal from service.

(2) The generator receives a Certificate of Disposal for a disposal date more than one year after the date of removal from service.

10. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable Executive Orders, and Federal, State, interstate, and regional statutory and regulatory environmental requirements.

19105. TERMS AND DEFINITIONS. The regulations at section 3 in reference (b) establish specific definitions for many terms, some of which are listed below:

1. Capacitor. A device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

a. LHVC. An LHVC that contains 1.36 kg (3 lb) or more of dielectric fluid and that operates at 2,000 volts (alternative current (AC) or direct current (DC) or above.

b. LLVC. An LLVC that contains 1.36 kg (3 lb) or more of dielectric fluid and that operates below 2,000 volts (AC or DC).

c. Small Capacitor. A capacitor that contains less than 1.36 kg (3 lb) of dielectric fluid.

2. EPA Identification Number. A 12-digit number assigned to a facility by EPA upon notification of PCB waste activity.

3. Fluorescent Light Ballast. A device that electrically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric.

4. In or Near Commercial Buildings. Within the interior of, on the roof of, attached to the exterior wall of, in an adjacent parking area serving, or within 30 meters of a nonindustrial, nonsubstation commercial building, including, but not limited to civilian or military personnel assembly buildings, hospitals, and clinics; living quarters; stores; and educational facilities.

5. Nonliquid PCBs. Materials containing PCBs that by visual inspection do not flow at room temperature (25°C or 77°F), or from which no liquid passes when a 100-gram or 100-milliliter representative sample is placed in a mesh number 60 ± 5 percent paint filter and allowed to drain at room temperature for five minutes.

6. Non-PCB Transformer. Any transformer that contains less than 50 ppm PCB, except any transformer that has been converted from a PCB transformer or a PCB-contaminated transformer, cannot be classified as a non-PCB transformer until reclassification has occurred per the requirements of section 30 in reference (b).

7. PCB. Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees, or any combination of substances that contains such substance.

8. PCB Article. Any manufactured article, other than a PCB Container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. This includes capacitors, transformers, electric motors, pumps, pipes, and other manufactured items.

9. PCB Article Container. Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles

or PCB equipment, and whose surface(s) has not been in direct contact with PCBs.

10. PCB Bulk Product Waste. Any waste derived from manufactured products containing PCBs in a nonliquid state, regardless of current concentration, where the concentration at the time of designation for disposal was 50 ppm or greater PCB.

11. PCB Container. Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB articles and whose surface(s) has been in direct contact with PCBs.

12. PCB-Contaminated Electrical Equipment. Any electrical equipment (e.g., transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable) that contain 50 ppm or greater PCB, but less than 500 ppm PCB.

13. PCB Equipment. Any manufactured item, other than a PCB container or a PCB article container, that contains a PCB article or other PCB equipment. This includes microwave ovens, electronic equipment, and fluorescent light ballasts and fixtures.

14. PCB Item. Any PCB article, PCB article container, PCB container, PCB equipment, or anything that deliberately or unintentionally contains any PCB or PCBs.

15. PCB Leak. Any instance in which a PCB article, PCB container, or PCB equipment has any PCBs on any portion of its external surface.

16. PCB Remediated Waste. Waste containing PCBs as a result of a spill, release, or other unauthorized disposal.

17. PCB Transformer. Any transformer that contains 500 ppm or greater of PCB.

18. PCB Waste Generator. Any person whose act or process produces PCBs that are regulated for disposal, whose act first causes PCBs or PCB items to become subject to disposal requirements, or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated.

19. Quantifiable Level/Level of Detection. For PCB analysis, it is 2 µg/gram (2 ppm) from any resolvable gas chromatographic peak.

20. Retrofill. To remove PCB or PCB-contaminated dielectric fluid and to replace it with PCB, PCB-contaminated, or non-PCB dielectric fluid.

21. Totally enclosed manner. Any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

CHAPTER 19

PCB MANAGEMENT

SECTION 2: MARINE CORPS POLICY

19200. GENERAL. Marine Corps installations must comply with all applicable Federal, State, and local regulatory requirements relating to PCB management.

19201. MARINE CORPS PCB ANNUAL INVENTORY REPORT. All Marine Corps installations that have PCB items still in use, or that generate, store, treat, or dispose of PCBs must prepare an annual report of all PCBs and PCB items on the installation and those sent off-site for disposal during the past calendar year. For tracking purposes, all PCBs or PCB-containing equipment of 50 ppm or less (such as fluorescent light ballast and small electrical devices) are to be reported on the annual inventory report. This report will be submitted to CMC (LFL) by 1 February by making appropriate entries into the PCB Inventory Form in the Environmental Quality in Progress (EQUIP) database on the Headquarters Environmental Applications Portal (HEAP). The annual report should list the PCBs and PCB items in the following manner:

1. Categories. The PCBs and PCB items should be listed in the following categories: those containing less than 50 ppm PCBs, those containing between 50 and 499 ppm PCBs, and those containing greater than or equal to 500 or more ppm PCBs.
2. Identification Number and Location. The identification number and location of each PCB item or storage area for PCBs should be listed.
3. PCB Concentration. The concentration of PCBs in each PCB item that has been determined by testing. Test results should be maintained by the installation.
4. Disposal Plan. The plan for disposal of all PCBs and PCB items should be provided, including the expected date of disposal of all PCBs and PCB items.
5. Annual Update. A statement certifying the PCBs and PCB items that have been disposed since the last annual report should be included. Annual records and document logs required

under TSCA reporting and recordkeeping may be attached for supporting documentation.

6. Statement When an Installation is PCB-Free. When the installation becomes PCB-free, a statement to that effect will be submitted.

19202. MARINE CORPS AND DEFENSE LOGISTICS AGENCY (DLA) INTERFACE ON PCBs. Reference (f), designates DLA's Defense Reutilization and Marketing Service (DRMS) as the responsible agency for worldwide disposal of all PCBs and PCB items. Marine Corps installations shall use the DRMS PCB contract disposal services as much as economically and operationally feasible. The DLA must accept accountability for storage and disposal of PCBs and PCB items. The DLA must also accept custody where the Defense Reutilization and Marketing Office (DRMO) has conforming storage. Installations may use other appropriate contract authority to procure PCB disposal services; however, they should ensure that the contract requirements comply with all Federal, State, and local PCB regulations.

19203. PCB TRANSFORMERS IN OR NEAR COMMERCIAL BUILDINGS. PCB transformers in use in or near commercial buildings must be registered with building host owners. Host installations will inform tenants as to the location and type of any PCB transformers in or near all buildings they occupy. The Marine Corps policy is to treat Marine Corps, military, or civilian personnel assembly buildings, educational properties, institutional properties (including museums, hospitals, or clinics), residential properties (living quarters), stores, office buildings (including administrative buildings), and transportation centers (including airport terminal buildings, bus stations, or train stations) as commercial buildings.

19204. PCB EQUIPMENT REMOVAL POLICY. The Marine Corps policy is to eliminate PCBs from all Marine Corps-owned electrical distribution systems and equipment containing hydraulic fluids, cooling oils, and lubricating oils.

1. Transformers

a. Determine, by gas chromatography or another appropriate EPA-approved method, the PCB concentration for all pad-mounted and pole-mounted transformers. Mark transformers in accordance with Federal, State, and/or local requirements. Note PCB test results (in ppm) for each transformer in the installation records.

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b. The United States Marine Corps' (USMC) goal is to eliminate all PCB transformers containing 50 or more ppm from the inventory. To reduce future potential liabilities, accomplish transformer elimination by replacement or by removal with load transfer to other non-PCB transformers. Retrofill is an acceptable alternative to replacement of transformers when the economic benefit is clear and when a transformer is difficult or impossible to replace because of the constraints of their physical location.

2. Capacitors

a. Establish an accurate inventory of PCB capacitors based on manufacturing information. Mark large capacitors with over 50 ppm PCB as PCB contaminated and label each with the sample identification number and concentration. Mark large capacitors established as not containing PCBs as non-PCB. Note the PCB classification of each large capacitor in installation records.

b. USMC's goal is to eliminate all PCB capacitors from the inventory.

3. Elimination Plan. Complete annual updates of the installation PCB elimination plan until all PCBs and PCB items have been removed from the installation. Make appropriate entries into the PCB Inventory Form in the EQUIP database on the HEAP. The plan must include the proposed date of removal and the requested source of funding for each PCB item. Transformer and capacitor owners must prioritize corrective projects based on:

a. The severity of mission impact if a fire, explosion, or major PCB spill occurred.

b. The likelihood of such an incident occurring. Transformer and capacitor owners must coordinate priorities with impacted customers, paying special attention to the redesign of the power grid that accommodates PCB removal. PCB elimination plans must be updated every 1 February for the previous calendar year.

4. Procurement. All future procurement of transformers or any other equipment containing dielectric or hydraulic fluid must be accompanied by a manufacturer's certification that the equipment contains no detectable PCBs or that the equipment contains less than 2 ppm PCBs at time of shipment. For inventory purposes,

affix labels to such newly procured transformers and equipment stating that they are "Non-PCB" (i.e., no detectable levels of PCB present).

CHAPTER 19

PCB MANAGEMENT

SECTION 3: RESPONSIBILITIES

19300. CMC (LF)

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to PCBs, and uniformly apply Marine Corps policy as set forth in this Manual.
2. Monitor the status of installation inventories and PCB management programs.
3. Assist installations in resolving disputes with Federal, State, local, and foreign regulatory agencies as required.
4. Conduct special environmental compliance and protection studies with regard to PCBs to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, State, and local regulatory agencies with regard to PCB regulations.
6. Track installation progress toward meeting the elimination of PCB transformers (50ppm and above) and capacitors.

19301. COMMANDING GENERAL/COMMANDING OFFICER OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify and submit, to the CMC (LFL and LFF), project documentation and funding requests for PCB management facilities that are required to maintain compliance with applicable existing and emerging regulations and permits.
2. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with PCB management requirements.
3. Pay appropriate Federal, State, and local fees.

4. Ensure that the environmental management hierarchy is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements (see chapter 15 of this Manual).
5. Ensure that all required Federal, State, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all PCB management projects.
6. Designate an activity focal point to coordinate installation PCB management programs.
7. Determine, evaluate, and comply with applicable Federal, State, and local laws and regulations governing PCB management.
8. Submit and sign, as appropriate, PCB reports and other required data to EPA and State and local agencies.
9. Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, treat, and dispose of Marine Corps PCBs and PCB items in compliance with applicable Federal, State, and local requirements.
10. Transfer to DRMO, To the extent possible, accountability and physical custody of PCBs and PCB items stored for disposal.
11. Complete the annual PCB inventory and forward to CMC (LF).
12. Report PCB spills or incidents involving combustion as prescribed in chapter 7 of this Manual when the spill exceeds the reportable quantities established in applicable State or Federal regulations. Immediately report fire-related incidents involving PCB transformers to the NRC regardless of quantity.
13. Register all PCB transformers and equipment with cognizant fire departments.
14. Register all PCB transformers with EPA by submitting Form 7720-12.
15. Prepare and update the installation PCB elimination plan and submit to CMC (LF).
16. Ensure that coordination occurs, as appropriate, with the safety office in matters relating to PCB management.

REFERENCES

- (a) 15 U.S.C. 2601 et seq.
- (b) 40 CFR 761
- (c) 49 CFR 171
- (d) 49 CFR 180
- (e) SECNAV M-5210.1
- (f) DOD Directive 4140.1, "Supply Chain Materiel Management Policy," April 22, 2004

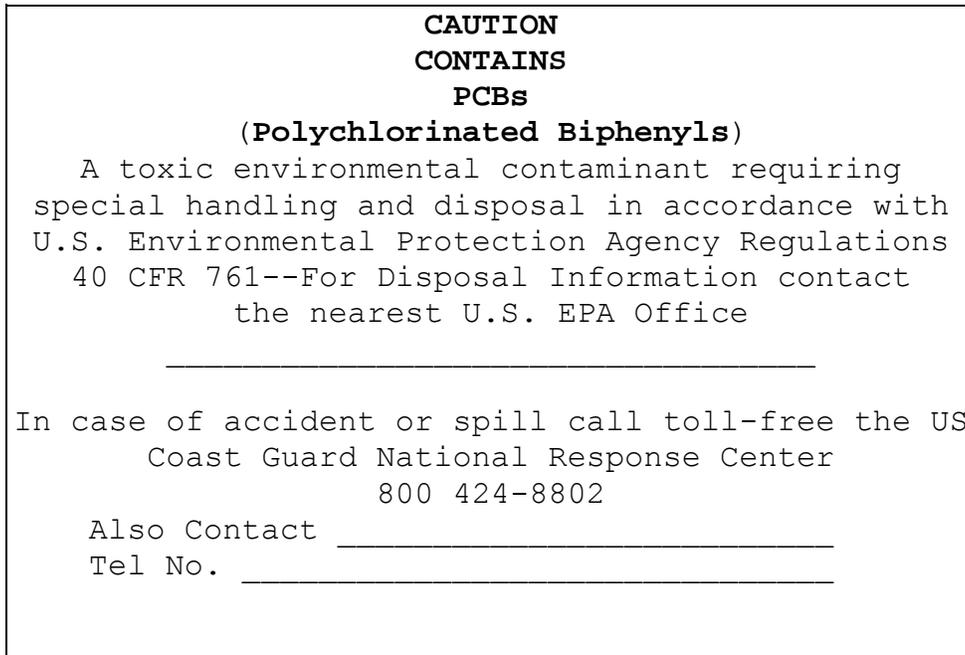


Figure 19-1.--LARGE PCB MARK - M_L (reference (b), section 45(a))

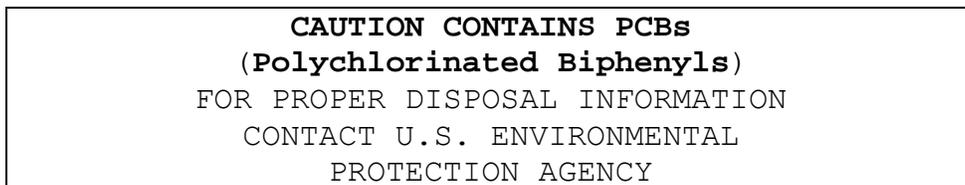


Figure 19-2.--SMALL PCB MARK - M_S . (reference (b), section 45(b))

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

CHAPTER 20

WATER QUALITY MANAGEMENT

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CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 1: INTRODUCTION

20100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with Federal water pollution control requirements for water quality management (WQM) programs. Chapter 16 of this Manual discusses specific provisions for preventing and controlling surface and groundwater pollution and for the protection of drinking water supplies. For information on the planning, prevention, and control of water pollution from oil discharges and hazardous substance (HS) releases, see chapter 7 of this Manual.

20101. APPLICABILITY. See paragraph 1101.

20102. BACKGROUND. Marine Corps operations that are regulated through the WQM program include the following:

1. Sanitary or industrial wastewater discharged directly to receiving waters or through an on-base Marine Corps Owned Treatment Works (MCOTW).
2. Sanitary or industrial wastewater discharged to an off-base POTW or to a treatment plant of another DoD activity.
3. Stormwater runoff associated with industrial or construction activities discharged to receiving waters.
4. Range operations which result in nonpoint source pollution.
5. Agricultural, silvicultural, and grazing operations, including outleases, which contribute to polluted runoff or groundwater contamination.
6. Sewage sludge generation, processing, use, and disposal practices.
7. Facilities involved in the transfer, storage, and transportation of petroleum, oil, and lubricants (POL) which, because of their location, could reasonably be expected to cause

substantial harm to the environment by discharging into navigable waters or on the adjacent shoreline.

8. Hazardous material storage areas and other regulated storage areas where runoff is likely to occur.

20103. FEDERAL STATUTES

1. Water Quality Act (WQA) of 1965 (Public Law 89-234), Water Quality Improvement Act of 1970 (Public Law 91-224), Federal Water Pollution Control Act (FWPCA) of 1972, as Amended by Clean Water Act (CWA) of 1977 (33 U.S.C. 1251 et seq.)

a. The WQA provides Federal assistance for the establishment and enforcement of jurisdictional water quality standards for surface waters. It was amended in 1970 by the Water Quality Improvement Act to prohibit releases of oil and sewage into navigable waters. The FWPCA made the Environmental Protection Agency (EPA) responsible for setting nationwide effluent standards on an industry-by-industry basis. This Act provided effluent and water quality standards, and instituted a permit system for the regulation of oxygen-demanding pollutant discharges. In 1977, the CWA Amendments refocused the enforcement tools of the FWPCA on the control of toxics. The CWA amended the permit system, which is now the National Pollutant Discharge Elimination System (NPDES), a nationwide permit program administered by the EPA. The CWA was amended in 1987 to include the regulation of stormwater runoff, and to strengthen enforcement mechanisms. The intent of the CWA is to restore and protect the integrity of the Nation's waters by controlling discharges of pollutants, including oil and hazardous substance spills, into those waters.

b. The CWA identifies the following two national goals:

(1) To eliminate the introduction of pollutants into waters of the United States; and

(2) To develop water quality which protects and propagates fish, shellfish, and wildlife and provides for recreation in and on the water.

c. To attain these goals, the EPA has identified conventional, nonconventional, and toxic pollutants and the degrees of technology that must be applied to remove these pollutants from point and nonpoint sources of wastewater. Point

source discharge requirements are implemented through the NPDES, or through state programs that have been authorized by the EPA. Nonpoint source discharges are regulated through state WQM programs. The CWA also authorizes the EPA to promulgate pretreatment standards for industrial sources discharging effluents to POTW's.

d. Important statutory requirements of the CWA are summarized as follows:

(1) Section 208 requires the preparation of area-wide waste treatment management plans. These plans must contain alternatives for waste treatment management and must apply to all wastes generated within the area involved.

(2) Section 301 provides that the discharge of any pollutant by any person (including Federal installations) into waters of the United States is unlawful without a discharge permit and adherence to any permit requirements.

(3) Section 302 establishes requirements for the development of water quality related effluent limitations. These limits are calculated for a particular section of a receiving water and applied to one or more point sources by inclusion in an NPDES permit. These limits are more stringent than general water quality standards or categorical industry effluent limits.

(4) Section 303 requires states to develop and revise water quality standards and implementation plans for interstate and intrastate waters. These standards are used to determine effluent discharge limits in NPDES permits.

(5) Section 304(1) requires states to develop a list of impaired waters due to point source discharges of toxic pollutants and a determination of which point sources are responsible for the discharges. This section requires the imposition of an Individual Control Strategy for the toxic pollutant(s) within the NPDES permit in order to reduce the concentration of the toxic pollutant(s), which would enable the receiving water to meet its designated water quality standard.

(6) Section 306 requires the development of National Standards of Performance for new and existing sources of industrial wastewater from specified industrial categories. Categories relevant to Marine Corps operations include electroplating, metal finishing, metal products and machinery,

landfill leachate and incinerators, waste treatment, transportation equipment cleaning, and industrial laundries.

(7) Section 307 establishes a list of toxic pollutants and requires the development of effluent and pretreatment standards for those pollutants.

(8) Section 308 establishes the EPA's right to enter and inspect any facility subject to the CWA provisions. It also specifies requirements for permittees to monitor discharges and to establish and maintain appropriate records and reports.

(9) Section 309 provides for Federal enforcement of the CWA, to include filing of Notices of Violation, issuing compliance orders, and bringing civil suits in United States District Courts against violators. This section also specifies criminal penalties of up to \$25,000 per day and/or 1 year imprisonment for negligent violations; up to \$50,000 per day and/or 3 years imprisonment for knowing violations; and up to \$250,000 per day and/or 15 years imprisonment for an individual or up to \$1,000,000 for an organization that knowingly endangers human life or causes serious bodily injury. Until a complete sovereign immunity waiver similar to that contained in the Federal Facilities Compliance Act (FFCA) is placed into the CWA by Congress, Marine Corps policy specifies that penalties levied under the CWA will not be paid.

(10) Section 311 addresses oil and HS liability. It requires the development of a National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP provides the organizational structure and procedures for preparing for, and responding to, oil discharges and releases of HS's, contaminants, and pollutants. This section further provides that the President (and installation commanders as duly appointed representatives) act on behalf of the United States to recover all costs for restoring or replacing natural resources damaged by such discharges and releases.

(11) Section 313(a) states that Federal agencies, their facilities, and personnel are subject to, and must comply with, all Federal, state, and local requirements, administrative authority, process, and sanctions respecting the control and abatement of water pollution. It exempts Federal personnel from personal liability for civil penalties arising from performing official duties and limits the liability of the United States to only "civil penalties arising under Federal law or imposed by a state or local court to enforce an order or the process of such

court." The President may exempt any effluent source of any Federal installation from CWA compliance if he determines it is in the express interest of the United States to do so; however, no exemption may be granted from requirements promulgated for categorical industries under section 306 and toxic pollutants under section 307.

(12) Section 319 requires states to establish nonpoint source (NPS) pollution management programs. These management programs must identify the best management practices (BMP) for reducing specific types of NPS pollution, identifying programs to implement the BMP's, developing a schedule with annual milestones for implementing the BMP's, certifying that the state has adequate legal authority for administering and enforcing the program, and identifying sources of assistance and funding.

(13) Section 401 requires that any applicant for a Federal license or permit to conduct an activity that may result in a discharge to navigable waters must provide to the permitting agency a certification from the state in which the discharge will originate that any such discharges will comply with applicable CWA provisions. The applicant must provide an opportunity for the certifying state or agency to review the manner in which the facility will operate to ensure that effluent limits will not be violated.

(14) Section 402 establishes the NPDES-permit program.

(15) Section 403 establishes ocean discharge criteria.

(16) Section 404 establishes requirements for the issuance of permits by the Army Corps of Engineers (COE) for discharges of dredged or fill material into navigable waters.

(17) Section 504 provides authority to the EPA to bring suit in United States District Courts to immediately restrain any person (including Federal facilities) from causing or contributing to a discharge alleged to imminently and substantially endanger human health or welfare.

(18) Section 505 provides for citizen suits against any person (including the United States) who allegedly is violating an effluent standard or an order issued by the EPA or a state with respect to such a standard or limitation.

2. Oil Pollution Act (OPA) of 1990 (Public Law 101-380, 33 U.S.C. 2701 et seq.)

a. This Act prohibits harmful discharges of oil and HS's into waters of the United States or discharges which may affect natural resources owned or managed by the United States.

b. The OPA requires owners or operators of tank vessels and facilities to develop and submit appropriate facility response plans (see chapter 7 of this Manual) because their locations might cause substantial harm by discharging oil or HS's into the environment.

3. Safe Drinking Water Act (SDWA) of 1974 (42 U.S.C. 300(f) et seq.)

a. This Act and its amendments prescribe treatment and distribution control strategies for abating the contamination of drinking water. For more information on drinking water systems and conservation, refer to chapter 16 of this Manual.

b. Part C of the SDWA prescribes the protection of underground sources of drinking water. It establishes three groundwater protection programs for which the states should assume the primary responsibility. These programs are:

(1) The Underground Injection Control (UIC) Program. The purpose of this program is to regulate the injection of fluids into underground strata which could affect groundwater supplies.

(2) The Sole Source Aquifer Program. The purpose of this program is to designate and protect aquifers which are the sole or principal source of drinking water for an area and which, if contaminated, would create a significant hazard to public health.

(3) The Wellhead Protection (WHP) Program. The purpose of this program is for states to protect wellhead areas from contaminants which may have an adverse effect on the health of persons using wells for drinking water within that area.

4. Rivers and Harbors Act of 1899 (3 U.S.C. 407 et seq.). Sections 9 and 10 of this Act provide authority to the COE to issue or deny permits for construction of dams, dikes, or other structures in, or ones that will affect, navigable waters of the United States.

5. Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.)

a. This Act, also known as the Ocean Dumping Act, restricts the dumping of all types of materials which would adversely affect human health and welfare or the marine environment, originating from within and outside the United States, into ocean waters. It further prohibits ocean disposal of biological, chemical, and radiological warfare agents, high level radioactive waste, and medical waste.

b. The Act establishes a system for the issuance of permits by the EPA, under section 102, and by the COE, under section 103, for ocean disposal of dredged materials. Section 104 contains conditions for permits issued by the EPA and the COE. Section 104B of the MPRSA banned ocean disposal of sewage sludge or industrial waste after December 31, 1991.

6. CZMA of 1972 (16 U.S.C. 1451 et seq.)

a. This Act plays a significant role in water quality management, particularly with regard to nonpoint source pollution. State coastal zone management programs approved under the Act incorporate flood control, sediment control, grading control, and stormwater runoff control statutes. Under the CZMA, a Federal action that affects any land, water use, or natural resource of the coastal zone must be accomplished as consistently as possible with the enforceable policies of the approved state management programs (15 CFR 930.32). This requirement applies to activities conducted both within or outside the coastal zone if there are impacts in the coastal zone.

b. These state programs must be considered when addressing water pollution impacts of Marine Corps projects. Assistance in determining compliance requirements in specific situations may be requested from the CMC (LF).

c. In their coastal zone management program, states must list activities which directly affect the coastal zone and, therefore, require a consistency determination. Installations should review this list to identify activities applicable to their installation which are likely to require a consistency determination.

7. Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901 et seq.)

a. This Act prescribes technical requirements for preventing leachate migration from solid or hazardous waste (HW) disposal sites to groundwater.

b. Section 3023, as implemented under the FFCA, defines and regulates FOTW's, which include Marine Corps domestic wastewater treatment plants. This section prohibits introducing any HW into an FOTW, specifies conditions under which an FOTW without a RCRA permit may receive industrial wastewaters, and discusses enforcement procedures.

c. Section 7003 provides authority to the EPA to bring suit in United States District Court to immediately restrain any person (including Federal facilities) from causing or contributing to a discharge alleged to imminently and substantially endanger human health or the environment.

20104. REQUIREMENTS

1. General

a. Statutory Requirements. The CWA requires compliance by Federal installations with all requirements, substantive and procedural, that are applicable to the control and abatement of water pollution. The CWA makes it illegal for any Marine Corps installation to discharge any pollutant, other than when such discharge is in compliance with effluent standards, treatment technology requirements, or other procedural requirements.

b. Regulatory Requirements

(1) Applicable requirements include Federal, state, and local regulations. The remainder of this section summarizes many of the significant Federal regulations pertaining to water quality management.

(2) Authorized EPA, state, or other regulatory officials who have presented proper credentials must be allowed to enter Marine Corps facilities at reasonable times to examine or copy records, inspect facilities and monitor equipment, and sample any wastewater or stormwater which the activity is required to monitor. Designated representatives of the CG/CO should accompany the officials during these site visits.

c. Executive Order (EO) Requirements. EO 12088, Federal Compliance with Pollution Control Standards, October 13, 1978, requires executive agencies, including the military departments, to comply with applicable requirements of Federal laws, including the CWA. The EO requires each agency to submit to the Office of Management and Budget an annual plan for environmental pollution control with cost estimates for the design, construction, management, operation, and maintenance of Federal facilities.

d. DoD Requirements. DoD has established the DON as the DoD Executive Agent for implementation of the CWA.

2. Point Source Control

a. Definition (40 CFR 122). 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.

b. Discharge Permits

(1) Titles 40 CFR 122 and 40 CFR 125 require NPDES permits for all point source discharges into waters of the United States. Discharges must comply with all terms and conditions of EPA, state, and locally issued permits.

(2) For installations with discharge points located in states that have not been authorized to administer all or parts of CWA programs, NPDES permits must be requested from, and issued by, the EPA. If a state has a separate water pollution permit program, Marine Corps installations must, when required, obtain a state permit as well as an EPA permit for point sources regulated under that program.

(3) For all discharge points located in states that have EPA-approved NPDES programs, permit applications must be filed with, and issued by, the appropriate state agency.

(4) Any discharge that will continue after its discharge permit expires must be re-permitted prior to the expiration date of the current permit. A new permit application must be forwarded to the permitting agency no later than 180 days (90 days for stormwater discharges resulting from construction

activity) prior to the permit expiration date. In the case of complex permits, such applications should be filed well in advance of the 180 day (or 90 day) requirement. To meet these deadlines, installations must allow sufficient time to collect the required information and prepare the application.

(5) All permit applications and required reports must be prepared in the format prescribed by the permitting agency.

(6) Any monitoring records, including all original strip chart recordings for continuous monitoring, instrumentation and calibration, maintenance records, and laboratory test results pursuant to sampling, must be retained for a minimum of 3 years at the installation where monitoring is performed, if not otherwise prescribed.

(7) The owner of a treatment plant which continually fails to meet its discharge permit limits can be subject to enforcement actions by the permitting agency and to citizen suits filed in a United States court.

c. Industrial Wastewater Treatment and Direct Discharge Requirements

(1) Marine Corps Owned Industrial Wastewater Treatment Plants (IWTP) and other industrial based activities with direct discharge into receiving waters must obtain and comply with an NPDES permit.

(2) Direct discharges from oil/water separators must be permitted, monitored, and reported under the NPDES program. The installation of wash water recycling equipment (a pollution prevention technology) is the preferred method of treating and reusing air and ground equipment wash rack effluent. Where the installation of recycling equipment is not practical, wash rack discharges when aircraft or vehicles are being washed should be valved to oil/water separators which discharge to the sanitary sewer and valved to drainage ditches at all other times so that stormwater runoff does not overload the sanitary sewer system. Oil transfer and storage facility storm waters should be directed through an oil/water separator prior to discharge.

(3) When new NPDES permit standards are promulgated, Marine Corps Owned IWTP's and other industrial activity dischargers may not be able to comply automatically with the new standards. If the discharger determines it cannot meet the new standard, it must begin to upgrade its treatment processes to

meet the deadline for compliance with the new standards. If the discharger cannot meet the required compliance date, it should negotiate a new date in a Consent Order with the appropriate regulatory agency.

d. Discharge to FOTW's

(1) Industrial discharges to an FOTW will meet all applicable general and categorical pretreatment standards contained in 40 CFR 403 and 40 CFR 405 through 471, respectively, as appropriate. After the effective date of any new pretreatment standards for toxic substances, affected sources will comply within the time frame designated by the appropriate agency.

(2) If necessary, an FOTW can impose limitations more stringent than the categorical pretreatment standards on industrial activities which discharge to it, in order to prevent interference with treatment plant operations, to prevent pass-through of pollutants to receiving waters, to prevent sewage sludge contamination, to prevent workers from being exposed to health hazards, and to prevent a violation of the FOTW's NPDES permit. The repeated inability of an FOTW to meet its discharge permit limits, due to an industrial activity's failure to pretreat its waste, can result in enforcement actions against both the FOTW and the industrial activity.

(3) Industrial activities discharging to an FOTW will notify the FOTW operator of any substantial change in quantity or type of pollutants discharged and of any spills, releases, or slug discharges of any substance which could adversely impact the FOTW, its personnel, or the effluent discharged from the treatment works.

(4) FOTW's discharging to United States waters must be designed, constructed, operated, and maintained to comply with all effluent limitations as prescribed by discharge permits.

e. Discharge to POTW's

(1) Discharges to a POTW must meet all applicable general and categorical pretreatment standards. After the effective date of any new pretreatment standards for toxic substances, affected sources must comply within the timeframe designated by the permitting authority.

(2) A POTW controls discharges received from Marine Corps installations or activities through local ordinances, sewer use

contracts, and/or discharge permits. These control mechanisms often require the user to monitor its industrial discharges into the sewer, to pretreat certain categories of wastes, to notify the treatment plant of substantial changes to the quantity or quality of the influent, and to take other administrative or procedural actions as necessary.

(3) Dischargers to a POTW usually pay user fees commensurate with the waste load contributed. New sources to such systems may also be required to share in the capital costs for increasing the capacity of the POTW's collection, treatment, and disposal facilities.

(4) Under the CWA, states have established certain areas for which a regional approach to wastewater treatment is necessary. Such areas have developed section 208 management plans that detail collection and treatment works requirements, timetables for accomplishment of the plan, and requirements for individual participants. Since approved plans are binding on Marine Corps installations within the region, it is imperative that close liaison be established with these planning organizations.

f. Hazardous Pollutant Discharges

(1) In 40 CFR 116, the EPA identifies a list of HS's regulated under the CWA. Title 40 CFR 117 presents the reportable quantities for releases of these HS's. Chapter 9 discusses prevention of HS discharges that may result from accidental spills on land or into waters of the United States.

(2) A POTW which has an NPDES permit is deemed to have a RCRA permit (Permit by rule, 40 CFR 270.60(c)), and it may accept HW for treatment, provided that certain recording, manifesting, and reporting criteria are met. FOTW's are prohibited from treating a HW by section 3023(b) of the FWPCA.

(3) POTW's have a "domestic sewage exclusion" (40 CFR 261.4(a)(1)) that allows domestic sewage and other wastes, even HW's, that pass through the POTW to be excluded from the definition of a solid waste and thus are exempt from RCRA regulation. FOTW's have a similar but conditional "domestic sewage exclusion" (FWPCA section 3023(a)(1-4)), which would allow a waste, even if originally hazardous, to pass through the FOTW and escape RCRA regulation if it has first been processed at a separate wastewater treatment unit (40 CFR 260.10(120)) to meet the applicable industrial categorical pretreatment standards of

40 CFR 405-471. The FFCA excluded solid or dissolved wastes which meet one of the following conditions:

(a) Those subject to a pretreatment standard promulgated in subchapter N (40 CFR 405 through 471) for which the source is in compliance.

(b) Those covered under a pretreatment standard which the EPA is scheduled to promulgate by 1999.

(c) Those not prohibited from land disposal because they have been pretreated in accordance with RCRA section 3004(m).

(d) Those originating from a location which generates less than 100 kilograms of HW per month.

g. Stormwater Discharges

(1) The 1987 CWA amendments established greater regulation of stormwater discharges; the implementing regulations in 40 CFR 122.26 became effective in December 1990. Stormwater discharges from a point source are subject to NPDES permitting if the discharges are associated with industrial activity or are specifically identified as contributing to a violation of water quality standards. The regulations require an NPDES permit for such stormwater discharges made directly to receiving waters or to a municipal storm sewer that is separate from the municipal sanitary sewer. The regulations exclude discharges of stormwater to a combined sewer system or to a POTW.

(2) Applications for an NPDES stormwater permit can be submitted either through the individual permit application process or through a general permit. Installations should coordinate with regional EPA offices and cognizant state regulatory agencies to access the applicability of general or individual permit procedures.

(a) Operators of facilities with stormwater discharges associated with industrial activity which do not obtain coverage under a general permit or which are not eligible for a general permit must submit an individual permit application. The information required for an individual application includes a site drainage map, a narrative description of the site that identifies potential pollutant sources, and quantitative testing data. Stormwater discharges that cannot be authorized by general permits include those:

- 1 With existing effluent guideline limitations for stormwater;
- 2 With an existing NPDES individual or general permit for stormwater discharges; or
- 3 Which are, or may reasonably be expected to be, contributing to a violation of a water quality standard.

(b) Title 40 CFR 122.26(c) specifies the EPA's individual stormwater permit application procedures and information requirements. Applications must be submitted 180 days before the discharge begins or 90 days before the construction activity is due to begin. State regulations generally parallel those of the EPA in requiring that a permit application be filed with the appropriate permitting authority.

(c) General permits are intended to cover the majority of stormwater discharges associated with industrial activity. Dischargers seeking to be covered by a general permit must file a Notice of Intent (NOI) with the appropriate permitting authority. The NOI requirements for the general permit usually address only general information and typically do not require the collection of monitoring data. Title 40 CFR 122.28 provides information regarding general permit NOI filing requirements. The EPA published its final NPDES stormwater multi-sector general permit for industrial activities in the September 29, 1995, Federal Register.

(3) Industrial activities and facilities which can contaminate stormwater and to which these regulations apply may occur on Marine Corps installations. These activities and facilities include HW treatment, storage, and disposal facilities; scrap and waste material processing and recycling facilities; landfills; sewage sludge land application sites; petroleum bulk oil stations and terminals; airfields; wastewater treatment plants with a design capacity of one million gallons per day or greater; and construction activities.

(4) Installations discharging to a separate municipal storm sewer system serving a population of 100,000 or more must submit notification information to the operator of the municipal storm sewer system.

(5) In general, the EPA and state stormwater discharge permit regulations require the permittee to:

(a) File a permit application or NOI.

(b) Determine if any nonstormwater discharges occur. Certain nonstormwater discharges are authorized, such as water from fire fighting activities, hydrant flushing, street cleaning, air-conditioning and compressor condensates, and lawn watering. For other nonstormwaters, the discharger must develop a list of illicit discharges discovered and submit it to the regulatory agency. The agency determines which discharges may be permitted and under what conditions. Any discharges that cannot be permitted must be eliminated. Coordination with Federal and state regulatory agencies is essential to determine applicable requirements.

(c) Prepare and implement a stormwater pollution prevention plan (SWPPP). The plan's objectives should be to identify pollution sources potentially affecting stormwater discharge quality and to describe and implement practices to minimize and control pollutants from the industrial facility. The process for developing an SWPPP includes the following four steps: 1) formation of a qualified pollution prevention team; 2) assessment of potential stormwater pollution sources; 3) selection and implementation of appropriate BMP's and controls; and 4) periodic examination of the plan's effectiveness. Further information is provided in the EPA publication Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices. Chapter 15 of this Manual provides additional information regarding general pollution prevention.

(d) As required by the permit, monitor the discharges, report the results to the permitting authority, and maintain required records.

(e) Comply with any effluent limits placed within the permit.

(6) The EPA's Guidance Manual for the Preparation of NPDES Permit Applications for Stormwater Discharges Associated with Industrial Activity (EPA-505/8-91-002) provides an overview of the permitting process and information regarding the permit application requirements.

h. Waste Disposal Sites

(1) Collected stormwater runoff from waste disposal sites, such as landfills, sewage sludge monofills, and land

application sites, is regulated under an NPDES permit as noted in paragraph 20104.3(f).

(2) Leachate from waste disposal sites must be tested for the hazardous characteristics listed in 40 CFR 261 to determine which disposal method can be used. Landfill leachates have been found to contain high concentrations of toxic organic compounds, metals, and conventional and nonconventional pollutants.

(a) Hazardous leachate must be treated or disposed of in accordance with requirements specified for HW (see chapter 10 of this Manual).

(b) Nonhazardous leachate from waste disposal sites may need to be pretreated prior to discharge to an FOTW or a POTW. Direct discharges of nonhazardous leachate to receiving waters must be permitted under the NPDES. The EPA will propose effluent guidelines and pretreatment for the landfill leachate and incinerator category (40 CFR 437) in 1997. Until those standards are promulgated, the general pretreatment standards (40 CFR 403) apply to leachate discharged to an FOTW or a POTW. The permitting authority will develop treatment and permit requirements for leachate discharged to receiving waters depending upon the quantity and nature of the leachate and its potential impact on the environment.

i. Non-NPDES Discharge Permits

(1) Sanitary and industrial wastewaters and stormwater may be disposed of in a nondischarging manner. Examples of such instances are evaporation/transpiration ponds, leach fields, spreading basins, and land application systems.

(2) Such discharges are not regulated under the NPDES program, but are normally regulated under a state permit program, such as California's "Waste Discharge Requirements." These state permits usually contain limitations and conditions similar to those in NPDES permits, such as monitoring, reporting, and recordkeeping requirements, flow restrictions, pollutant limits, etc. Noncompliance with these state permit conditions is subject to enforcement action by the permitting authority.

3. NPS Control

a. Regulatory Citation. The EPA regulations in 40 CFR 130 specify requirements for NPS management programs. These regulations incorporate CWA section 208 requirements for

development of area-wide waste treatment management plans. They also include CWA section 319 requirements for states to establish NPS pollution management programs through WQM plans.

b. State WQM Plan. The plan must describe the nonregulatory and regulatory programs, activities, and BMP's selected to control NPS pollution where necessary to protect or achieve approved water body uses. The plan must identify BMP's to be employed to reduce specific types of NPS pollution, identify programs to implement the BMP's, develop a schedule with annual milestones for implementing the BMP's, certify that the state has adequate legal authority for administering and enforcing the program, and identify sources of assistance and funding.

c. Contributors to NPS Pollution

(1) Most NPS pollution results from unchannelled runoff of stormwater, snowmelt, or irrigation. This runoff picks up contaminants from tilled land, urban and suburban areas, construction sites, timber harvest areas, mine drainage, and other disturbed areas.

(2) Aboard Marine Corps installations, nonpoint sources include agricultural, silvicultural, and grazing operations (including outleases), firing and training range operations, construction sites, industrial activities without discrete point source conveyances, parking lot and roof runoff, and runoff from lawn maintenance activities, such as fertilizer and herbicide applications, in residential and other garrison areas.

d. Discharge Permits. The EPA and the states do not require discharge permits for nonpoint sources of pollution.

e. BMP's

(1) Where required by states, installations must implement BMP's to control NPS pollution. If not required, installations should implement BMP's as resources allow.

(2) BMP's which can be implemented to reduce NPS pollution include, but are not limited to, the following:

(a) Pollution prevention, such as performing maintenance and storing materials under cover;

(b) Wet and dry stormwater detention and retention ponds with sedimentation manholes and inverted elbows to trap sediments and floatable items;

(c) Constructed wetlands;

(d) Grassed swales;

(e) Forest buffers from 50 to 100 feet wide along streams; and

(f) Fabric screens and hay bales at construction sites to reduce erosion and trap sediments prior to discharge.

f. Waste Disposal Sites

(1) To prevent surface water contamination, 40 CFR 258.25 requires that runoff from the active portion of the landfill unit not cause a discharge of pollutants into waters of the United States, including wetlands, which violates any requirements of the CWA, including NPDES requirements.

(2) Similarly, 40 CFR 258.27(b) prohibits any discharge of a nonpoint source of pollution to waters of the United States, including wetlands, which violates any requirement of an area-wide or state-wide WQM plan that has been approved under CWA section 208 or 319.

(3) If stormwater runoff and uncontrolled leachate discharges to surface waters occur, they must be controlled by an NPDES permit.

g. Reference. The EPA Seminar Publication entitled Nonpoint Source \Watershed Workshop (EPA/625/4-91/027) provides in-depth information for developing and implementing nonpoint source pollution control projects.

4. Septage Treatment and Disposal

a. Regulatory Citations

(1) The EPA regulations define domestic septage as "either liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, or similar treatment works that receives only domestic sewage." Septage that does not meet this definition must be handled and disposed of per 40 CFR 257.

(2) Septage which is land applied must meet the requirements in 40 CFR 503.

b. Septic Tank Management. The EPA regulations for UIC in 40 CFR 146 apply to septic tanks and cesspools which are class V wells by virtue of their drain fields. They contain requirements for construction, operating, monitoring, and reporting.

c. References

(1) The EPA publication entitled Guide to Septage and Disposal (EPA/625/R-94/002) provides concise, practical information on septic tank management and the handling, treatment, and disposal of septage.

(2) The EPA Handbook on Septage and Disposal (EPA-625/6-84-009) presents a review of available design, performance, operation and maintenance, cost, and energy information pertaining to receiving, treatment, and disposal of septage.

5. Groundwater Protection

a. General. Another goal of programs which regulate point and nonpoint sources of water pollution is to prevent groundwater contamination from those sources. Specifically, the WQM plans, UIC program, and WHP program ensure that groundwater sources for drinking water are protected from contamination. Chapter 18 of this Manual provides information regarding groundwater protection requirements applicable to underground storage tanks (UST).

b. State WQM Plans

(1) State WQM plans identify and develop programs to control groundwater pollution resulting from disposal of pollutants on land or in subsurface excavations. States can require installations to monitor groundwater around landfills, leaking UST sites, firing ranges, wastewater oxidation and percolation ponds, septic tank leach fields, fire training pits which use waste fuel, HW storage sites, etc.

(2) States may issue Non-NPDES-discharge permits with pollutant limits intended to protect underlying aquifers from contaminants contained in the discharge using the state WQM plan as the basis for the permit limitations.

c. UIC Program

(1) Title 40 CFR 144 - 148 contains the UIC program regulations. Chapter 16 of this Manual summarizes these regulations and highlights important requirements.

(2) Installations must pay special attention to class V wells, which include certain septic system wells and cesspools, stormwater drainage wells, and dry wells used for waste disposal. To continue to operate these wells under the permit by rule, the installation must submit to the permitting authority an inventory of all wells located on the installation. Improperly managed wells can contaminate groundwater used by the installation for its drinking water supplies.

d. WHP Program

(1) This locally administered program protects community drinking water wells and well fields from contamination sources. Chapter 16 summarizes these regulations and highlights important requirements.

(2) An installation which derives its potable water from on-base wells should survey its agricultural, commercial, industrial, residential, and other activities to identify and locate operations with the potential to release pollutants into the underlying groundwater.

e. References

(1) The EPA Technical Assistance Document, A Review of Sources of Groundwater Contamination from Light Industry (EPA 440/6-90-005), addresses the potential impacts of contamination from light industrial activities on WHP areas. Light industry sectors covered by this document and found at Marine Corps installations include metal products and machinery, scrap material recycling, transportation equipment maintenance, automotive and truck repair, and highway de-icing.

(2) The EPA document, A Groundwater Information Tracking System with Statistical Analysis Capability (EPA/625/11-91/002), provides software and instructions to implement a comprehensive database system designed to store, analyze, and report data generated during groundwater monitoring programs required by RCRA, CERCLA, and the SDWA.

6. Sewage Sludge Use or Disposal

a. Regulatory Citations

(1) The EPA regulations in 40 CFR 268 provide standards for the land disposal of sewage sludge determined to be hazardous under 40 CFR 261.

(2) The EPA regulations in 40 CFR 258 provide the requirements for disposal of sewage sludge in a municipal solid waste landfill.

(3) The EPA regulations in 40 CFR 240 provide the requirements under which sewage sludge may be co-fired in an incinerator with other wastes.

(4) The EPA regulations in 40 CFR 503 provide the standards for the use and disposal of nonhazardous sewage sludge. These standards apply to the following:

(a) Any installation which prepares sewage sludge, applies sewage sludge to land, or fires it in a sewage sludge incinerator, and to the owner/operator of a surface disposal site;

(b) Any sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator;

(c) The exit gas from a sewage sludge incinerator stack; and

(d) The land where sewage sludge is applied, a surface disposal site, and a sewage sludge incinerator.

(5) The EPA regulations in 40 CFR 257 provide the standards for the disposal of nonhazardous sewage sludge on land when the sewage sludge is not disposed through a practice regulated under 40 CFR 503.

b. Permit Requirements

(1) An FOTW, which is classified under 40 CFR 122.2 as a "treatment works treating domestic sewage," must submit an NPDES permit application to comply with the provisions of 40 CFR 503. The application must be submitted to the appropriate permitting authority (either the EPA, or the state, if it has an EPA-approved sludge management program).

(2) For the operation of a sewage sludge incinerator, a Clean Air Act permit application must be submitted to the appropriate permitting authority.

c. Land Application Requirements

(1) Land application includes the spraying or spreading of sewage sludge onto the land surface, the injection of sewage sludge below the land surface, or the incorporation of sewage sludge into the soil so that it can condition the soil or fertilize crops or vegetation.

(2) Marine Corps installations which apply bulk sewage sludge to the land, prepare sewage sludge for application to land off site, sell or give away sewage sludge or a sewage sludge-derived product in a bag or other container, or apply domestic septage to the land must comply with the requirements in 40 CFR 503, subpart B. These requirements include adherence to pollutant ceiling concentrations, cumulative and annual pollutant loading rates, and monthly average pollutant concentrations; management practices; operational standards for pathogens and vector attraction reduction; and monitoring, recordkeeping, and reporting, depending on the quality of the sludge.

d. Surface Disposal

(1) Surface disposal involves the disposal of sewage sludge in an active sewage sludge unit. It does not include the treatment or storage of sewage sludge on land in preparation for ultimate use or disposal.

(2) If the same sewage sludge is stored at a site for more than 2 years, the permitting authority can determine that the storage site has become an active sewage sludge unit unless the installation can explain extenuating circumstances for delaying disposal.

(3) Marine Corps installations which dispose of sewage sludge at an active sewage sludge unit must comply with the requirements in 40 CFR 503, subpart C. These requirements include proper location of an active sewage sludge unit; submission of closure and post closure plans 180 days prior to closure of the unit; sewage sludge pollutant concentrations; management practices; operational standards for pathogens and vector attraction reduction; and monitoring, recordkeeping, and reporting.

e. Pathogens and Vector Attraction Reduction. The EPA regulations in 40 CFR 503, subpart D, provide the following requirements for pathogen and vector attraction reduction in sewage sludge:

(1) Class A pathogen control requirements for application of bulk sewage sludge to a lawn or garden or when sewage sludge is sold or given away in a bag or other container.

(2) Either class A requirements or class B requirements with appropriate site restrictions for application of bulk sewage sludge to agricultural land, forest land, a public contact site, or a reclamation site or for disposal in an active sewage sludge unit.

(3) Appropriate pH treatment and/or site restrictions when domestic septage is applied to agricultural or forest land or a reclamation site.

(4) At least one of the appropriate vector attraction reduction requirements in 40 CFR 503.33 for all forms of land application or disposal of sewage sludge or domestic septage.

f. Incineration

(1) Marine Corps installations which fire sewage sludge in a sewage sludge incinerator must comply with the requirements in 40 CFR 503, subpart E. These requirements include adherence to National Emission Standards for beryllium and mercury in 40 CFR 61, subparts C and E, respectively; pollutant limits for arsenic, cadmium, chromium, lead, and nickel as calculated by the appropriate equations in 40 CFR 503.43; operational standards for total hydrocarbons or carbon monoxide; management practices; and monitoring, recordkeeping, and reporting.

(2) Compliance with pathogen and vector attraction reduction requirements is not required for facilities which fire sewage sludge in a sewage sludge incinerator.

7. Dredge and Fill Operations

a. Permits

(1) Installations which intend to construct a dam, dike, dock, pier, or other structure, or to dredge, fill, or otherwise alter or modify navigable waters or wetlands must apply to the COE district engineer or authorized state agency for an

individual permit, unless the discharge is allowed under a nationwide or regional general permit.

(2) The EPA and COE regulations in 40 CFR 230 and 33 CFR 320, respectively, explain the basis of the dredge and fill permit system:

(a) 33 CFR 321 explain regulations for a COE permit to construct a dam or dike.

(b) 33 CFR 322 contains regulations for a COE permit to construct a structure in, or one that will affect, waters of the United States.

(c) 33 CFR 323 sets forth regulations for a COE permit to discharge dredged or fill material in waters of the United States.

(d) 33 CFR 325 specifies application requirements for individual COE permits.

(e) 33 CFR 330 contains regulations regarding general nationwide permits.

(f) 40 CFR 233 provides procedures on state permit programs regulated by the EPA for discharge of dredged or fill material.

(3) If the district engineer determines that a water quality certification for the proposed activity is necessary under CWA section 401, the district engineer will inform the installation of this requirement. The installation must obtain a state certificate indicating that the activity complies with applicable state effluent limitations, water quality related effluent limitations and standards, water quality implementation plans, and toxic effluent limitations. If the state includes any monitoring requirements, these must be forwarded to the COE district engineer for consideration with the permit application.

(4) An installation which is located within a state operating under an approved coastal zone management program must ensure that the proposed activity is consistent with the state CZMA management program. If the proposed activity is not consistent with the state CZMA program, the district engineer cannot make a decision on the permit application until the installation and the state have implemented the procedures specified in the CZMA for resolving their disagreements.

(5) The COE and states with EPA-approved dredging control programs may issue a general permit applicable for 5 years to categories of similar actions that will cause minimal environmental effects either singularly or cumulatively. The general permit may be issued on a state, regional, or national basis. Projects covered by a general permit do not require individual permits, although some additional individual requirements, such as revocation or modification for specific activities due to adverse environmental impact, may be applied by the COE or states on a case-by-case basis.

b. Permit Exemptions

(1) Normal agricultural, silvicultural, and ranching activities, such as plowing, cultivating, minor drainage, harvesting, and water conservation practices are exempt from regulation under CWA section 404.

(2) Federal construction projects specifically authorized by Congress for which an Environmental Impact Statement (EIS) has been written and submitted to Congress do not require COE or state permits, as specified in section 404(r) of the CWA.

c. Discharges of Dredged or Fill Material

(1) Discharges of dredged or fill material into waters under COE jurisdiction must comply with Federal regulations and the terms of the individual or general permit issued for that activity.

(2) Discharges into waters under the jurisdiction of states with approved dredging control programs must comply with applicable state permits and discharge regulations, including state fee schedules.

(3) Disposal site selection may entail field sampling and analyses. An elutriate and bioassay test may be required to determine if the proposed dredged materials should be classified as polluted or unpolluted. Other surveys, including site monitoring, may be required at disposal sites before, during, and after discharge of the dredged or fill material.

8. Ocean Disposal

a. Prohibited Disposal. Ocean disposal of other than dredged material, including any materials collected from Marine

Corps installations or units, is prohibited by the MPRSA unless authorized by an EPA permit.

 b. Permits

1. No permit may be issued for ocean disposal of biological, chemical, and radiological warfare agents, high level radioactive waste, and medical waste.

(2) Under section 102 of the MPRSA, the EPA is the authority for issuing all permits for the transportation from the United States, or for the transportation from Outside the Continental United States Marine Corps installations, of any material for the purpose of dumping it in ocean waters at locations where the EPA Administrator determines such dumping will not unreasonably degrade or endanger human health or the marine environment.

(3) Under section 103 of the MPRSA, the COE is the authority for issuing all permits for the transportation of dredged material that will be disposed of in ocean waters. Installations which intend to transport or contract for the transportation of dredged material for ocean disposal must apply to the COE district engineer for an individual permit. EPA Regional Administrators have the authority to review, to approve or to disapprove, or to propose conditions upon Dredged Material Permits for ocean dumping. The EPA regulations for reviewing these COE permits are specified in 40 CFR 225.

(4) The EPA and COE regulations in 40 CFR 220 and 33 CFR 324, respectively, explain the basis of the ocean disposal permit systems:

(a) The 33 CFR 325 specifies application requirements for individual COE ocean disposal permits.

(b) The 40 CFR 221 contains EPA permit application requirements.

(c) The 40 CFR 222 sets forth EPA regulations pertaining to approval of ocean dumping permit applications.

(d) The 40 CFR 227 provides EPA regulations pertaining to evaluation of permit applications for the ocean dumping of material.

(5) Permit applications must be accompanied by an Environmental Assessment (EA) which includes an examination of the environmental impact criteria set forth in 40 CFR 227, subpart B.

c. Reporting and Recordkeeping. The EPA regulations in 40 CFR 224 require permittees to maintain appropriate records and to submit periodic reports to the EPA Administrator.

9. CZMA Consistency Determinations

a. Regulatory Citation. The National Oceanic and Atmospheric Administration regulations in 15 CFR 930 implement the CZMA. Marine Corps actions affecting the coastal zone must be as consistent as possible with approved state management plans, unless such consistency is prohibited based upon requirements of existing laws applicable to the installation and the mission of the Marine Corps. Actions affecting the coastal zone include those that take place outside the coastal zone but affect any land or water use or natural resource within the coastal zone. Chapter 11 of this Manual provides further information regarding the CZMA and its applicable regulations.

b. Consistency Determination. The consistency determination may employ any format as long as it complies with the requirements contained in 15 CFR 930, subpart C. A consistency determination must be prepared for the following:

- (1) Development projects within the coastal zone (15 CFR 930.33),
- (2) Nondevelopment projects within the coastal zone which may affect the coastal zone, and
- (3) Installation- or unit-sponsored actions taking place outside the coastal zone but which may impact the coastal zone.

20105. TERMS AND DEFINITIONS

1. BMP. Methods, measures, or practices selected by an agency to meet its nonpoint source control needs including, but not limited to, structural and nonstructural controls and operation and maintenance procedures (40 CFR 130).

2. Coastal State. A state of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico,

Long Island Sound, or one or more of the Great Lakes. This term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands, and American Samoa (section 304, CZMA).

3. Coastal Waters. In the Great Lakes area, the waters within the jurisdiction of the United States consisting of the Great Lakes, their connecting waters, harbors, roadsteads, and estuary-type areas such as bays, shallows, and marshes; in other areas, those waters, adjacent to the shorelines, which contain a measurable quantity or percentage of sea water, including, but not limited to, sounds, bays, lagoons, bayous, ponds, and estuaries (section 304, CZMA).

4. Coastal Zone. The coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder) that strongly influence each other and that remain close to the shorelines of the several coastal states, as well as islands, transitional and intertidal areas, salt marshes, wetlands, and beaches (section 304, CZMA).

5. Designated Uses. Those uses specified in water quality standards for each water body or segment whether or not they are being attained (40 CFR 131). Such uses can include public water supply, contact recreation, noncontact recreation, cold water fishery, warm water fishery, shellfishing, etc.

6. Discharge

a. Under NPDES, the addition of any pollutant or combination of pollutants to waters of the United States from any point source (40 CFR 122).

b. Under OPA, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping, excluding NPDES-permitted discharges identified under section 402 of the CWA (40 CFR 110).

7. Disposal Site. An interim or ultimately approved and precise geographical area within which the dumping of wastes into the ocean is permitted under specified conditions (40 CFR 228).

8. Dredged Material. Material that is excavated or dredged from waters of the United States (33 CFR 323).

9. Dumping. A disposal and discharge of material, which does not include any effluent from any outfall structure, that is

regulated under the provisions of the CWA, under the provisions of section 13 of the Rivers and Harbors Act, or under the provisions of the Atomic Energy Act. Dumping does not mean a routine discharge of effluent incidental to the propulsion of, or operation of motor-driven equipment on, vessels (40 CFR 220).

10. Effluent Limitation. Any restriction imposed by the acting director (EPA Regional Administrator or state NPDES-approved program director, as appropriate) on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean (40 CFR 122).

11. FOTW. A facility that is owned and operated by a department, agency, or instrumentality of the Federal Government, which treats wastewater, a majority of which is domestic sewage, prior to discharge in accordance with a permit issued under section 1342 of the FWPCA.

12. Fill Material. Any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body (33 CFR 323).

13. Indirect Discharger. A nondomestic discharger introducing pollutants to a publicly owned treatment works (40 CFR 122). For the purposes of this Manual, an indirect discharger would include any industrial activity which discharges non sanitary wastewater or waste into a MCOTW.

14. IWTP. A wastewater treatment facility that discharges treated industrial effluent directly or indirectly into waters of the United States.

15. Load or Loading. An amount of matter (material) or thermal energy that is introduced into a receiving water. Loading can be either man-caused (pollutant loading) or natural (natural background loading) (40 CFR 130).

16. Material. Matter of any kind or description, including, but not limited to, dredged material; solid waste; incinerator residue; garbage; sewage; sewage sludge; munitions, radiological, chemical, and biological warfare agents; radioactive materials; chemicals; biological and laboratory waste; wrecked or discarded equipment; rock; sand; excavation debris; and industrial, municipal, agricultural, and other waste (40 CFR 220). This term does not include sewage from vessels as defined in section 312 of the CWA.

17. NPDES. The national program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits and for imposing and enforcing pretreatment requirements under sections 307, 402, 318, and 405 of the CWA. The term includes approved state, interstate, or tribal programs (40 CFR 122).

18. Nonpoint Source Discharges. Discharges, typically in the form of runoff, that are not conveyed through a single point source. Major operations that result in nonpoint source discharges include agricultural activities, grazing, timber harvesting, construction, range activities, and improper waste disposal practices.

19. Ocean Waters. Waters of the open seas lying seaward of the baseline from which the territorial sea is measured, including the waters of the territorial sea, the contiguous zone, and the oceans (40 CFR 220).

20. Permit

a. Under NPDES, an authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of 40 CFR 122, 123, and 124. Permit includes an NPDES general permit, but does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit (40 CFR 122).

b. Under the CWA section 404 program, a written authorization issued by an approved state to implement the requirements of 40 CFR 233, or by the Marine Corps under 33 CFR Parts 320 - 330, which includes general permits, as well as individual permits (40 CFR 232).

21. Point Source. Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, and 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 (40 CFR 122).

22. Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt,

and industrial, municipal, and agricultural waste discharged into water. A pollutant is not 1) "sewage from vessels" as defined in section 312 of the CWA or 2) water, gas, or other material that is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well. In this case the well used either to facilitate production or for disposal purposes is one approved by authority of the state in which the well is located; however, the state must determine that such injection or disposal will not result in the degradation of ground or surface water resources (40 CFR 122).

23. Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or introducing such pollutants into a POTW. The reduction or alteration may be accomplished by physical, chemical, or biological processes, operational process changes, material substitutions, or by other approved means.

24. POTW. Any device or system (including recycling and reclamation) used in the treatment of municipal sewerage or industrial wastes of a liquid nature which is owned by a state or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment (40 CFR 122).

25. Runoff. Water that drains overland from any part of a facility.

26. Sediment. Solid material, such as clay, gravel, mud, silt, sand, and organic matter that moves from its site of origin and settles to the bottom of a water course or water body.

27. Septage. The liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or from a holding tank when the system is cleaned or maintained (40 CFR 122).

28. Sewage Sludge. Any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. It includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment; scum, septage, portable toilet pumpings; type III marine sanitation device pumpings; and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during incineration of sewage sludge (40 CFR 122).

29. Sewage Sludge Use or Disposal Practice. The collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge (40 CFR 122).
30. Territorial Sea. The belt of seas measured from the baseline, in accordance with the Convention on the Territorial Sea and the Contiguous Zone (the line of ordinary low water located along the coast that is in direct contact with the open sea and the line marking the seaward limits of inland waters), and extending seaward at a distance of 3 nautical miles (40 CFR 230).
31. Treatment Works Treating Domestic Sewage. A POTW, FOTW, or any other sewage sludge or wastewater treatment device or system, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge (40 CFR 122).
32. Toxic Pollutant. Any pollutant listed as toxic under section 307(a)(1) of the CWA or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA (40 CFR 122). Toxic pollutants include those that have been determined by the EPA as causing death, disease, behavioral abnormalities, cancer, genetic mutations, physical deformities, or physiological malfunctions.
33. Underground Injection. A well injection which consists of the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the well dug is greater than the largest surface dimension (40 CFR 144).
34. Wasteload Allocation. The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution (40 CFR 130).
35. Water Quality Standards. Provisions of state or Federal law which consist of a designated use or uses for the waters of the United States, and water quality criteria for such waters based upon such uses (40 CFR 130).
36. Waters of the United States. All waters which are currently used, or 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; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, perennial and intermittent streams,

mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The use, degradation, or destruction of these waters could affect interstate or foreign commerce, including waters used for recreational, industrial, or other purposes (e.g., fishing, harvesting shellfish, etc.); impoundments of waters otherwise defined herein; tributaries of waters identified above; the territorial seas; and wetlands adjacent to waters identified above (33 CFR 328).

37. Whole Effluent Toxicity. The aggregate toxic effect of an effluent measured directly by a toxicity test (40 CFR 122). Toxicity tests can be conducted to measure "acute" and "chronic" toxic effects.

CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 2: MARINE CORPS POLICY

20200. GENERAL

1. Marine Corps installations in the United States will comply with all substantive and procedural WQM regulations established by the EPA or those states that have been granted primary enforcement responsibility.

2. Marine Corps installations within foreign countries will comply with the applicable Final Governing Standards (FGS)/Japan Environmental Governing Standards or the Overseas Environmental Baseline Guidance Document if no FGS has been published.

20201. POINT SOURCE CONTROL

1. Marine Corps policy directs the reduction or elimination of wastewater treatment and disposal needs through a pollution prevention program. This program should examine and implement wastewater volume and pollutant reductions through process changes, materials substitution, cooling water recycling, water conservation practices and equipment, wastewater reclamation and reuse, and wastewater collection system maintenance and renovation to decrease groundwater infiltration and stormwater inflow. Ensure that the environmental management hierarchy (EMH) is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements. The Pollution Prevention Act establishes the following order of preference for the EMH:

- a. Source reduction,
- b. Recycling,
- c. Treatment, and
- d. Disposal.

2. The use of a regional or municipal POTW will be the preferred method for wastewater collection, treatment, and disposal

whenever an analysis of life-cycle costs and environmental impacts indicates that the use of a POTW is more economical and environmentally beneficial than constructing/upgrading and operating an FOTW. Economic components used in the analysis should include any capital cost contributions to the POTW for a prorated share of system capacity; continuing user fees and surcharges; pretreatment costs; and FOTW capital; operation and maintenance costs, including expenses for permit fees, monitoring, utilities, equipment repair and replacement; solids handling and disposal; chemical usage; and personnel staffing, training, and certification. The environmental analysis should include surface and groundwater quality and quantity issues, threatened and endangered species impacts, and archaeological, cultural, and natural resources issues.

3. The installation and operation of Marine Corps owned wastewater treatment and disposal facilities are authorized whenever a municipal system or other alternatives are not available or cost-effective.

4. The Marine Corps encourages wastewater reclamation for reuse; this option should be studied during planning for the construction of new wastewater facilities or for renovation, expansion, or the upgrading of existing facilities. Reuse options pertain to industrial wastewater recycling, aquifer recharge, constructed wetlands, wildlife habitat mitigation or enhancement; and to the irrigation of parade decks, athletic fields, golf courses, forests and tree lines, and garrison and residential landscaping; and to outleased areas used for agriculture, silviculture, or grazing.

5. Job descriptions for Marine Corps wastewater treatment plant and collection system operators must require a state certification, or license, or the ability to obtain and maintain a certification or license as a condition of employment at all facilities where state certification requirements apply, as stipulated in the Federal Personnel Manual (Supplement 271-1, subchapters 3-4, "License and Credentials").

6. The CMC (LF) supports funding for annual refresher training for all plant and collection system operators, especially for safety-related courses. Training sources include the EPA, state environmental and health departments, local colleges and universities, extension courses, and private firms.

7. Marine Corps laboratories which perform wastewater and stormwater analyses as required in permit monitoring conditions

must be certified under applicable regulations of the Federal, state, or local permitting authority, if required. Appropriate chain of custody procedures will be used to track samples collected for analysis. The 40 CFR 136 contains EPA test procedures for analyzing water pollutants.

20202. NONPOINT SOURCE CONTROL

1. Marine Corps installations must implement BMP's to control nonpoint source pollution.
2. Stormwater from military construction projects that increase impervious surfaces must be managed in accordance with state regulations and engineering practices that manage the quantity and quality of stormwater runoff.
3. Lease terms for agricultural, silvicultural, and grazing operations will include requirements for implementing BMP's for pesticide, fertilizer, and erosion controls to reduce contaminated runoff.

20203. SEPTAGE TREATMENT AND DISPOSAL

1. Marine Corps installations with septic tanks will ensure that these tanks do not contaminate adjacent surface waters or groundwaters.
2. A periodic inspection program must be developed to determine when pumping is required and if any structural defects, such as broken baffles or cracked pipes, exist. The recommended frequency is every 4 to 5 years.
3. Marine Corps installations may select their own preferred method of septage disposal. If land disposal is selected, the installation or its contractor must adhere to the requirements in 40 CFR 503.

20204. GROUNDWATER PROTECTION

1. Underground injection of wastes will be used only as a last resort at Marine Corps installations after all other disposal alternatives have been considered and rejected as unfeasible. Any underground injection well, including those within class V,

will be operated in compliance with the UIC program and applicable permits.

2. Marine Corps installations will inventory all class V wells to determine whether pollutants are discharged into underlying aquifers. Class V wells include certain septic system wells and cesspools, stormwater drainage wells, and dry wells used for waste disposal, such as those found in motor pools.

20205. SEWAGE SLUDGE USE AND DISPOSAL

1. The preferred method of sewage sludge disposal is the beneficial use at land application sites, as regulated under 40 CFR 503. This method requires the effective pretreatment of industrial wastes, including proper management of oil/water separators, to prevent contamination of sewage sludge. An effective monitoring program is also necessary to ensure compliance with subpart B requirements.

2. If sewage sludge is transported off site for disposal, the installation will ensure that the disposal agent acts in accordance with applicable regulations and permits.

20206. DREDGE AND FILL OPERATIONS

1. Marine Corps installations proposing to undertake any action requiring a COE permit must apply to the COE District Engineer for the district in which the proposed activity is to be conducted. The installation may request assistance from the cognizant Naval Facilities Engineering Command Engineering Field Division/Activity (EFD/EFA) in preparing and submitting the permit application. Applications for COE permits are normally initiated by the EFD/EFA at the 35 percent design stage. Whenever a potential requirement for a COE permit under this section is identified, initiate consultation with the CMC (LF).

2. A National Environmental Policy Act (NEPA) analysis must be conducted for any actions that will require an individual permit for dredge and fill activities or the loss of wetlands. Because this process is complex and lengthy, it must be initiated well in advance of developing and filing the permit applications. Further information on the NEPA process is provided in chapter 12 of this Manual.

3. COE permits are required by Marine Corps installations for the following actions:
 - a. The construction of a dam or dike (33 CFR 321);
 - b. The construction of a structure in, or one that will affect, waters of the United States (33 CFR 322);
 - c. Dredging projects for navigation to enhance morale, welfare, and recreational activities (33 CFR 322);
 - d. The discharge of dredged or fill material into the navigable waters of the United States, including wetlands (33 CFR 323); and
 - e. The transportation of dredged material for dumping in ocean waters (33 CFR 323).
4. Existing disposal sites, approved by the COE, should be used wherever possible. Proposed new disposal sites should be identified and reported to the cognizant COE district engineer for evaluation and approval 2 to 3 years before project initiation.
5. If a land disposal site is proposed, consideration must be given to the liquid runoff and leaching potential of undesirable chemical constituents and to any NPDES-permit requirements. Requests for revalidation of existing permits for maintenance dredging and disposal must be received by the COE at least 6 months prior to expiration of the permit.
6. A permit for maintenance dredging will include an expiration date that will not extend more than 10 years from the issue date. A request for renewal from the COE must be filed with the cognizant District Engineer at least 1 year before expiration.
7. The COE or the supporting EFD/EFA may be requested, on a cost-reimbursable basis, to prepare or assist in the preparation of an EA/EIS for projects requiring a COE permit.
8. Early planning for dredge spoil disposal site selection, preparation, and use is essential to avoid unnecessary costs and delays.

20207. OCEAN DUMPING. Except in emergency situations (e.g., jet fuel dumped from aircraft in an emergency situation to safeguard life), ocean dumping may be authorized only on a case-by-case basis by the EPA. Requests for such authorization must be accompanied by an EA (see chapter 12). Full compliance with EPA regulations (40 CFR 220-229) is required.

20208. COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY DETERMINATIONS. Marine Corps installations must review proposed actions to identify those that directly affect the coastal zone. For all activities affecting the coastal zone, provide a consistency determination to the appropriate state agency at least 90 days prior to final approval for the activity.

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 3: RESPONSIBILITIES

20300. CMC (LF)

1. Provide information and advice to installation commanders and tenants regarding proposed and final rules and regulations pertaining to WQM and uniformly apply Marine Corps policy as set forth in the Manual.
2. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
3. Conduct special environmental compliance and protection studies with regard to water quality management to assist in establishing policy or initiating actions.
4. Ensure, through field visits and the Environmental Compliance Evaluation Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to water quality regulations.
5. Track Marine Corps progress toward meeting established water quality goals.

20301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES
RESERVE (COMMARFORRES)

1. Identify and submit to the CMC (LFL) and the CMC (LFF) project documentation and funding requests for water quality management facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with water quality management requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, pollution prevention alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all water quality management projects.
3. Ensure that a base or station order is written to implement the specifications of this chapter. This requirement can be accomplished either by writing a comprehensive base order to implement all of this Manual, or by writing a separate base order to implement the contents of this chapter alone.
4. Identify and submit to the CMC (LFL) and (LFF) project documentation and funding requests for wastewater sources, collection systems, and treatment facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with wastewater treatment requirements.
5. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all wastewater treatment projects.
6. Identify applicable effluent limitations, new toxic pollutant effluent standards, pretreatment standards, wastewater discharge problems associated with solid waste disposal sites, and nonpoint source requirements pursuant to regional plans under section 208 of the CWA.
7. Coordinate the review of all projects for the construction of new or upgraded treatment works with the appropriate EPA, state, and regional offices to ensure early identification of discharge permit conditions and limits, siting restrictions, innovative treatment alternatives, wastewater reclamation criteria, and sewage sludge use or disposal options.
8. Use innovative treatment technology where technically and economically feasible in the designs for the construction of new or the upgrading of existing wastewater treatment plants.
9. Ensure that management programs and controls exist to comply with applicable regulations, permit limits, monitoring, recordkeeping, and reporting requirements for wastewater and stormwater discharges from point and nonpoint sources.

10. Identify training and certification needs for operators of treatment and collection system facilities, and allocate needed resources.
11. Use municipal or regional wastewater collection and disposal systems to the maximum extent feasible.
12. Maintain a liaison with the COE and state or area-wide planning organizations to ensure that Marine Corps interests are considered during regional wastewater treatment planning or to facilitate dredge/fill projects.
13. If responsible for operation of a FOTW:
 - a. Notify the cognizant permitting agency of any changes in wastewater input to the treatment plant that may affect the ability of the plant to comply with applicable requirements.
 - b. Operate and maintain the collection system, treatment works, and effluent discharge facilities to ensure compliance with applicable permit requirements.
14. Provide the resources for monitoring, sampling, and testing, as well as for maintaining and demonstrating compliance with permit and pretreatment requirements; maintain records of all monitoring information.
15. Identify pollution prevention measures, devices, systems, and procedures to reduce the total generation of wastewater volume and pollutants.
16. Ensure that adequate access to wastewater generating and treatment facilities is provided to the EPA, state, and local pollution control authorities for the purpose of waste stream sampling and the inspection of operations and records.
17. Ensure that coordination occurs as appropriate with the Safety Office in matters relating to wastewater discharges, sewage sludge use or disposal, dredge and fill operations and, POL management.

20302. COMMANDERS RESPONSIBLE FOR DISCHARGES TO FEDERALLY OWNED TREATMENT
WORKS (FOTW) AND PUBLICLY OWNED TREATMENT WORKS (POTW)

1. Comply with all applicable pretreatment requirements. This includes providing the necessary resources for monitoring, sampling, recordkeeping, and reporting.

2. Implement procedures to notify operators of treatment works receiving Marine Corps discharges of any changes in discharges or of accidental pollutant discharges.

CHAPTER 21

WASTE MILITARY MUNITIONS

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CHAPTER 21

WASTE MILITARY MUNITIONS

SECTION 1: INTRODUCTION

21100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for managing waste military munitions (WMMs).

21101. APPLICABILITY

1. See paragraph 1101

2. Each installation should obtain copies of its respective State and local WMM management requirements. Each commander of a deployed unit shall be aware of new or additional WMM management requirements.

3 Marine Corps military munitions management activities in foreign countries shall comply with all Department of Defense (DOD) policies and standards and applicable Marine Corps Orders, primarily reference (a), as amended or superceded.

21102. BACKGROUND. Under Federal regulations implementing reference (b), WMM may be considered hazardous waste (HW) military munitions and subject to regulation by the U.S. Environmental Protection Agency (EPA) or a state and/or locality. Consequently, should the Marine Corps fail to properly manage WMM that are determined to be HW under the EPA and/or State and/or local HW military munitions management requirements; Federal, State, and/or local regulators may have the authority to issue the Marine Corps Notices of Violation and assess fines and penalties.

21103. FEDERAL REQUIREMENTS

1. Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S.C. 6901 et seq.). Congress enacted RCRA to protect human health and the environment from hazards associated with solid waste (SW) and HW generation, transportation, treatment, storage, and disposal. Major RCRA revisions resulted from Congressional passage of the Federal Facility Compliance Act (FFCA).

2. FFCA, Section 107; P.L. 102-386, 1992; 42 U.S.C. 3004(y). This Act amended RCRA in 1992 with an emphasis on strengthening EPA's authority to enforce RCRA at Federal facilities. FFCA section 107, added as section 3004(y) of RCRA, required the EPA, in consultation with DOD, to promulgate regulations identifying when military munitions (both chemical and conventional) become HW. It also required the EPA and DOD to provide for the safe storage, transportation, and disposal of such wastes.

3. Military Munitions Rule (MR): 40 CFR part 266, Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Systems - Subpart M Military Munitions, 12 February 1997. The MR became effective on 12 August 1997, to clarify the applicability of RCRA to military munitions and establish the regulatory roles for Federal, State, and/or local regulators and the military regarding HW military munitions management. In promulgating the MR, the EPA chose to regulate military munitions as a special type of RCRA HW. The MR generally applies to military munitions use on operational ranges (i.e., inactive and active ranges). The MR does not apply to used or fired military munitions remaining on closed, transferring, or transferred (CTT) ranges.

21104. REGULATORY CONCEPTS

1. Definition of WMM. Because the MR addresses when conventional military and chemical munitions become SW, and potentially HW, it has a significant impact on the manner in which military munitions are managed on installations. Important MR concepts are discussed below.

a. SW Military Munitions. Under section 202 of reference (c), the EPA has established specific conditions under which military munitions are considered regulatory SW.

(1) Use for Intended Purpose. Military munitions are not considered regulatory SW and; therefore, cannot be regulatory HW, if they are:

(a) Used for their intended purpose (e.g., training of infantry, aviation ordnance personnel, ammunition technicians, explosive ordnance disposal personnel, and/or combat engineers);

(b) Used during research, development, testing, and/or evaluation; and/or

(c) Destroyed during operational range clearance.

(2) Unused SW Military Munitions. Unused military munitions are considered regulatory SW; and, therefore, potentially a regulatory HW if they are:

(a) Abandoned by disposal (e.g., buried or landfilled), burned, incinerated, or treated prior to disposal;

(b) Removed from storage for the purpose of disposal or treatment prior to disposal;

(c) Deteriorated, leaking, or are damaged to the point that they can no longer be put back into serviceable condition and cannot be reasonably recycled or used for other purposes; and/or

(d) Declared a regulatory SW by a Designated Disposition Authority (DDA).

(3) Unused Military Munitions. Unused military munitions are not considered regulatory SW if they are being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subject to material recovery activities.

(4) Used or Fired SW Military Munitions. Military munitions that have been used or fired are considered regulatory SW and potentially regulatory HW when they are:

(a) Transported off-range for the purpose of treatment or disposal;

(b) Recovered, collected, and disposed by burial either on or off-range; and/or

(c) Fired, land off-range, and are not promptly rendered safe or retrieved.

2. HW Military Munitions Accumulation and Storage. Compliance with reference (d), as implemented by reference (e); reference (a); and reference (f); all as amended or superseded, are mandatory, regardless whether HW military munitions are accumulated on site for less than 90 days or are stored under a conditional exemption (CE) or in a permitted storage facility,

provided such accumulation or storage complies with applicable Federal, State, and/or local HW management requirements.

a. Conditional Exemption (CE) for HW Military Munitions Storage. Under section 205 of reference (c) or to the extent authorized by applicable State and/or local requirements, storage of non-chemical HW military munitions may be granted a CE from otherwise applicable HW storage requirements as per reference (b) provided the HW military munitions are stored in accordance with reference (d), as implemented by references (e), (a), and (f); all as amended or superceded. Waivers and exemptions to reference (d) are not authorized for units storing HW military munitions under a CE. When removed from CE storage for transportation to a non-military owned or operated treatment, storage, or disposal facility, HW military munitions become subject to applicable regulatory HW transportation requirements as per reference (b). In addition to any applicable Federal, State, and/or local HW management requirements, the following requirements must be met for CE unit storage:

(1) Notification. Each installation's environmental office shall, within 90 days after the date each unit is first used to store HW military munitions under CE, notify the appropriate Federal, State, and/or local regulatory authorities of the location of any CE storage unit used to store HW military munitions.

(2) Inventories and Records. Each installation shall conduct an annual inventory and quarterly inspections of HW Military Munitions stored under a CE to ensure compliance with DOD Explosive Safety Board storage standards. Records of the inventories and inspections shall be maintained in accordance with SSIC 8011. Records of inventories and inspections shall also be shared with and maintained by the installation environmental office and be available for inspection. Records shall also contain the following:

(a) The type of HW military munitions stored by standard nomenclature, Lot Number, Federal Supply Class, National Stock Number, DOD Identification Code, and condition code;

(b) The quantity of each type of HW military munitions stored;

(c) The date that each type of military munitions were identified as HW;

(d) The initial storage date for each type of HW military munitions;

(e) The storage location for each type of HW military munitions (e.g., building number or storage pad, and grid coordinates);

(f) The disposition of each type of HW military munitions (e.g., destroyed, demilitarized, and transported for treatment and/or disposal) and the date of action; and

(g) For all HW military munitions shipped off site for treatment and/or disposal, the HW transporter(s) name(s) and the name(s) of the receiving facilities.

(3) Releases. Any loss, theft, and/or unpermitted or uncontrolled detonation, release, discharge, or migration of HW military munitions and/or munitions constituents out of any CE storage unit that creates a risk to human health or the environment shall result in the immediate loss of a CE for those HW military munitions. Installations shall report any such occurrence to cognizant Federal, State, and/or local regulatory authority within 24 hours after discovery. If the initial report is by telephone, a written report shall be provided to cognizant Federal, State, and/or local regulatory authority no later than five days after discovery.

(4) Closure of Units Storing HW Military Munitions Under a CE. In addition to complying with requirements for closure of ammunition storage facilities as per reference (d), as amended or superceded, installations shall notify cognizant Federal, State, and or local regulatory authority, in writing, at least 45 days before permanent closure of a CE storage unit. Installations shall, within 90 days after completing closure activities, forward a certification of closure signed by the appropriate military authority and an independent professional engineer to cognizant Federal, State, and or local regulatory authority.

(5) CE Loss and Reinstatement. Failure to comply with applicable Federal, State, and/or local requirements for CE storage may result in loss of the CE. Reinstatement of the CE is possible after corrections are made to ensure compliance with

applicable CE storage requirements and an application for reinstatement is approved or deemed approved by cognizant Federal, State, and or local regulatory authority. Installation environmental offices are responsible for notifying cognizant Federal, State, and or local regulatory authority regarding CE use, loss, and reinstatement.

b. Other HW Accumulation and Storage. Pending off-site transportation for treatment and/or disposal, if HW military munitions cannot be stored under a CE, then they must be accumulated (e.g., satellite or 90-day accumulation) as HW or be stored in a facility that may accept the waste according to its RCRA storage facility permit. Chapter 9 of this Manual discusses regulatory HW storage requirements as per reference (b). In general, in addition to any applicable Federal, State, and/or local HW storage facility construction and operation, preparedness and prevention, emergency planning, recordkeeping, reporting, monitoring, corrective action, closure, and post-closure standards or requirements, HW military munitions storage shall comply with the requirements of references (a) and (d), as amended or superceded.

3. HW Military Munitions Transportation

a. General. Subject to more stringent State and/or local requirements, the MR does not regulate HW military munitions transportation occurring within an installation boundary. In addition, regulatory HW transportation requirements as per reference (b) are not generally applicable to intra-installation transportation on a public or private right-of-way that is within or immediately alongside an installation boundary.

b. Conditional Exemption (CE) for Transportation. In addition to any applicable Federal, State, and/or local requirements applicable to the transportation of HW military munitions, transportation of non-chemical HW military munitions may be managed under a CE from HW transporter requirements as per reference (b) provided the following conditions are met:

(1) The HW military munitions are transported in accordance with DOD and Department of Transportation shipping controls applicable to military munitions transportation;

(2) The HW military munitions are transported from a military-owned or operated installation to a military-owned or operated treatment, storage, or disposal facility;

(3) If HW military munitions undergoing CE transportation are lost or stolen or if the CE transportation fails to comply with CE transportation conditions and the failure may endanger health or the environment, the loss, theft, and/or CE transportation violation must be orally reported to the cognizant Federal, State, and or local regulatory authority within 24 hours after discovery; and

(4) If HW military munitions undergoing CE transportation are lost or stolen or if the CE transportation fails to comply with CE transportation conditions and the failure may endanger health or the environment, the loss, theft, and/or CE transportation violation must be reported, in writing, to the cognizant Federal, State, and or local regulatory authority within 5 days after discovery. The written submission shall contain a description of the circumstances concerning the loss, theft, and/or CE transportation violation. Installation transportation, ammunition, and environmental offices shall maintain copies of each submission.

c. Loss and Reinstatement of a CE. Failure to comply with applicable Federal, State, and or local CE transportation requirements may result in loss of the CE. Reinstatement of the CE is possible after corrections are made that ensure compliance with all applicable CE requirements, and an application for reinstatement is approved or deemed approved by cognizant Federal, State, and or local regulatory authority. Installation environmental offices are responsible for notifying cognizant Federal, State, and or local regulatory authority regarding CE use, loss, and reinstatement.

d. Transportation Requirements When a CE is Not Applicable. A CE is not applicable to HW military munitions transportation to or from a non-military-owned or operated installation when such transportation requires transportation on a public or private right-of-way that is not within or immediately alongside an installation boundary. In addition to ensuring any applicable Federal, State, and/or local HW transportation standards are met, installations utilizing non-CE HW military munitions transportation shall comply with HW transportation requirements in

references (a), (g), and (h), all as amended or superceded, and ensure the following requirements are met:

(1) The installation environmental office shall be contacted before the HW military munitions are transported to or from the installation;

(2) The HW military munitions transporter shall use Hazardous Waste Manifests; and

(3) The installation environmental office shall sign all hazardous waste manifests.

4. Explosives or Munitions Emergency Response. Under the MR, explosives or munitions emergency responses are not subject to RCRA generator, transporter, and permit requirements. An explosives or munitions emergency is a situation where there is an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an Explosive Ordnance Disposal (EOD) technician.

5. Training Requirements

a. General Training. Installation environmental office personnel and personnel involved with handling, storage, transportation, and treatment of WMM (e.g., explosive ordnance disposal (EOD) and ammunition supply point (ASP) personnel) shall receive initial and refresher HW management training. Installations shall document that all personnel receive the required training. The training shall be equivalent to the training requirements applicable to:

(1) 29 CFR part 1910.120, Hazardous Waste Operations and Emergency Response;

(2) 40 CFR part 260, Hazardous Waste Management System, General;

(3) 40 CFR part 261, Identification and Listing of Hazardous Waste;

(4) 40 CFR part 262, Standards Applicable to Generators of Hazardous Waste;

(5) 40 CFR part 263, Standards Applicable to Transporters of Hazardous Waste;

(6) 40 CFR part 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, with Special Attention Paid to Subpart X, Miscellaneous Units; and Subpart EE, Hazardous Waste Munitions and Explosives Storage;

(7) 40 CFR part 266, Subpart M, Military Munitions; and

(8) 49 CFR parts 171-180, Standards for Transportation of Hazardous Materials.

b. Recordkeeping. Units shall maintain their environmental training records and have them available for inspection. The aforementioned records must be retained on board and cannot be destroyed. The installation environmental office may maintain copies of all training records. Military Occupational Specialty Individual Training Standard (ITS) records shall be maintained in accordance with reference (i), as amended or superceded.

21105. TERMS AND DEFINITIONS

1. Ammunition. A device charged with explosives, propellants, pyrotechnics, or initiating composition or chemical material for use in connection with defense or offense, including demolitions, training, ceremonial, or non-operational purposes.

2. HW. A SW that is hazardous, as defined in section 3 of reference (j) or by applicable State and/or local requirements.

3. HW Military Munitions. Military munitions that meet the definition of HW as defined in section 3 of reference (j) or by applicable and/or local requirements.

4. Military Munitions. Defined in section 10 of reference (k) or by applicable State and/or local requirements. The Federal regulatory definition means all ammunition products and components produced or used by or for the DOD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term, "military munitions," includes: confined gaseous, liquid, and solid propellants; explosives; pyrotechnics; chemical and riot control agents; smokes; and incendiaries used by DOD components,

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. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under reference (1), as amended, have been completed.

5. Military Range. Defined in section 201 of reference (c) or by applicable State and/or local requirements. The Federal regulatory definition means designated land and water areas 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.

6. Operational Range. A military range that is used for range operations and activities, or a military range that is not currently being used, but that is still considered to be a range, is under the jurisdiction, custody, or control of the DOD, and has not been put to a new use that is incompatible with range activities. Operational ranges include both "Active Ranges" (i.e., currently in service or use) and "Inactive Ranges" (i.e., not in current use or service) as these terms are defined in section 201 of reference (c) or by applicable State and/or local requirements.

7. Range Residue. Any residual material left on a range after a training exercise (e.g., hard targets, bunker construction material, concertina wire, sandbags, lifting plugs, and packaging material such as wooden boxes, pallets, strapping, and cardboard containers).

8. SW. Discarded material as defined in section 2 of reference (j) or by applicable State and/or local requirements.

CHAPTER 21

WASTE MILITARY MUNITIONS

SECTION 2: MARINE CORPS POLICY

21200. GENERAL. Installations and units in the United States (and overseas U.S. territories) shall comply with all applicable DOD, Marine Corps, Federal, State, and local requirements regarding HW military munitions management. Compliance with all aspects of an EPA-approved State HW management program is deemed to be in compliance with otherwise applicable Federal requirements. If a State HW management program is not EPA-approved, installations and units in the state shall comply with the most stringent Federal and State requirements. Marine Corps activities in foreign countries shall, as applicable, follow reference (m) or applicable country-specific Final Governing Standards (FGSs) establishing environmental compliance requirements for Marine Corps activities in foreign countries.

21201. WMM MINIMIZATION. The Marine Corps shall reduce the quantity of HW disposed of by using source reduction and recycling. The Navy Demilitarization Office and the Commanding General Marine Corps Systems Command (MARCORSYSCOM), via the process, minimize WMM.

21202. RANGE OPERATIONS

1. Operations Not Subject to the Munitions Rule

a. Use for Intended Purpose. Military munitions are not considered regulatory SW and, therefore, cannot be regulatory HW if they are used for their intended purpose. The following are examples of intended use in military training:

(1) Consistent Use. Use of military munitions to sustain or enhance Marine Battle Skills, Military Occupational Specialty (MOS) skills, or ITS in accordance with applicable orders and directives.

(2) Unused Propellant. Destruction of unused propellant, when such destruction is conducted as a result of MOS training required by an ITS.

(3) Range Sweeps. Range sweep operations when conducted on an operational range to destroy military munitions posing a safety hazard.

(4) Retargeting Operations. Operations to mitigate unexploded ordnance (UXO) hazards on or near targets being removed from operational range impact areas to allow safe movement of non-EOD-trained personnel. Retargeting operations shall be documented as training.

2. Operations Subject to the MR. The following activities are subject to provisions of reference (c) and/or other applicable Federal, State, and/or local HW management requirements (note: some of the activities are prohibited by Marine Corps policy):

a. Used Military Munitions Transported Off-Range for Disposal. Used military munitions, if recovered and removed from an operational range for the purpose of storage or treatment prior to disposal are considered SW and potentially HW military munitions. Military munitions removed from an operational range for research, development, test, and evaluation; reuse; or repair are not SW until declared so by the DDA.

b. Burial. Unused or used military munitions disposed of by deliberate burial on or off an operational range are SW and may be subject to RCRA corrective action. Burial of any military munitions as a method of disposal is strictly prohibited.

c. Fired Off-Range. Military munitions that land off an operational range that are not promptly rendered safe in accordance with EOD 60-series publications and/or retrieved are SW and may be subject to EPA action using its RCRA imminent hazard authority.

3. Recordkeeping

a. Range Records. All operational range use and military munitions expenditures will be permanently recorded. Such records will be the responsibility of the installation Range Control office and maintained in the Range Facility Management Support System and will include the following information:

(1) Expenditure of all military munitions including military munitions type, quantity, location, using unit, and estimated dud rate;

(2) UXO clearance operations or EOD incidents conducted on or off operational ranges including military munitions type, quantity, and location; and

(3) The coordinates of all areas known or suspected of containing UXO.

(4) The records mentioned above must be retained on board and cannot be destroyed.

b. Training Records. Units shall maintain operational range training records with supporting documentation in accordance with SSIC 8027. The aforementioned records must be retained on board and cannot be destroyed. Documentation supporting use of military munitions for training shall be developed and maintained according to references (a) and (i), both as amended or superseded.

4. Range Residue

a. Information. Range residue (e.g., hard targets, bunker construction material, concertina wire, sandbags, lifting plugs, and packaging material such as wooden boxes, pallets, strapping, cardboard containers) is considered a SW and possibly a HW when removed from an operational range for the purpose of disposal. Due to its exposure and close proximity to military munitions and military munitions-related items, range residue is assumed to contain explosives hazards until certified otherwise by a technically qualified person.

b. Certified Range Residue. A technically qualified person shall certify all range residue as being free from explosives hazards before it is removed from an operational range for the purpose of disposal.

c. Non-certified Range Residue. All non-certified range residue shall be managed as explosives containing material in accordance with reference (a). Uncertified range residue shall remain on military ranges until certified free of explosives hazards by a technically qualified person.

d. Segregation. Range residue that has been certified free of explosives hazards by a technically qualified person shall be segregated and secured from uncertified range residue.

e. Release to the Public. Materials presenting a potential explosives hazard, particularly range residue gleaned from operational range impact areas, shall only be transported to entities that are qualified to receive, process, recycle, and dispose of such material.

21203. EOD EMERGENCIES. The following procedures are established to ensure compliance with reference (c) and/or other applicable Federal, State, and/or local HW management requirements during explosives or munitions emergency response.

1. Explosives or Munitions Emergency. EPA HW management guidance is limited when explaining what constitutes an explosive or munitions emergency. Accordingly, the DOD has established two levels of emergency response. These levels are determined by on-scene EOD response personnel.

a. Immediate Response (Level 1). Level 1 responses are necessary when immediate threats to human health, public safety, property, or the environment exist. When EOD response personnel are dispatched to an explosives or munitions emergency, they should assume that the situation requires, from an explosives safety standpoint, a Level 1 response. During a Level 1 response, EOD response personnel should take whatever action is necessary to control or eliminate imminent threats to human health (including safety) or the environment (including property). Such actions include transporting the explosives hazard to a safer location for defusing, detonation, or the performance of render-safe procedures. A Level 1 response does not require a permit, including an emergency permit. When extenuating circumstances (e.g., adverse weather or nightfall) delay the completion of necessary action, response action may be delayed if the explosives or munitions are in a safe and secure environment, or actions are implemented to create such a situation. The installation environmental office shall be immediately notified of the response.

b. Imminent and Substantial Endangerment Response (Level 2). A Level 2 response is necessary when an emergency poses an imminent and substantial endangerment to human health and the environment. These emergency responses are subject to Federal,

State, and/or local HW management requirements (e.g., emergency permits). Accordingly, if EOD response personnel determine an emergency response can be delayed to obtain an emergency permit without compromising safety or increasing the risk posed by the explosives or munitions emergency, then such permits should be requested. Explosives or munitions emergency response specialists should consult with the applicable host installation's environmental office in this circumstance. When requesting an emergency permit, certain information should be known, such as the type and location of the munitions involved and the manner in which the munitions will be transported and treated or disposed.

2. Coordination. EOD technicians shall coordinate any explosives or munitions emergency response actions with the installation environmental office personnel. The installation shall coordinate any response requiring an EOD Technician with the appropriate state regulatory officials. This can be done by preparing a Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA), if applicable. After the initial response it is the installation's responsibility to coordinate any environmental cleanup actions that may be required.

3. EOD Recordkeeping. EOD shall maintain call sheets for all emergency responses. The aforementioned records must be retained on board and cannot be destroyed.

21204. MUNITIONS DISPOSITION PROCESS

1. Background. In response to EPA's promulgation of reference(c), the military services developed reference (e), effective 1 July 1998. Reference (e) created the DDA process including the procedures used to request disposition instructions for excess, obsolete, unserviceable, and WMM.

2. Disposition Process. The military munitions disposition process includes a request for disposition instruction and a subsequent instruction from the appropriate DDA or inventory manager. Specific information regarding the military munitions disposition process for Class V(W) munitions is found in references (a) and (n), both as amended or superseded. Reference (e) contains specific information on the DDA and procedures for declaring WMM.

21205. RANGE MANAGEMENT PLANS. Installations shall develop range management plans in accordance with reference (o), as amended or superceded.

CHAPTER 21

WASTE MILITARY MUNITIONS

SECTION 3: RESPONSIBILITIES

21300. HEADQUARTERS MARINE CORPS, FACILITIES AND SERVICES
DIVISION (CMC (LF))

1. Develop Marine Corps WMM implementation policy and coordinate that policy with Commander Marine Corps Systems Command (COMMARCORSYSCOM), installations, the DOD, and, as appropriate, non-DOD entities.
2. Audit ongoing Marine Corps compliance with applicable Federal, State, and/or local HW military munitions requirements and report compliance trends to appropriate organizations.
3. Assist installations in resolving HW military munitions management disputes with Federal, State, and/or local regulatory agencies.
4. Provide environmental expertise to the implementation process (e.g., Subpart X permitting issues, WMM transportation procedures, and overall environmental compliance) as per reference (c).
5. Promote Marine Corps awareness of military munitions resource, recovery, and recycling (R3) methods. Coordinate with COMMARCORSYSCOM to distribute R3 information to installations.

21301. COMMARCORSYSCOM. As the Marine Corps Executive Agent for military munitions life-cycle management and the DDA for Class V(W) military munitions:

1. Support CMC (LF) WMM management policy development and monitoring.
2. Per reference (a), as amended or superseded, provide installations disposition instructions for Class V(W) ammunition.
3. When requested by CMC (LF), augment the MR portion of Environmental Compliance Evaluations with qualified personnel.

4. Promote Marine Corps awareness of military munitions resource, recovery, and R3 methods. Coordinate with CMC (LF) to distribute R3 information to installations. Coordinate with TECOM-RTAM for those R3 functions on operational ranges.

21302. COMMANDING GENERAL/COMMANDING OFFICER (CG/CO) OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE FORCES RESERVE

1. Identify, evaluate, and comply with: (a) applicable Federal, State, and local HW military munitions management requirements; or (b) reference (m) or applicable country-specific FGSSs.

2. Designate an individual responsible for coordinating the HW military munitions component of the installation HW management program.

3. Include HW military munitions in the installation's HW Management Plan and contingency plan.

4. Designate, in writing, environmental office personnel authorized to sign HW military munitions manifests.

5. Designate personnel technically qualified to certify range residue as being free from explosives hazards.

6. Ensure all range residue and other material presenting a potential explosives hazard are certified as free from explosives hazards before their release to the public.

7. Ensure installation personnel coordinate with CMC (LF), MARCORSYSCOM, and other appropriate entities on HW military munitions matters of DOD, Department of the Navy, Marine Corps, and/or regional significance.

8. Designate installation environmental office personnel responsible for coordinating HW military munitions compliance matters with CMC (LF) and Federal, State, and/or local regulators.

9. Forward recommendations for improving the MRIP and HW military munitions policy to CMC (LF) and COMMARCORSYSCOM.

10. Program and budget for services, personnel, facilities, and equipment necessary to comply with: (a) applicable Federal, State, and local HW military munitions management requirements; or (b) reference (m) or applicable country-specific FGSSs.

11. Implement HW military munitions management training programs and train personnel involved with HW military munitions management.

12. Assist tenants in developing their HW military munitions management programs.

13. Coordinate HW military munitions management among installation EOD, Range Control, environmental personnel, explosives safety, and ammunition management personnel.

14. With participation from installation tenants, modify installation orders or instructions to comply with this chapter. This responsibility may be accomplished by writing HW military munitions management standard operating procedures.

21303. MARINE CORPS REGIONAL ENVIRONMENTAL COORDINATORS

1. Coordinate, both within the region and with Headquarters Marine Corps, significant regional installation WMM management issues.

2. Assist installation environmental office personnel with developing and implementing MOU/MOA for explosives or munitions emergency response.

21304. CG/CO OF MARINE CORPS TENANT COMMANDS/UNITS

1. Participate in the updating of host installation's HW military munitions management orders and/or instructions.

2. Develop tenant command/unit orders and/or instructions necessary to implement the host installation's HW military munitions management program.

3. Designate HW military munitions management personnel responsible for coordinating command/unit HW military munitions compliance matters with the host installation.

4. Comply with: (a) applicable Federal, State, and local HW military munitions management requirements; or (b) reference (m) or applicable country-specific FGSS.

5. Assist the host installation in completing regulatory reports involving HW military munitions and the Marine Corps Pollution Prevention Annual Data Summary.

6. Program and budget for services, personnel, facilities, and equipment necessary to comply with: (a) applicable Federal, State, and local HW military munitions management requirements; or (b) reference (m) or applicable country-specific FGSS.

7. Train HW military munitions management personnel. Utilize, when possible, the host installation's HW management training program.

REFERENCES

- (a) MCO P8020.10A
- (b) 42 U.S.C. 6901-6992k
- (c) Title 40, Code of Federal Regulations, Part 266, "Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities," 2006 edition
- (d) DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards," October 1, 2004,
- (e) Department of Defense Policy to Implement the EPA's Military Munitions Rule, July 1, 1998
- (f) NAVSEA OP 5, Volume 1
- (g) MCO 4400.16G
- (h) MCO 4450.12A
- (i) NAVMC Directive 3500.78
- (j) Title 40, Code of Federal Regulations, Part 261, "Identification and Listing of Hazardous Waste," 2006 edition
- (k) Title 40, Code of Federal Regulations, Part 260, "Hazardous Waste Management System: General," 2006 edition
- (l) 42 U.S.C. 2011-2296
- (m) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (n) NAVSUP P-724, "Conventional Ordnance Stockpile Management", Chapter 5
- (o) MCO 3570.1B

APPENDIX A

FEDERAL ENVIRONMENTAL STATUTES, REGULATIONS,
EXECUTIVE ORDERS, AND MILITARY MANDATES

A. FEDERAL STATUTES

1. Alternative Motor Fuel Act of 1988, as Amended (Public Law 100-494). This Act was enacted by Congress to achieve long-term energy security and to improve air quality by encouraging the production of alternative fuel vehicles (AFVs). The Act requires a portion of the new vehicles that the Federal Government acquires each year to be AFVs.

2. American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996). This Act states the policy of the United States to protect and preserve for Native Americans their inherent rights of freedom to believe, express, and exercise the traditional religions of Native Americans, Eskimos, Aleuts, and Native Hawaiians. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremony and traditional rites.

3. Antiquities Act of 1906 (16 U.S.C. 431-433). This Act provides for the protection of historic and prehistoric ruins and objects of antiquity on Federal lands and for the authorized scientific investigation of antiquities on Federal lands, subject to permits and other regulatory requirements.

4. Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469 et seq.). This Act directs Federal agencies to notify the Secretary of the Interior when any Federal construction project of a Federally licensed activity or program may cause irreparable loss or destruction of significant scientific, prehistoric, historic, or archaeological data. The Act also provides a mechanism for funding the protection of historic and archaeological data.

5. Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. 470(aa) et seq.). This Act prohibits the removal, sale, receipt, and interstate transportation of archaeological resources obtained illegally (without permits) from public or Native American lands and authorizes agency permit procedures

for investigations of archaeological resources on public lands under the agency's control. Public Law 100-555 amended the ARPA to require the Secretaries of the Interior, Agriculture, and Defense 1) to develop plans for surveying the lands under their control to determine the nature and extent of archaeological resources, and 2) to prepare a schedule for surveying those lands that are likely to contain the most scientifically valuable archaeological resources.

6. Atomic Energy Act (AEA) of 1954, as Amended (42 U.S.C. 2011 et seq.). This Act amended the AEA of 1946, which had placed complete power for atomic energy development in the hands of the Atomic Energy Commission. The Act was passed to promote the peaceful uses of nuclear energy through private enterprise and to implement President Eisenhower's Atoms for Peace Program. The Act allowed the Atomic Energy Commission to license private companies to use nuclear materials and to build and operate nuclear power plants. The purpose of the Act is to assure the proper management of source, special nuclear, and byproduct material. The AEA and amendments delegate the control of nuclear energy primarily to the Department of Energy, the Nuclear Regulatory Commission, and the Environmental Protection Agency (EPA).

7. Bald Eagle Protection Act of 1940, as Amended (16 U.S.C. 668 et seq.). This Act, amended in 1972, prohibits the killing, harassment, possession, or selling of bald eagles. The Act also imposes penalties for the possession of bald eagles or eagle parts taken from birds after June 1940. The Act provides an exemption for the use of bald eagle parts in Native American religious ceremonies, provided that the appropriate permit is granted to the tribe by the United States Fish and Wildlife Service.

8. Base Closure and Realignment Act (BRAC) of 1988 (Public Law 100-526). This Act, as amended in 1990 (PL 101-510), was enacted by Congress to select bases for realignment and closure as a part of overall military downsizing. The Act contains provisions which provide for the BRAC Environmental Restoration Program. This program ensures that the property is not released for public use until all hazardous waste (HW) has been removed from the property. Ultimately, this cleanup process may prevent the transfer of cleaned parcels of land in the otherwise

required six-year time frame. However, the Act does not prevent the Marine Corps from initiating and executing lease agreements with interested parties before cleanup is complete.

9. Clean Air Act (CAA) of 1970, as Amended (42 U.S.C. 7401 et seq.). This Act, the major Federal legislation concerning the control of the Nation's air quality, requires the setting of National Ambient Air Quality Standards and the development of Federal and State programs to achieve these standards through the control of air pollution sources. The Act also provides for the EPA's delegation of authority to states to conduct air pollution control programs. The 1990 amendments (Public Law 101-549) stress pollution control and prevention.

10. Clean Water Act (CWA) of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). This Act is a compilation of decades of Federal water pollution control legislation. The Act amended the Federal Water Pollution Control Act (FWPCA) and requires Federal agency consistency with state nonpoint source pollution abatement plans. The CWA is the major Federal legislation concerning improvement of the Nation's water resources. The Act was amended in 1987 to strengthen enforcement mechanisms and to regulate stormwater runoff. The Act provides for the development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters. The CWA contains specific provisions for the regulation of dredge soil disposal within navigable waters and for the placement of material into wetlands. Permits are required under sections 401, 402, and 404 for proposed actions which involve wastewater discharges and/or dredging/placement of fill in wetlands or navigable waters. These permits are required prior to the initiation of proposed actions. Certain proposed actions may implicate State review and water quality certification jurisdiction under section 401 of the Act, resulting in the imposition of conditions designed to ensure consistency with state water quality standards.

11. Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. 1451 et seq.). This Act provides incentives for coastal states to develop and implement coastal area management programs. The Act plays a significant role in water pollution abatement, particularly with regard to nonpoint source pollution. State coastal zone management programs frequently incorporate flood control, sediment control, grading control, and stormwater

runoff control statutes. Under the CZMA, Federal actions that have a direct impact on the coastal zone must be consistent to the maximum extent practicable with the State program. These state statutes must be considered when addressing the water pollution impacts of Marine Corps projects.

12. Community Environmental Response Facilitation Act (CERFA) of 1992 (Public Law 102-426). This Act amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), section 120(h), Property Transferred by Federal agencies. CERFA requires the Federal government, before the termination of Federal activities on any real property owned by the government, to identify real property where no hazardous substances (HS) or petroleum was stored, released, or disposed of. CERFA further clarifies "remedial action taken" in CERCLA section 120(h)(3).

13. CERCLA of 1980, as Amended (42 U.S.C. 9601 et seq.). This Act was enacted to deal with health and environmental hazards caused by past HW management practices. As amended by the Superfund Amendments and Reauthorization Act (SARA), the Act requires the EPA to promulgate revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (the National Contingency Plan (NCP)). The NCP establishes the process for determining appropriate removal and remedial action for the Nation's most serious Superfund HW sites. Additionally, the NCP establishes the national framework for planning and response to oil discharges and HS releases. The NCP assigns responsibilities for contingency planning and response to various Federal agencies, including the Department of Defense (DOD), and outlines State and local government and public and private interest group participation in these areas. The NCP also specifies notification procedures for certain oil discharges and HS releases.

14. Conservation Programs on Military Reservation (Sikes Act) of 1960, as Amended (16 U.S.C. 670(a) et seq.). This Act requires each military department 1) to manage natural resources and to ensure that necessary services are provided for the management of fish and wildlife resources on each installation, 2) to provide their personnel with professional training in fish and wildlife management, and 3) to give priority to contracting work with Federal and State agencies that have responsibility for the conservation or management of fish and wildlife. The Act authorizes cooperative agreements with State and local

governments, non-governmental organizations, and individuals that call for each party to provide matching funds or services to carry out natural resources projects and initiatives.

15. Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). Also known as SARA, Title III, this Act focuses on the hazards associated with toxic chemical releases. Most notably, specific sections of EPCRA require the immediate notification of releases of extremely HS and CERCLA-defined HS to State and local emergency response planners. EPCRA requires State and local coordination in planning response actions to chemical emergencies. The Act also requires certain industries to submit information on chemical inventories and fugitive emissions.

16. The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). This Act determines and protects both plant/animal species and their critical habitats that are threatened or endangered. The Act prohibits any Federal action that may jeopardize such species and provides for the designation of critical habitat of such species wherein no action is to be taken concerning degradation of the habitat. The Act requires a biological assessment of Federal agency actions when an endangered or threatened species may be present in the area affected by the actions.

17. Energy Policy Act of 1992 (Public Law 102-486). This Act seeks to reduce the Nation's dependency on imported oil and to improve energy efficiency. It includes provisions on government purchases of AFVs, electricity, and global warming research. The Act promotes energy efficiency and renewable energy and uses a mixture of voluntary and mandatory measures, requiring new efficiency standards for appliances that use energy and water.

18. Energy Policy and Conservation Act of 1975, as Amended (42 U.S.C. 6201 et seq.). This Act increases the supply of petroleum reserves, while concurrently lowering the demand for those products. The Act provides for the creation of a Strategic Petroleum Reserve, the implementation of price incentives to increase the supply of fossil fuels, the regulation of certain energy uses, and the reduction in demand for petroleum products through programs designed to promote the use of coal. The Act also provides for the increased energy

efficiency of automobiles, major appliances, and other consumer products, as well as the conservation of water via efficiency improvements in plumbing.

19. Federal Facilities Compliance Act of 1992 (Public Law 102-386). This Act amends the Solid Waste Disposal Act (SWDA) to waive governmental immunity, subject Federal agencies to civil and administrative penalties, and require payment of any nondiscriminatory charges that are assessed in connection with a Federal, State, or local solid waste (SW) or HW regulatory program. The Act also provides Federally Owned Treatment Works with the same sewage exclusion from HW regulation as afforded to Publicly Owned Treatment Works.

20. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947, as Amended (Public Law 92-516, 7 U.S.C. 136 et seq.). This Act provides the principal means for preventing environmental pollution from pesticides through product registration and applicator certification. The Act requires that all pesticide products registered by the EPA must have label instructions for use, storage, and disposal on each container (label instructions are legally applicable to all users). Under FIFRA, the EPA is required to accept certain pesticides under recall for safe disposal. It is unlawful to purchase, distribute, or use any pesticide that does not have an EPA registration number or for which registration has been canceled or suspended, or to apply, store, or dispose of any pesticide or container in any manner inconsistent with applicable regulations. The Act was amended in 1972 by the Federal Environment Pesticide Control Act, and subsequently in 1975 and 1978.

21. Federal Noxious Weed Act of 1974 (7 U.S.C. 2801 et seq.). This Act provides for the control and eradication of noxious weeds and their regulation in interstate and foreign commerce. The Act requires a general or specific permit from the Secretary of Agriculture for the movement of noxious weeds identified in the regulation into or through the United States unless such movement is from Canada.

22. Federal Property and Administrative Services Act of 1949 (10 U.S.C. 484 et seq.). This Act contains provisions on the sale of recyclable materials.

23. Federal Tort Claims Act of 1946, as Amended (28 U.S.C. 2671 et seq.). This Act substitutes the United States as the party defendant in cases alleging negligent action by a Federal employee or service member.

24. FWPCA of 1972, as Amended (33 U.S.C. 1251 et seq.). As the precursor to the CWA, this Act contains virtually all the same tools and enforcement mechanisms that the CWA contains. The CWA amendments of the FWPCA in 1977 redefined the contaminants of concern, which had previously been oxygen-demanding materials. The FWPCA is usually referred to as the CWA.

25. Fish and Wildlife Conservation Act of 1980 (16 U.S.C. 2901 et seq.). This Act promotes State programs for the purpose of conserving, restoring, or otherwise benefiting nongame fish and wildlife, and their habitat.

26. Forest and Rangeland Renewable Resource Planning Act of 1974 (16 U.S.C. 1600-1614). Imposes requirements designed to ensure the effective management, use, and protection of the National Forest System.

27. Freedom of Information Act of 1966, as Amended (5 U.S.C. 552). This Act provides the mechanisms and procedures by which Federal agency information is distributed to the public.

28. Hazardous and Solid Waste Amendments (HSWA) of 1984 (Public Law 98-616). See SWDA.

29. Hazardous Materials Transportation Act (HMTA) of 1975 (49 U.S.C. 5101 et seq.). This Act regulates the shipping, marking, labeling, placarding, and recordkeeping requirements for hazardous materials (HM), including HW and military munitions. The Act applies to the transportation of HM by rail car, aircraft, vessels, interstate, and foreign carriers by motor vehicle. Substances covered by the Act are HW, HS, flammable cryogenic liquids in portable tanks and cargo tanks, and marine pollutants. The Act is administered by the Department of Transportation (DOT).

30. Hazardous Materials Transportation Uniform Safety Act (HMTUSA) of 1990 (Public Law 101-615). This Act clarifies the maze of conflicting Federal, State, and local regulations relating to the transportation of HM. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate

regulations for the safe transport of HM in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. The Act includes provisions to encourage uniformity among different state and local highway-routing regulations, to develop criteria for the issuance of Federal permits to motor carriers of HM, and to regulate the transport of radioactive materials.

31. Historic Sites, Buildings, and Antiquities Act of 1935 (Public Law 74-292, 16 U.S.C. 461 et seq.). This Act lists national historic sites and sets forth Federal policy to preserve historic and prehistoric properties of national significance. The Act enables the Secretary of the Interior to protect nationally significant historic resources and includes the authority to establish and acquire nationally significant sites.

32. Low-Level Radioactive Waste Policy Act of 1980, as Amended (42 U.S.C. 2021b et seq.). This Act mandates that radioactive waste be disposed of in the State, or the associated compact, where it is generated. The Act also transfers the responsibility for the storage and disposal of low-level radioactive waste from the Federal government to the States or compacts, excepting several cases in which the Federal government is responsible for the generation of regulated wastes.

33. Magnuson Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq.). This Act halts overfishing by foreign fleets and aids the development of the domestic fishing industry. The Act gives the United States sole management authority over living resources within its jurisdictional waters.

34. Marine Mammal Protection Act of 1972, as Amended (16 U.S.C. 1361 et seq.). This Act protects marine mammals and establishes a marine mammal commission.

35. Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.). This Act, also known as the Ocean Dumping Act, protects oceanic waters from dumping. The Act provides for the establishment of procedures for regulating the transportation of materials into the oceans for the purpose of dumping. The Act

prohibits the dumping of sewage sludge after December 31, 1991.

36. Migratory Bird Treaty Act of 1918, as Amended, (16 U.S.C. 703 et seq.). This Act prohibits taking or harming a migratory bird, its eggs, nests, or young without the appropriate permit.

37. Military Construction Authorization Act, Passed Annually. This Act is an annual update of military construction projects.

38. Military Construction Codification Act of 1982 (Public Law 97-214). This Act provides guidance for the sale of certain recyclable materials.

39. Military Reservation and Facilities: Hunting, Fishing, and Trapping Act of 1958 (Public Law 85-337, 10 U.S.C. 2671). This Act requires that all hunting, fishing, and trapping activities on military installations be conducted in accordance with the State fish and game laws in which the installation is located. Appropriate State licenses must be obtained for these activities on the installation.

40. National Energy Conservation Policy Act of 1978 (Public Law 95-619). This Act promulgates conservation measures and efficiency standards to control the growth rate of energy demands.

41. National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.). This Act ensures that environmental factors are given the same consideration as other factors in decision making by Federal agencies. Through the environmental impact statement requirements, NEPA mandates that all Federal agencies consider the environmental effects of, and any alternatives to, all proposals for major Federal actions that significantly affect the quality of the human environment. The Act also established the Council on Environmental Quality in the Executive Office of the President.

42. National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.). This Act provides for the nomination, identification (through listing on the National Register of Historic Places (NRHP)), and protection of historical and cultural properties of significance. The Act establishes specific procedures for compliance, including initial review authority by the cognizant State Historic Protection Officer.

43. Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq.). This Act requires Federal agencies to establish procedures for identifying Native American groups associated with cultural items on Federal lands, to inventory human remains and funerary objects in Federal possession, and to return such items upon request to affiliated groups. The Act also requires that any discoveries of cultural items covered by this statute must be reported to the head of the cognizant Federal entity, who will notify the appropriate Native American tribe or organization and cease activity in the area of discovery for at least 30 days.

44. Noise Control Act of 1972 (42 U.S.C. 4901 et seq.). This Act authorizes the establishment of Federal noise emissions standards for products distributed in commerce and coordinates Federal research efforts in noise control.

45. Noxious Plant Control Act of 1968 (43 U.S.C. 1241 et seq.). This Act requires the head of Federal departments and agencies to allow a state having a program for the control of noxious plants to enter upon any Federal lands, for the purpose of controlling noxious plants, if certain criteria are met.

46. Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.). This Act ensures safe and healthful working conditions by authorizing the enforcement of the standards developed under the Act; by assisting and encouraging the states in their efforts to ensure safe and healthful conditions; and by providing for research, information, education, and training in the field of occupational safety and health.

47. Oil Pollution Act (OPA) of 1990 (Public Law 101-380, 33 U.S.C. 2702 et seq.). This Act prohibits the harmful discharges of oil and HS into waters of the United States or discharges which may affect natural resources owned or managed by the United States. The Act amended section 311 of the CWA to augment Federal response authority, increase penalties for oil spills, expand the organizational structure of the Federal response framework, and provide an emphasis on preparedness and response activities.

48. Outdoor Recreation - Federal/State Program Act (16 U.S.C. 460(L) et seq.). This Act requires consultation with the National Park Service regarding management for outdoor recreation.

49. Pollution Prevention Act of 1990 (42 U.S.C. 13101 et seq.). This Act establishes the national policy that pollution should be prevented at the source whenever feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible, pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible, and disposal or other release into the environment should be employed only pursuant to a permit and only as a last resort and should be conducted in an environmentally safe manner.

50. Public Buildings Cooperative Use Act of 1976 (Public Law 94-541). This Act encourages the adaptive reuse of historic buildings as administrative facilities for Federal agencies or activities.

51. Resource Conservation and Recovery Act (RCRA) of 1976, as Amended (42 U.S.C. 6901 et seq.). This Act gives the EPA and delegated States the authority to regulate the generation, transportation, treatment, storage, and disposal of HW ("cradle-to-grave" management). The most significant of the ten subtitles of RCRA is subtitle C, which establishes the national HW management program. The 1986 amendments to RCRA provide the EPA and delegated states with regulatory authority over underground storage tanks (USTs) containing HS and petroleum. RCRA focuses only on active and future facilities. Of particular note is section 3004(u) (i.e., corrective action) by which the EPA or a state may require the cleanup or a schedule for investigation and cleanup of all inactive Solid Waste Management Units on an installation before issuing a RCRA part B permit for current HW operations at the installation. Note that cleanup standards may be different under RCRA than under CERCLA.

52. Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.). This Act, commonly referred to as the Refuse Act, provides authority to the United States Army Corps of Engineers to issue or deny permits for the construction of dams, dikes, or other structures in or affecting navigable waters of the United States.

53. Safe Drinking Water Act (SDWA) of 1974 (42 U.S.C. 300(f) et seq.). This Act amended the Public Health Service Act and specifies a system for the protection of drinking water supplies through the establishment of contaminant limitations and enforcement procedures. The EPA has two kinds of promulgated

contaminant limitations: primary drinking water standards to protect public health and secondary drinking water standards to protect public welfare. This Act requires each state to adopt a program to protect wells within its jurisdiction from contamination. States have the primary responsibility to enforce compliance with national primary drinking water standards and sampling, monitoring, and notice requirements. The 1996 amendments (Public Law 104-182) to the SDWA include new regulations based on risk and public health concerns. These regulations include prohibiting the use of lead in plumbing that carries potable water and the listing of unregulated contaminants which pose a health threat or which are known to occur in public water supplies. Additionally, the amendments waive sovereign immunity for Federal facilities.

54. Sikes Act. See Conservation Programs on Military Reservation of 1960.

55. Soil Conservation Act of 1938 (16 U.S.C. 5901 et seq.). This Act provides for the application of soil conservation practices on Federal lands.

56. SWDA of 1965, as Amended (42 U.S.C. 3251 et seq.). The HSWA extended and strengthened the provisions of the SWDA, as amended by RCRA. Subtitle I of HSWA provides for the development and implementation of a comprehensive regulatory program for USTs containing HS, petroleum products, and releases of those substances into the environment. HS regulated under subtitle I include any substance listed in section 101(14) of CERCLA.

57. SARA of 1986 (Public Law 99-499). This Act reauthorized CERCLA to continue cleanup activities around the country. An \$8.5 million appropriation was authorized for the "Superfund" program. Several site-specific amendments, definitions, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

58. Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. 2601 et seq.). This Act provides for the Federal regulation of chemical substances that present a hazard to health or the environment. Such regulation requires the testing of new substances and subsequent control of their commercial distribution. The Act also contains specific requirements relative to polychlorinated biphenyls, asbestos, and radon.

59. Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901 et seq.). This Act, which amended the AEA, provides for the custody, remediation, and transfer of lands which are disposal sites for residual radioactive materials, uranium and thorium byproduct materials, and mill tailings. Regulations govern the long-term care and maintenance, monitoring requirements, cleanup standards, and emergency management plans of tailings sites. The Act includes provisions for the use of source material by prime contractors, as well as for the sale or lease of subsurface mineral rights.

60. Used Oil Recycling Act of 1980, as Amended (Public Law 96-463). This Act was enacted to protect and conserve the "scarce" supplies of oil and to protect human health and the environment from the hazards of the improper disposal of used oil. The Act provided for the recycling/reuse of used oil and required the labeling of used oil. Provisions of the Act were incorporated into the HSWA of the SWDA.

61. Water Quality Act of 1965 (Public Law 89-234). This Act was the first major legislation pertaining to the water quality standards of surface waters. The Act provides States and interstate compacts with Federal support in the establishment and enforcement of water quality standards. The concepts in the Act are largely superseded by the CWA of 1977.

62. Water Quality Improvement Act of 1970 (Public Law 91-224). This Act prohibits the discharge of "harmful" quantities of oil and sewage from recreational boats into navigable waters. Regulations at 40 CFR 110 define "harmful" quantities as those discharges which will cause a sheen or discoloration on the surface of the water or a sludge or emulsion to be deposited beneath the surface of the water.

B. FEDERAL REGULATIONS

1. 15 CFR part 930, Federal Consistency with Approved Coastal Management Programs.
2. 15 CFR parts 902-981, National Oceanic and Atmospheric Administration (NOAA).
3. 29 CFR part 1910, Occupational Safety and Health Standards.

4. 29 CFR part 1910.120, Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response.
5. 29 CFR part 1910.1200, Hazard Communication Standard.
6. 30 CFR part 254, Oil-spill Response Requirements for Facilities Located Seaward of the Coast Line.
7. 32 CFR part 172, Disposition of Proceeds from DOD Sales of Surplus Personal Property.
8. 32 CFR part 190, Natural Resources Management Program.
9. 32 CFR part 775, Procedures for Implementing the National Environmental Policy Act.
10. 33 CFR part 80, COLREGS DEMARCATION Lines.
11. 33 CFR part 153, Control of Pollution by Oil and Hazardous Substances, Discharge Removal.
12. 33 CFR part 154, Facilities Transferring Oil or Hazardous Material in Bulk.
13. 33 CFR part 320, General Regulatory Policies.
14. 33 CFR part 321, Permits for Dams and Dikes in Navigable Waters of the United States.
15. 33 CFR part 322, Permits for Structures or Work in, or Affecting, Navigable Waters of the United States.
16. 33 CFR part 323, Permits for Discharges of Dredged or Fill Material into Waters of the United States.
17. 33 CFR part 324, Permits for Ocean Dumping of Dredged Material.
18. 33 CFR part 325, Processing of Department of the Army Permits.
19. 33 CFR part 326, Enforcement.
20. 33 CFR part 327, Public Hearings.

21. 33 CFR part 328, Definition of Waters of the United States.
22. 33 CFR part 329, Definition of Navigable Waters of the United States.
23. 33 CFR part 330, Nationwide Permit Program.
24. 36 CFR part 60, National Register of Historic Places.
25. 36 CFR part 800, Protection of Historic Properties.
26. 40 CFR part 61, National Emission Standards for Hazardous Air Pollutants.
27. 40 CFR part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories.
28. 40 CFR part 68, Chemical Accident Prevention Provisions.
29. 40 CFR part 70, State Operating Permit Programs.
30. 40 CFR part 71, Federal Operating Permit Programs.
31. 40 CFR part 109, EPA Regulations on Criteria for State, Local, and Regional Oil Removal Contingency Plans.
32. 40 CFR part 110, EPA Regulations on Discharge of Oil.
33. 40 CFR part 112, EPA Regulations on Oil Pollution Prevention.
34. 40 CFR part 113, EPA Regulations on Liability Limits for Small Onshore Storage Facilities.
35. 40 CFR parts 116-117, EPA Regulations on Hazardous Substances.
36. 40 CFR parts 122-124, EPA Regulations Implementing CWA.
37. 40 CFR part 125, EPA Regulations on Criteria and Standards for the National Pollutant Discharge Elimination System.
38. 40 CFR part 129, EPA Toxic Pollutant Effluent Standards.

39. 40 CFR part 130, EPA Requirements for Water Quality Planning and Management.
40. 40 CFR part 131, Toxic Criteria for those States not Complying with Clean Water Act, section 303(C)(2)(B).
41. 40 CFR part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
42. 40 CFR parts 141-143, EPA National Drinking Water Regulations.
43. 40 CFR part 144, Underground Injection Control Program.
44. 40 CFR part 145, State Underground Injection Control Program Requirements.
45. 40 CFR part 146, Underground Injection Control Program: Criteria and Standards.
46. 40 CFR part 147, State Underground Injection Control Programs.
47. 40 CFR part 148, Hazardous Waste Injection Restrictions.
48. 40 CFR part 149, Sole Source Aquifers.
49. 40 CFR part 220-225, Ocean Dumping Regulations and Criteria.
50. 40 CFR part 227, Criteria for the Evaluation of Permit Applications for Ocean Dumping of Materials.
51. 40 CFR part 228, Criteria for the Management of Disposal Sites for Ocean Dumping.
52. 40 CFR part 229, General Permits.
53. 40 CFR part 230, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
54. 40 CFR part 232, Section 404 Program Definitions; Exempt Activities not Requiring 404 Permits.
55. 40 CFR part 233, Section 404 State Program Regulations.

56. 40 CFR parts 240-241, EPA Guidelines for the Thermal Processing of Solid Wastes and for the Land Disposal of Solid Wastes.
57. 40 CFR part 243, Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste.
58. 40 CFR part 244, Solid Waste Management Guidelines for Beverage Containers.
59. 40 CFR part 245, EPA Guidelines for Resource Recovery Facilities.
60. 40 CFR part 246, Source Separation for Materials Recovery Guidelines.
61. 40 CFR part 247, Comprehensive Procurement Guideline for Products Containing Recovered Materials.
62. 40 CFR part 257, EPA Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices.
63. 40 CFR part 258, Criteria for Municipal Solid Waste Landfills.
64. 40 CFR part 261, Identification and Listing of Hazardous Waste.
65. 40 CFR part 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
66. 40 CFR part 268, Land Disposal Restrictions.
67. 40 CFR part 270, EPA Administered Permit Programs: The Hazardous Waste Permit Program.
68. 40 CFR part 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks.
69. 40 CFR part 300, EPA National Oil and Hazardous Substances Pollution Contingency Plan.

70. 40 CFR part 302, EPA Designation, Reportable Quantities and Notification.
71. 40 CFR part 310, Reimbursement to Local Governments for Emergency Response to Hazardous Substances Releases.
72. 40 CFR part 355, Emergency Planning and Notification.
73. 40 CFR part 370, EPA Hazardous Chemical Reporting: Community Right-to-Know Requirements.
74. 40 part CFR 372, Toxic Chemical Release Reporting: Community Right-to-know.
75. 40 part CFR 403, General Pretreatment Regulations for Existing and New Sources of Pollution.
76. 40 parts CFR 405-471, EPA Effluent Guidelines and Standards.
77. 40 CFR part 413, Electroplating Point Source Category.
78. 40 CFR part 433, Metal Finishing Point Source Category.
79. 40 CFR part 503, Standards for the Use or Disposal of Sewage Sludge.
80. 40 CFR 1500, Purpose Policy Mandate (Council on Environmental Quality Regulations on Implementing NEPA Procedures).
81. 40 CFR part 1501, NEPA and Agency Planning.
82. 40 CFR part 1502, Environmental Impact Statement.
83. 40 CFR part 1503, Commenting.
84. 40 CFR part 1504, Predecision Referrals to the Council of Proposed Federal Actions Determined to be Environmentally Unsatisfactory.
85. 40 CFR part 1505, NEPA and Agency Decision Making.
86. 40 CFR part 1506, Other Requirements of NEPA.
87. 40 CFR part 1507, Agency Compliance.

88. 40 CFR part 1508, Terminology and Index.
89. 43 CFR part 11, Natural Resource Damage Assessments.
90. 46 CFR part 7, Boundary Lines.
91. 49 CFR part 130, Oil Spill Prevention and Response Plans.
92. 49 CFR part 171, General Information, Regulations and Definitions.
93. 49 CFR part 172, Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information, and Training Requirements.
94. 49 CFR part 173, Shippers - General Requirements for Shipments and Packagings.
95. 49 CFR part 174, Carriage by Rail.
96. 49 CFR part 175, Carriage by Aircraft.
97. 49 CFR part 176, Carriage by Vessel.
98. 49 CFR part 177, Carriage by Public Highway.
99. 49 CFR part 194, Response Plans for Onshore Pipelines.
100. 50 CFR part 17, Endangered and Threatened Wildlife and Plants.
101. 50 CFR part 18, Marine Mammals.
102. 50 CFR part 22, Eagle Permits.
103. 50 CFR Appendix A to Chapter I, Codes for the Representation of Names of Countries.
104. 50 CFR part 216, Regulations Governing the Taking and Importing of Marine Mammals.
105. 50 CFR part 229, Authorization for Commercial Fisheries Under the Marine Mammal Protection Act of 1972.

106. 50 CFR part 402, Interagency Cooperation-Endangered Species Act of 1973, as Amended.

C. EXECUTIVE ORDERS (E.O.s)

1. E.O. 11593, May 13, 1971 (Reprinted as a Note at 16 U.S.C. part 470). This E.O. directs Federal agencies to provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation; to ensure the preservation of cultural resources; to locate, inventory, and nominate to the NRHP all properties under their control that meet the criteria for nomination; and to ensure that cultural resources are not inadvertently damaged, destroyed, or transferred before the completion of inventories and evaluation for the NRHP.

2. E.O. 11644, February 8, 1972 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. controls the use of off-road vehicles on public lands so as to protect the resources of those lands, promote the safety of all users of those lands, and minimize conflicts among the various uses of those lands. The E.O. was amended by E.O. 11989.

3. E.O. 11987, May 24, 1977 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. restricts the introduction of exotic species into the United States.

4. E.O. 11988, May 24, 1977 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. requires Federal agencies to evaluate the effects of their actions on floodplains.

5. E.O. 11989, May 24, 1977 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. clarifies agency authority to define zones of use by off-road vehicles on public lands and amends E.O. 11644, February 8, 1972, by exempting fire, military, emergency, law enforcement, or combat/combat-support vehicles.

6. E.O. 11990, May 24, 1977 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. directs agencies to take action to protect wetlands on Federal property and mandates the review of proposed actions on wetlands through procedures established by NEPA.

7. E.O. 12088, October 13, 1978 (Reprinted as a Note at 33

U.S.C. parts 1401 and 42 U.S.C. 4321). This E.O. replaces E.O. 11507 and directs Federal agencies to comply with applicable Federal, State, local, and host nation environmental laws and regulations. The E.O. also requires the head of each Executive agency to ensure that sufficient funds for compliance with applicable pollution control standards are requested in the agency budget. The E.O. requires Federal facility leadership in furthering the purpose and policies of the following statutes: the CAA, FWPCA, SWDA, MPRSA, SDWA, TSCA, NEPA, FIFRA, and the Noise Control Act. E.O. 12088 revoked in part by E.O. 13148 (sections 1-4 revoked).

8. E.O. 12114, January 4, 1979 (Reprinted as a Note at 33 U.S.C. part 1401 and 42 U.S.C. part 4321). This E.O. directs Federal agencies to take action to further the purpose of the NEPA with respect to the environment outside the United States and its territories and possessions.

9. E.O. 12580, January 23, 1987 (Reprinted as a Note at 42 U.S.C. part 9615 and 42 U.S.C. part 4321). This E.O. delegates authority to Federal agencies to investigate and respond to HS spills under CERCLA, as amended by SARA.

10. E.O. 12777, October 18, 1991 (Reprinted as a Note at 33 U.S.C. part 1321, 33 U.S.C part 2712, and 42 U.S.C. part 9615). This E.O. implements section 311 of the FWPCA and the OPA. The E.O. amended E.O. 12580 to implement provisions of the OPA. The E.O. also delegates the President's responsibilities for promulgating regulations pertaining to oil facility response plans to the EPA Administrator and to the Coast Guard through the Secretary of the DOT or, in times of war, the Secretary of the DOD.

11. E.O. 12843, April 21, 1993. This E.O. covers the early phase-out of ozone-depleting chemicals.

12. E.O. 12844, April 21, 1993. This E.O. accelerates Federal purchases of AFVs. E.O. 12844 revoked by E.O. 13031.

13. E.O. 12873, October 20, 1993. This E.O. addresses Federal acquisitions, recycling, and waste prevention. The E.O. requires the Federal Government to make more efficient use of natural resources by maximizing recycling and preventing waste wherever possible, in addition to using and procuring environmentally preferable products and services. The E.O.

directs Federal agencies to set goals for SW prevention and recycling, establishes a model facility program, and sets minimum recycled content standards for printing and writing paper. Revoked by E.O. 13101, then E.O. 13423.

14. E.O. 12898, February 11, 1994 (Reprinted as a Note at 42 U.S.C. part 4321). This E.O. requires Federal actions to address environmental justice in minority and low-income populations. The E.O. directs each Federal agency, wherever practicable and appropriate, to collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are subject to the reporting requirements under the EPCRA, sections 11001-1105, and that are expected to have a substantial environmental, human health, or economic effect on surrounding populations.

15. E.O. 12902, March 8, 1994. This E.O. requires Federal agencies to set goals for reducing energy consumption, increasing energy efficiency, auditing their facilities for energy and water use, purchasing energy efficient products, increasing the use of solar and other renewable energy sources, designating a "showcase" facility, and minimizing the use of petroleum-based fuel. Revoked by E.O. 13123, then E.O. 13423.

16. E.O. 13149, April 21, 2000. The purpose of this order is to ensure that the Federal Government exercises leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and the use of alternative fuel vehicles (AFVs) and alternative fuels. Reduced petroleum use and the displacement of petroleum by alternative fuels will help promote markets for more alternative fuel and fuel efficient vehicles, encourage new technologies, enhance the United States' energy self-sufficiency and security, and ensure a healthier environment through the reduction of greenhouse gases and other pollutants in the atmosphere.

17. E.O. 13423, January 24, 2007. This E.O. requires Federal agencies to set goals to improve environmental, transportation, and energy-related activities in support of their mission. The E.O. directs Federal agencies to ensure that they are improving energy efficiency and reducing greenhouse gases; that at least half of the renewable energy consumed is from new renewable energy sources; water consumption intensity is reduced; bio-based, environmentally preferable, energy-efficient, water

efficient, and recycled-content products are purchased; the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of is reduced; the use of petroleum-based fuel in agency fleets is minimized; new construction and major renovations comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006); whenever possible Electronic Product Environmental Assessment Tool products are acquired; Energy Star features are on agency computers and monitors; policies to extend the useful life of electronic equipment are implemented, and environmentally sound practices are used with respect to the disposal of electronic equipment that has reached the end of its useful life. E.O.s 13148 and 13149 are revoked.

D. DOD DIRECTIVES AND INSTRUCTIONS. See appendices H-Q for DOD specifications.

E. SECRETARY OF THE NAVY INSTRUCTIONS (SECNAVINST)

1. SECNAVINST 5000.2C.

2. SECNAVINST M-5210.1

3. SECNAVINST 5520.3.

4. SECNAVINST 5720.42F.

5. SECNAVINST 5720.44B.

6. SECNAVINST 5820.8A.

F. NAVAL FACILITIES (NAVFAC) PUBLICATIONS

1. NAVFAC P-442, Economic Analysis Handbook.

G. NAVAL MEDICINE (NAVMED) PUBLICATION

1. NAVMED P-5010, Manual of Naval Preventative Medicine.

H. CHIEF, BUREAU OF MEDICINE AND SURGERY (BUMED) INSTRUCTION

1. BUMEDINST 6280.1A.

I. NAVAL OPERATIONS INSTRUCTIONS (OPNAVINST)

1. OPNAVINST 5100.25G.

2. OPNAVINST 6250.4B

3. OPNAVINST 11010.36B.

J. MARINE CORPS ORDERS (MCOs)

1. Marine Corps Bulletin 1200. This bulletin describes the specific responsibilities and duties of Military Occupational Specialty (MOS) 8056, HM/HW Marine and Officer; and MOS 8831, Environmental Engineering Management Officer.

2. MCO 1553.1B. This order delineates the systems approach to training requirements which are applicable to Marine Corps formal schools, training centers, and formal courses of instruction at other military schools.

3. MCO 1553.7. This order contains procedures for requesting information about required training courses through the By Name Assignment System, which allocates course space to Marine Corps students.

4. MCO 1520.9G. This order contains specific prerequisites and other information regarding MOS 8831, Environmental Engineering Management Officer.

5. MCO 1560.19E. This order contains specific prerequisites and other information regarding MOS 8831, Environmental Engineering Management Officer.

6. MCO 4140.5. This order implements DOD 4140.27-M, Shelf-Life Item Management Manual.

7. MCO P4400.150E. This order sets forth policies for consumer level supplies.

8. MCO 4450.12A. This order provides policies, procedures, and responsibilities for the receipt, storage, transportation, and

handling of HW and HM.

9. MCO 4450.13A. This order contains procedures for HM shelf-life management and criteria for extending type II shelf-life items published in the DOD Quality Status List.

10. MCO 4555.3C. This order outlines policies, procedures, and responsibilities for the recovery of precious metals.

11. MCO 4733.1B. This order requires commanders to establish procedures for the calibration, safe operation, and maintenance of test, measurement, and diagnostic equipment that supports the installation's environmental management program.

12. MCO P4790.2C. This order requires commanders to establish procedures for the control of tool sets, chests, and kits and other equipment that supports the installation's environmental management program.

13. MCO 4860.3D. This order supplies guidance for performing commercial and industrial-type activities.

14. MCO 5040.6H. This order describes the Commanding General's Inspection Program and requires that the administrative aspects of an installation's environmental program be evaluated at least every two years.

15. MCO 5104.1B. This order sets forth guidance for laser hazard control.

16. MCO 5215.1K. This order promulgates policies and procedures for the management and administration of the Marine Corps Directives System, providing guidance on the review, preparation, filing, and maintenance of Marine Corps directives.

17. MCO P5580.2A. This order includes policies and procedures for reporting noncompliance.

18. MCO 7301.116. This order provides procedures governing unfunded reimbursable accounts.

19. MCO P11000.5G. This order supplies guidance for requesting funds to support environmental compliance requirements.

20. MCO P11000.12C. This order supplies guidance for

requesting funds for construction activities involved with
environmental compliance requirements.

APPENDIX B-1

PROCESSING ENFORCEMENT ACTIONS

A. GENERAL. An Enforcement Action (EA) is an action taken by an environmental regulatory agency to enforce statutory and/or regulatory environmental compliance requirements. Nomenclature of EAs may include warning order, notice of deficiency, notice of violation (NOV), citation, administrative complaint, notice of non-compliance, administrative order, corrective action order, immediate compliance order, delayed compliance order, or emergency power order. The relative gravity of an NOV or other EA, to include the possibility of monetary penalties, largely depends upon the frequency, severity, and duration of the environmental compliance violation(s) alleged as well as the degree of cooperation demonstrated after learning of the violations. When an installation or unit receives an EA, prompt and complete action must be taken to protect human health and the environment and minimize further adverse administrative, civil, or criminal EA against the installation or unit and the individual(s) responsible for receiving the EA.

B. DEFINITION OF EA

1. United States and Territories. A formal, written notification by the Environmental Protection Agency (EPA) or other Federal, State, inter-state, regional, or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement. It should cite the relevant standard or criteria to be met and request the installation take corrective action. An EA 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. (Note: Warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws and regulations, are considered EAs.)

2. Overseas. An EA is a formal, written notification by the appropriate Host Nation environmental regulatory authority of any applicable environmental standard (as defined in the Final Governing Standards). It should cite the relevant standard or criteria to be met and request the installation take corrective action. An EA 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.

C. Significant Non-Compliance (SNC). An EPA term describing facilities that have a violation of significant magnitude and/or duration that warrants priority for review and/or response by an agency. Currently, EPA only tracks Federal facilities that are identified as "major" under references (a), (b), and (c). The definition of "major" and "significant non-compliance" varies by media. The air program uses the term High Priority Violation (HPV) instead of SNC, but for the purposes of this chapter, SNC includes HPV. EPA Program offices are the source of media specific definitions.

D. SETTLEMENT AGREEMENTS. If the installation or unit does not contest the NOV or other EA, the environmental regulatory agency may demand the execution of a settlement agreement. Settlement agreement terms vary significantly and shall be negotiated by counsel. Basic settlement agreement terms may include a statement of facts and conclusions of law, penalty assessment and payment provisions, a list and description of environmental compliance projects, and an environmental compliance schedule.

E. REPORTING OF EAs

1. Informal Indication of an EA. Each installation and unit, upon receipt of any informal (e.g., oral) indication of an NOV or other EA (hereinafter collectively referred to as "enforcement action"), shall:

a. Consult with counsel. The Counsel for the Commandant of the Marine Corps (CMC (CL)) Offices of Counsel have environmental compliance counsel to advise installations and units on how to prepare for the EA; and

b. When significant natural resources damage occurs, and/or when immediate, adverse publicity is anticipated, notify Headquarters, Marine Corps, Facilities and Services Division by telephone or electronic mail on the same day of receiving the informal EA indication, unless serious incident reporting is required by reference (d).

2. Formal Receipt of an EA

a. Upon receipt of any EA, regardless of whether a response is required, the cited commander shall ensure the installation or unit reports the EA.

b. Within five working days after the installation's or unit's receipt of the EA, the installation or unit shall make appropriate entries into the Environmental Quality in Progress (EQUIP) data base and the Marine Corps Environmental Tracking System (CompTRAK) and submit a Report of NOV/Notice of Noncompliance (RCS MC-5090-01) to CMC (LFL). The report shall be submitted by routine radio message, with information copies to: the Assistant Deputy Chief of Staff, Installations and Logistics (Facilities), via the chain of command; the applicable CMC (CL) Office of Counsel; and the applicable Regional Environmental Coordinator. The message writing system to be used is the Defense Messaging System using "CMC WASHINGTON DC L LFL" as the addressee. Additionally, submit via email a copy of the NOV report to CMC (LFL) within five working days. The message and email shall contain the following information:

(1) Name of cited installation, unit, and/or individuals.

(2) Name of issuing agency.

(3) Date of written notice and date received by the cited installation, unit, and/or individuals.

(4) Certification that an appropriate entry in EQUIP and the CompTRAK is complete.

(5) Statute or regulation cited (with specific section).

(6) Cited findings or deficiencies in the following categories:

(a) Class I: Releases to the environment;

(b) Class II: Violations with a potential to cause a release to the environment; or

(c) Class III: Administrative procedural violations (e.g., allegations of improper paperwork, report filings, and

labeling). Note: A notice alleging an improper or incomplete permit application is not, by itself, an EA.

(7) Identification of the root cause, consistent with the categories defined in EQUIP and CompTRAK.

(8) Amount of any monetary penalty assessed.

(9) Discussion of compliance actions sought, to include whether the regulatory agency offers a settlement proposal or whether the installation or unit contemplates settlement, and if so, whether a Supplemental Environmental Project may be applicable to reduce a monetary penalty.

(10) Estimate of current risks for environmental harm posed by the circumstances giving rise to the alleged violations.

(11) Description of required compliance actions or projects, to include estimated costs and CompTRAK project number(s), as required.

(12) Commander's point of contact to include commercial and Defense Switching Network voice and fax phone numbers and email address.

c. The cited commander shall also ensure the installation or unit makes the appropriate EQUIP and CompTRAK follow-on entries. Any changes to the status of the EA shall be promptly recorded in EQUIP and CompTRAK.

F. EA CLOSURE

1. An EA is closed when any one of the following conditions exists:

a. The regulatory agency states, in writing, that it is satisfied with the installation or unit compliance actions and no further enforcement/actions will be taken regarding the violations alleged within the EA. Note that certain statutory/regulatory schemes provide for shared or delegated enforcement authority between state and Federal agencies. In the event the installation receives an NOV, installation compliance officials should ensure that all regulatory authorities possessing enforcement power are satisfied with the

installation's compliance actions. For example, even if a state regulatory agency deems compliance actions satisfactory, Federal authorities may still commence an EA. This is known as 'overfiling.' Thus, it is necessary to ensure that all potential EAs are resolved.

- b. The regulatory agency, in writing, rescinds the EA.
- c. The regulatory agency supersedes the EA with another action.
- d. A settlement agreement is executed regarding the violations alleged within the EA.

2. When the installation or unit commander cannot close an EA with a regulatory agency after compliance actions are complete, the installation or unit shall:

- a. Informally contact the regulatory agency to request written confirmation of compliance action completion and EA closure; then,
 - b. If the regulatory agency does not provide a confirmation of compliance action completion and EA closure, the installation or unit shall send a letter to the regulatory agency explaining its compliance actions and requesting EA closure. A copy of the EA shall be enclosed with the letter, and the letter shall state that the installation or unit commander will consider the EA closed if the regulatory agency does not confirm the EA's closure within 60 days following receipt of the letter. The letter shall be sent via United States certified mail with return receipt requested or via another delivery method documenting the letter's receipt.
 - c. If the regulatory agency does not respond to the letter within 60 days after its receipt, the installation or unit shall send a follow-up letter. The follow-up letter shall reference the previous letter and state that the regulatory agency's response has not been received and the EA is now considered closed. The follow-up letter shall be sent via United States certified mail with return receipt requested or via another delivery method documenting the letter's receipt.

Bear in mind that these letters do not legally preclude the regulatory agency from engaging in any further activity regarding the NOV which is authorized by law. They serve as a catalyst to inspire the regulatory agency to take final action and to memorialize that the installation commander scrupulously complied with all known requirements.

d. Finally, within five working days after regulatory agency receipt of the second letter without response, the installation or unit shall update EQUIP and CompTRAK to record the EA's closure.

APPENDIX B-2

DESKTOP PROCEDURES AND TURNOVER FOLDERS

A. DESKTOP PROCEDURES

1. Frequent personnel changes within installations and units challenge their maintenance of environmental compliance expertise and the continuity of their day-to-day operations. The proper use of desktop procedures and turnover folders alleviates these challenges and improves overall efficiency. It also provides work force continuity when unforeseen events suddenly remove a long-term employee.

2. Each installation and unit shall prepare and maintain desktop procedures for each environmental billet (e.g., hazardous waste handlers, recycling materials handlers, EQUIP and CompTRAK clerks, Environmental Compliance Evaluation (ECE) evaluators, Environmental Management System coordinators, and environmental compliance training specialists). Desktop procedures need not be all-inclusive or formal; rather, they may simply be a list of significant items and standardized instructions pertinent to an environmental billet's position description or duties. Normally, desktop procedures should include such items as current references; step-by step procedures for completing required duties; points-of-contact names, telephone numbers, and email addresses; and instructions for required reports.

3. Desktop procedures are current, concise instructions and shall not duplicate information within the turnover folder when the two documents are within the same record. Desktop procedures should also not be voluminous, however, as this will discourage their use. Each civil servant environmental billet position description shall make reviewing and updating the billet's desktop procedures a major duty or responsibility.

B. TURNOVER FOLDERS

1. Each installation and unit shall prepare and maintain a turnover folder for each environmental billet. Each civil servant environmental billet position description shall make reviewing and updating the billet's turnover folder a major duty

or responsibility. Turnover folder contents may be included within desktop procedures and shall, specific to the billet incumbent, contain:

- a. The billet title;
- b. The immediate supervisor's billet title, and the title(s) of any subordinate billet(s) within the chain of command (a Table of Organization may be used);
- c. A copy of the commander's environmental statement (see paragraph 2216 of this Manual);
- d. The position description (for civil service employees) or the billet description;
- e. A list of position description or billet description major duties and responsibilities (for civil service employees, these should already be in the position description);
- f. A list of tasks essential to performing the billet's major duties and responsibilities;
- g. A list of billet education or billet training requirements (e.g., initial and incumbent refresher) and the training plan;
- h. A list generally referencing the environmental laws, regulations, orders, and other instructions directly related to the billet;
- i. A list of required reports, required report due dates, and evidence of required report submittals for at least three prior fiscal years;
- j. A list of environmental compliance permits for which the incumbent is responsible and a description of the activities for which the permits are applicable;

(1) For unit billets, the permit list and activity descriptions shall be limited to the permits held by the installation or unit directly affecting unit operations. The activity descriptions shall identify each permitted activity location, generally describe each activity subject to permitting, and identify any additional installation or unit

best management practices limiting the activity apart from permit requirements (e.g., vehicles will be washed only on wash racks).

(2) For installation billets, the permit list and activity descriptions shall include a list of all applicable permits. Using a database format, the activity descriptions shall, at a minimum, identify the location (e.g., building number, grid coordinate) of each permitted activity; generally describe each activity subject to permitting; list each permit's expiration date; list and describe each permit fee; identify each fee's payment period (e.g., annually, quarterly, monthly) and due date; list the CompTRAK entry number to pay the permit fee; identify the unit point of contact (name, rank, unit, and billet) and phone number; and identify the frequency of compliance inspections;

k. A Plan of Actions and Milestones (POA&M) for studies and other projects required for each environmental compliance permit and the corresponding CompTRAK entry number for each project's funding request. This turnover folder section may be separate from the turnover folder if it is too large for it. If separate, the turnover folder shall incorporate the POA&M and corresponding CompTRAK entry numbers by reference and identify their location;

l. A list of environmental compliance and/or coordination activities (and their contact information). The list shall include environmental coordinators and Federal, State, and/or local regulators;

m. A list of other points of contact internal and external to the installation, with telephone numbers and mailing and email addresses. The list shall briefly describe each contact's general relationship to the billet;

n. Miscellaneous information (e.g., administrative or operational procedures peculiar to the billet, such as shared billet duties and responsibilities);

o. An itemized and current list of all applicable past, ongoing, and anticipated environmental compliance projects. This list may also include recent environmental compliance POA&Ms, a printout of current CompTRAK projects, and status

reports of pending projects including critical path diagrams using program evaluation and review techniques or bar charts plotting project tasks over time; and

p. An itemized and current list of all applicable past, ongoing, and anticipated environmental compliance projects and other compliance actions from the last Benchmark ECE, environmental audit, and/or Inspector General of the Marine Corps inspection. This list shall contain excerpts from the ECE POA&M.

2. Each installation and unit shall organize its turnover folders to permit billet incumbents to continuously improve them. Installation and unit commanders may establish procedures for turnover folder organization and the sufficiency of detail required to satisfy turnover folder content requirements.

REFERENCES

- (a) 42 U.S.C. 6901-6992k
- (b) 33 U.S.C. 1251-1387
- (c) 42 U.S.C. 7401-7671
- (d) MCO 3504.2

APPENDIX C

HEADQUARTERS MARINE CORPS, FACILITIES AND SERVICES DIVISION (CMC (LF))-SPONSORED ENVIRONMENTAL COMPLIANCE EVALUATION (ECE) REPORT
FORMAT

1. DRAFT ECE REPORT. The Draft ECE Report for the CMC (LF)-sponsored ECEs will contain, as a minimum, the following:

a. Preliminary Executive Overview. Prepared by the CMC (LF) Team Leader and normally three pages in length, this document is the out-brief to the installation commander. It contains the following parts: definitions, deficiencies, positive comments, areas of concern and interest, a request for comments and the Plan of Actions and Milestones (POA&M), a request for an evaluation of the ECE team, and a summary of the deficiencies presented in tabular format.

b. Media Overview. Prepared by the media-specific evaluator. This is a three to five sentence paragraph providing the installation commander with a word picture of the status for each media area evaluated. As part of the media overview, a table summary will be included. This summary will contain, at a minimum, the program media, type of evaluation (document review, interview, or visit), location or document title and date, building number, and installation point of contact.

c. Positive Findings. Positive results which warrant specific attention from the commander.

d. Deficiencies. This section includes all deficiencies (findings, discrepancies, and issues).

e. Not Reviewed. This section includes questions not reviewed by the ECE team. These questions will require research by the installation commander to determine whether they apply to the installation and the installation environmental compliance status.

f. Yes Section. This section includes all questions receiving a positive or "yes" response that include comments.

2. POA&M. The installation commander will develop and submit a POA&M using the POA&M module within Automated Compliance Evaluation (ACE Online). An installation commander's comment field is provided in the ACE Online POA&M module. This field is for the installation commander to describe the corrective action taken or projects to be developed to solve and/or prevent the noted situation. Any disagreement with the ECE team's report should be placed in the installation commander's comment field. The POA&M is a dynamic document with management flexibility built into the reporting format to allow the commander to track and document progress.

3. FINAL ECE REPORT. The Final Report is made up of the following: 1) the Final Report cover letter; 2) the notification of the POA&M report with installation commander and Higher Headquarters' comments available via ACE Online; and 3) the draft out-brief report with appropriate administrative mark outs. A copy of the Final Report cover letter with the POA&M will be provided to the Inspector General of the Marine Corps by the CMC (LF).

APPENDIX D

ENVIRONMENTAL TRAINING REQUIREMENTS

MCO P5090.2A chapter 5 requires each installation and Marine Corps Forces Reserve to prepare a specific Comprehensive Environmental Training and Education Program (CETEP) plan that details the number of personnel subject to identified Federal, State, local and Marine Corps environmental training requirements. Environmental training is any form of instruction and information that is based upon, derived from, or guided by environmental laws, regulations, or environmental policies. Training derived from other laws, regulations, or policies (e.g., Department of Transportation regulations or safety policy) that is required to perform environmentally-related functions may also fall under this definition.

Table D-1 summarizes the most common Federal and Marine Corps environmental training requirements for personnel performing environmental job functions. When preparing CETEP plans, installations should evaluate all regulated operations conducted aboard the base or station against Table D-1 and State and local training requirements, including training incorporated into installation management plans (e.g., Integrated Natural Resources Management Plans, Stormwater Pollution Prevention Plans).

The CETEP plan should detail the specific strategies, courses, and training venues that will be used to cost effectively ensure that personnel receive the required training. In some cases, training may be sponsored by other offices on the installation (e.g., safety office, medical clinic). Installations performing unique environmental functions not listed in table D-1 should ensure personnel receive applicable required training.

Table D-1.--Training By Regulation

Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Resource Conservation and Recovery Act (RCRA) Generators	40 CFR part 262.34 40 CFR part 264.16 MCO P5090. 2B 9404.1.b (12), 9104.1.h (2)(j)	Personnel who generate, accumulate or handle hazardous waste (HW)
HW Accumulators	9104.1.h.(1) e	Personnel who operate the process generating the HW
RCRA Treatment, Storage and Disposal Facility (TSDF) Operators	40 CFR part 262.34 40 CFR part 264.16	Personnel assigned to work at a permitted TSDF
Waste Military Munitions	29 CFR part 1910.120 29 CFR part 1926.65	Personnel involved with handling, storage, transportation, and treatment of Waste Military Munitions
Regulated Infectious Waste	29 CFR part 1910.1030(g)(2) BUMED INST 6280.1A	Personnel with occupational exposure to infectious waste
Hazardous Waste Operations and Emergency Response (HAZWOPER) for Emergency Response - Awareness Level & Refresher	29 CFR part 1910.120 (q)(6)(i)	Personnel who are likely to witness or discover a release of a hazardous substance and may initiate emergency response by notifying authorities
HAZWOPER General Site Workers & Refresher	29 CFR part 1910.120 (e)	Personnel assigned to work at an uncontrolled Installation Restoration site

Table D-1.--Training By Regulation

Training Requirement	Regulation or Policy Driver	Who Must Be Trained
HAZWOPER Emergency Response Operations & Refresher	29 CFR part 1910.120 (q)(6)(ii)	Personnel who respond to hazardous material (HM) releases in a defensive fashion without trying to stop the release
HAZWOPER Emergency Response Technician/Specialist and Refresher	29 CFR part 1910.120 (q)(6)(iii)	Personnel responding in an aggressive action to HM spills so they may plug patch or stop the release of HM
HAZWOPER TSDF Operations and Refresher	29 CFR part 1910.120 (p)(7)(i)	Personnel assigned to work at a permitted TSDF
HAZWOPER Emergency Response On Scene Incident Commander	29 CFR part 1910.120 (q)(6)(v)	Personnel who will control and/or manage spill response operations
Post Emergency Response Worker	29 CFR part 1910.120(q)(11)	Personnel that may perform spill cleanup operations after the threat of release is stabilized or eliminated
Oil Pollution Facility response training	40 CFR part 112.20 33 CFR part 154.1050 MCO P5090.2A 7104.3d, 7104.8a(3)	Facility personnel with responsibilities for oil spill response and cleanup as detailed in the Facility Response Plan (FRP)

Table D-1.--Training By Regulation

Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Oil Pollution Facility response exercises	40 CFR part 112.21c 33 CFR part 154.1055 MCO P5090.2A, 2B 7104.8 b (2), 7203.2	Facility owners or operators who must develop a program of facility response drills/exercises as detailed in the FRP
Spill Prevention Control and Countermeasures (SPCC) discharge prevention training	40 CFR part 112.7(f) MCO P5090.2A 7102.2c (5), 7104.8 a (2)	Employees involved in the operation and maintenance of equipment that may discharge oil as identified in the installation SPCC plan
Hazardous Materials (HAZMAT) Transportation employee training	MCO 4030.40B	Personnel involved in the preparation for, and transportation or shipment of, HM/HW
HAZMAT Transportation - Modal Specific Training	MCO 4030.40B 49 CFR part 172.700 49 CFR part 175.20(b) 49 CFR part 176.13(b) 49 CFR part 177.800(c)	Personnel involved in the transportation or shipment of HM/HW by air, vessel or motor vehicle
Clean Air Act (CAA) - Motor Vehicle Heating, Venting, and Air Conditioning (HVAC) Mechanics	40 CFR part 82.30(b) MCO P5090.2A 6302.15	Personnel servicing motor vehicle air conditioning equipment
CAA - HVAC Appliance Service, Repair, Disposal Personnel	40 CFR part 82.150(b) MCO P5090.2A 6302.15	Personnel servicing, maintaining, repairing or disposing of air conditioning equipment

Table D-1.--Training By Regulation

Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Asbestos Training - Supervisors/ Worker/Contractors & Refresher	40 CFR part 763.99 Subpart E, Appendix C MCO P5090.2A 6302.15	Personnel, supervisors and contractors engaged in maintenance activities that disturb friable asbestos
Asbestos Inspector & Refresher	40 CFR part 763.99 Subpart E, Appendix C MCO P5090.2A 6302.15	Personnel who inspect for Asbestos Containing Building Material (ACBM) in schools or public commercial buildings
Asbestos Project Designer & Refresher	40 CFR part 763.99 Subpart E, Appendix C MCO P5090.2A 6302.15	Personnel who design projects that may disturb friable ACBM in a school or commercial building
Asbestos Project Monitor & Refresher	40 CFR part 763.99 Subpart E, Appendix C MCO P5090.2A 6302.15	Personnel who monitor abatement projects and serve as building owners representative
Asbestos for Maintenance Custodial staff	29 CFR part 1920.1001 (j)(7)(i) MCO P5100.8 16006.d (4), Table 16-1	Maintenance and custodial personnel who may come in contact with ACBM

Table D-1.--Training By Regulation

Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Federal Insecticide, Fungicide, and Rodenticide Act - Applicators	40 part CFR 170.130 (a)(3) DOD 4150.7M DOD 4150.7P MCO P5090.2A Ch 14	Personnel who apply or supervise the application of pesticides and contract Quality Assurance Evaluators
Safe Drinking Water Act (SDWA) training, certification and licensing	MCO P5090.2A 16201.5	Personnel who operate drinking water systems
Hazard Communications	29 CFR part 1910.1200(h)(1) DOD INST 6050.5 MCO P5100.8 f18002.2f	Employees who may be exposed to hazardous chemicals under normal operations conditions or in foreseeable emergencies
Hazardous Chemicals-Laboratories	29 CFR part 1910.1450 (a)	Personnel engaged in the laboratory use of hazardous chemicals
Bloodborne/Infectious Pathogens Exposure	29 CFR part 1910.1030 (a) MCO P5100.8 21002.2	Personnel who may be exposed to blood or other potentially infectious materials
Environmental General Awareness	MCO P5090.2A Chap 5	All United States Marine Corps (USMC) personnel
Commanding Officer/Commanding General (CO/CG) and Senior Executive Service (SES) Education	MCO P5090.2A Chap 5	CO/CGs and SES
General Pollution Prevention Awareness Training	MCO P5090.2A 15203	All USMC personnel

Table D-1.--Training By Regulation		
Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Specific Pollution Prevention Training	MCO P5090.2A 15203	Personnel whose job responsibilities require training in Emergency Planning & Community Right to Know Act Toxic Release Inventory reporting and pollution prevention planning and implementation
National Environmental Policy Act	MCO P5090.2B 12104	Personnel with environmental planning responsibilities
Natural Resources Law Enforcement training	MCO P5090.4 2c & Section III	Personnel engaged in conservation law enforcement
Natural Resource personnel training	32 CFR part 190.5c(2) MCO P5090.2A.4	Personnel who manage Natural Resources
Military Occupational Specialty (MOS) 8056 Training	MCO P5090.2A Ch 5 MCBul 1200	Uniformed Marines managing HM/HW, primarily at the unit level and desiring the secondary MOS 8056
Systems Approach to Training	MCO P5090.2A Chap 5	Personnel designated as the CETEP Coordinator
Curriculum Development	MCO P5090.2A Chap 5	Personnel designated as CETEP Coordinator & developing curriculum > 4 hours in length or computer based courses

Table D-1.--Training By Regulation		
Training Requirement	Regulation or Policy Driver	Who Must Be Trained
Environmental Management	MCO P5090.2A Chap 5	Personnel designated as CETEP Coordinator
Environmental Instructor	MCO P5090.2A Chap 5	Personnel assigned as environmental instructors

APPENDIX E

OIL DISCHARGE AND HAZARDOUS SUBSTANCE
RELEASE REPORTS MESSAGE FORMATS

- A. TRANSMITTAL PRECEDENCE. Send oil discharge and hazardous substance (HS) release report messages by routine precedence if prior voice reports have been made to the U.S. Coast Guard National Response Center and the reporting command's Chain of Command, and in case of HS release, the HS is not classified as an "Extremely Hazardous Substance (EHS)." Use priority precedence if prior voice report has not been made, the release is very large, threatens human health, requires evacuation of the local populace, is expected to result in significant environmental harm, or is expected to generate adverse publicity. Always use priority precedence for EHS release report messages.
- B. CLASSIFICATION OR SPECIAL HANDLING MARKING. Do not include classified or sensitive unclassified information in the report, unless necessary for operational reasons. Report symbol DD-5090-10 applies.
- C. OUTSIDE THE CONTINENTAL UNITED STATES REPORTS. For releases occurring outside the United States, its territories, and its possessions, delete the Coast Guard District and the Environmental Protection Agency (EPA) region organizations from the addressee and information blocks in the message. Instead, add the appropriate higher headquarters to the list of addressees.
- D. CORRECTING DISCHARGE/RELEASE REPORT MESSAGES. Oil discharge and 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, type of material, source, or lessons learned.
- E. MESSAGE DATA ELEMENTS. The essential data elements for reporting oil spills and HS releases are provided on the following pages. Installations may also submit the information via email to the appropriate point of contact at CMC (LFL-6).

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)
COMNAVFACECOM ALEXANDRIA VA
COGNIZANT ENGINEERING FIELD DIVISION
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LFL

SUBJ: OIL SPILL REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH SPILL OCCURRED
2. ACTIVITY ORIGINATING SPILL (INSTALLATION; UIC)
3. SOURCE (FUEL TANK, BARGE, PIPELINE, RAIL CAR, VEHICLE, AIRCRAFT, ETC.)
4. LOCATION (AREA, BUILDING DESIGNATION, PIER, ETC.)
5. AMOUNT (BARRELS, GALLONS, LITERS)
IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
6. TYPE (JP-5, GASOLINE, DIESEL, LUBE OIL, ETC.)
7. CONTAINER AND OPERATION FROM WHICH RELEASE OCCURRED (DRUM, STORAGE TANK, FUELING, ETC.)
8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
10. RELEASE SCENE DESCRIPTION (OIL SLICK, CONTAMINATED AREA, ETC.)
11. ACTION TAKEN/PLANNED:
A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
C. AMOUNT OF OIL RECOVERED (BARRELS/GALLONS/LITERS OF DECANTED PURE PRODUCT)
D. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
14. POTENTIAL DANGERS (FIRE, EXPLOSION, OILED WILDLIFE, ETC.)
15. ESTIMATED COST OF RECOVERY, IF KNOWN
16. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
17. LESSONS LEARNED
18. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
19. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
20. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
21. ASSISTANCE REQUIRED/COMMENTS

//BT

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)
COMNAVFACENGCOM ALEXANDRIA VA
COGNIZANT ENGINEERING FIELD DIVISION
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LFL

SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH RELEASE OCCURRED
2. ACTIVITY ORIGINATING RELEASE (INSTALLATION; UIC)
 3. SOURCE (STORAGE AREA, SHOP, VEHICLE, ETC.)
 4. LOCATION (BUILDING DESIGNATION, PIER, HIGHWAY, RANGE, ETC.)
 5. AMOUNT (GALLONS/LITERS, POUNDS/KILOGRAMS) IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
 6. TYPE (PESTICIDES, CORROSIVE LIQUIDS, TOXIC SUBSTANCES, EXPLOSIVES, ETC.)
 7. CONTAINER AND OPERATION INVOLVED (DRUM, BAG, STORAGE TANK, RAIL CAR, PLATING TANK, PAINTING SHOP, ETC.)
 8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
 9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
 10. RELEASE SCENE DESCRIPTION (CONTAMINATED AREA, PATH OF RELEASE, ETC.)
 11. ACTION TAKEN/PLANNED:
 - A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
 - B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
 - C. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
 - D. AMOUNT OF HS RECOVERED (BARRELS/GALLONS/LITERS OR POUNDS/KILOGRAMS OF PURE PRODUCT)
 - E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
 12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
 13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
 14. POTENTIAL DANGERS (FIRE, EXPLOSION, TOXIC VAPOR, ETC.)
 15. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
 16. LESSONS LEARNED
 17. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
 18. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
 19. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
 20. ASSISTANCE REQUIRED/COMMENTS
- //BT

APPENDIX F-1

INSTALLATION PEST MANAGEMENT (IPM) PLANS

A. DEPARTMENT OF DEFENSE (DOD) PEST MANAGEMENT PLAN. Each installation must have a pest management plan as described in enclosure 6 of reference (a). The plan must list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, material, or property. Installations that have more than 0.5 productive work-years of pest management work must have their own plan. Installations with less than 0.5 productive work-years must have an individual plan, or be included in a supporting installation's pest management plan. Professional pest management personnel or certified pesticide applicators must manage these installation programs.

B. CONTENT. Pest management plans must be comprehensive, long-range narrative documents, as outlined in enclosure 8 of reference (a), and must:

1. Describe all installation and satellite installation pest management requirements and programs, including those for contracts, natural resources, golf courses, and out leases, and identify minimum pest management staffing requirements.
2. Describe all integrated pest management (IPM) procedures required to monitor and control pests on the installation.
3. Describe all IPM procedures for surveillance and control of disease vectors.
4. Identify all resources, such as work-years, facilities, and equipment, required to support the installation pest management program.
5. Identify all pesticides, including Environmental Protection Agency (EPA) registration numbers, approved by the respective component pest management consultant for use in the installation pest management program.
6. Describe all health and safety measures that will be taken to protect both pest management personnel and the general public from pesticide exposure and risk.

7. Identify any planned measures to comply with DOD Memoranda of Agreement with state pesticide regulatory offices relating to use or application of pesticides.
8. Describe pest management functions that can be done more economically through commercial contracts and provide or reference cost comparison analyses.
9. Describe any pest management operation with special environmental considerations such as those that:
 - a. Use a restricted-use pesticide;
 - b. Use any pesticide application that may contaminate surface water or groundwater;
 - c. Include 259 or more contiguous hectares (640 acres) in one pesticide operation;
 - d. May adversely affect endangered or other protected species or their habitats;
 - e. Involve aerial application of pesticides;
 - f. Involve management or control of designated noxious weeds in accordance with reference (b) in cooperation with local control efforts; or
 - g. Involve permits for the use of experimental-use pesticides.
10. Identify animal control efforts for feral cats, feral dogs, or wildlife.
11. Identify active or potential vector-borne diseases and describe medical department collaboration with local and State agencies or host nations for vector surveillance and control matters.
12. Identify golf course pest management operations.

APPENDIX F-2

PEST MANAGEMENT PERSONNEL
TRAINING AND CERTIFICATION REQUIREMENTS

A. PERSONNEL QUALIFICATIONS. Installation pest management programs are comprehensive and include all pest management operations on an installation to support facilities engineering, nonappropriated funds, leased or out-leased activities, contract operations, material resources, etc. Therefore, the installation pest management coordinator must have an appropriate position, educational background, and management skills to implement the plan for the installation commander. Pesticide applicators must meet the job qualification standards specified by the Office of Personnel Management. Outside of the United States, Marine Corps pesticide applicators must comply with the DOD Overseas Environmental Baseline Guidance Document or the Final Governing Standards.

B. TRAINING AND CERTIFICATION. All installation pest management personnel who apply or supervise the application of pesticides must be trained and certified within two years of employment in accordance with reference (c), authorized by reference (a), or an EPA-approved State certification plan. Personnel who are undergoing apprenticeship training, but are not yet certified, must apply pesticides only under the direct supervision of a certified pesticide applicator.

1. IPM and pesticide application requirements may vary with installation mission, location, size, and environmental considerations. Some installations may have unique requirements. Training requirements for individual pesticide applicators may vary due to the pest management categories and complexity of the work to be performed. Therefore, the Marine Corps' senior pest management consultants must determine the training and experience necessary to perform the pest management activities within their areas of responsibility. The minimum training for Marine Corps installation pesticide applicators or contractors must be that required by EPA for certification in the applicable pesticide application categories. However, additional training beyond certification may be required due to the circumstances at a particular installation or the nature of the work to be done. These additional pest management training requirements may be fulfilled by successful completion of any

DOD; other Federal agency; or State, local, or private pest management training, provided the specific DOD requirements would be satisfied by the training.

2. Both DOD-certified and State-certified pesticide applicators must be recertified every three years in accordance with reference (c), authorized by reference (a) and reference (d), respectively. Designated Marine Corps certifying officials may administratively extend individual certifications for up to six months for cause.

3. Contractor employees performing pest management work on a Marine Corps installation must be certified prior to the beginning of the contract under a State plan accepted in the state in which the work is performed. The contractor must provide evidence of certification in all appropriate pest management categories. Additionally, the contractor must provide evidence of training and experience equivalent to that determined by the Marine Corps as necessary to satisfy the performance requirements for the particular pest management function to be contracted. Successful bidders for contracts must be afforded the opportunity to receive initial DOD pest management training on a space-available basis at the contractor's expense.

4. Pest Control Performance Assessment Representatives (PCPARs) trained in pest management must monitor and evaluate contractor performance for pest management services, unless a DOD employee, certified in accordance with reference (c), authorized by reference (a), is available to assist the PCPAR. If an installation's pest management contract efforts are less than 0.25 work-year, the presence of a trained PCPAR at the installation is recommended, but is not mandatory.

5. Installations must encourage all eligible professional pest management personnel to obtain appropriate certification in accordance with reference (c), authorized by reference (a) and reference (d) and to obtain certification from applicable professional boards and professional certifying organizations. Professional pest management personnel must be certified if their duties include:

a. Making recommendations for the use of pesticides, applying pesticides, or directly supervising the application of pesticides;

b. Conducting demonstrations on the proper use and techniques of pesticide application or the supervision of such demonstrations; or

c. Conducting field research that includes using or supervising the use of pesticides.

6. Marine Corps personnel and family members who apply pesticides under Marine Corps installation self-help programs or for their own relief are exempted from the certification requirement. Requirements for operational and deployable military personnel are described in chapter 14 of this Manual.

REFERENCES

(a) DOD Instruction 4150.7, "DOD Pest Management Program," April 22, 1996

(b) 7 U.S.C. 2814

(c) DOD Directive 4150.7-P, "DOD Plan for the Certification of Pesticide Applicators," September 20, 1996

(d) 7 U.S.C. 136 *et seq.*

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APPENDIX G-1

MINIMUM REQUIREMENTS FOR UNDERGROUND STORAGE TANKS

A. GENERAL. The following information concerning underground storage tank (UST) requirements was adopted from a document published by the United States Environmental Protection Agency (EPA) Office of Underground Storage Tanks in August 1988. It includes minimum requirements and important deadlines.

B. WHAT DO YOU HAVE TO DO?

LEAK DETECTION

<p>NEW TANKS + 40 CFR 280.41(a)(1)) Three choices</p>	<p>1. Monthly monitoring* 2. Monthly inventory control & tightness test every 5 years 3. Monthly manual tank gauging & tightness test every 5 years (only for tanks holding 2,000 gallons or less); (Can use tightness test methods for only 10 years after installation or upgrading.)</p>
<p>EXISTING TANKS++ (40 CFR 280.41(a)(2)) Two choices</p>	<p>1. Monthly monitoring* 2. Monthly inventory control & annual tightness test (Can use tightness test methods only until 1998 when tank must be upgraded or permanently closed. If upgraded, follow requirements for new tanks.)</p>
<p>ALL TANKS WITH CAPACITIES OF 550 GALLONS OR LESS (40 CFR 280.41a)(3)) Two choices</p>	<p>1. Methods listed above 2. Weekly manual tank gauging</p>
<p>NEW & EXISTING PRESSURIZED PIPING (40 CFR 280.41(b)(1)) One choice from each set</p>	<p>1. Automatic flow restrictor 2. Automatic shutoff device 3. Continuous alarm and 1. Annual line tightness test 2. Applicable monthly monitoring*</p>

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<p>NEW & EXISTING SUCTION PIPING (40 CFR 280.41(b)(2)) Three choices</p>	<ol style="list-style-type: none"> 1. Line tightness test every 3 years 2. Applicable monthly monitoring 3. None if: <ol style="list-style-type: none"> a. Piping sloped back to tank b. Only one check valve present just below pump c. Piping operates at below atmospheric pressure
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CORROSION PROTECTION

<p>NEW TANKS (40 CFR 280.20 (a)) Three choices.</p>	<ol style="list-style-type: none"> 1. Coated & cathodically protected 2. Fiberglass-reinforced plastic 3. Steel-fiberglass-reinforced plastic composite
<p>EXISTING TANKS (40 CFR 280.21 (b)) Three choices</p>	<ol style="list-style-type: none"> 1. Add interior liner with periodic inspections 2. Add cathodic protection system proving after tank is tight and not corroded 3. Add interior liner & cathodic protection system
<p>NEW PIPING (40 CFR 280.20 (b)) Three choices</p>	<ol style="list-style-type: none"> 1. Coated & cathodically protected steel 2. Fiberglass-reinforced plastic 3. Piping approved by the regulatory agency
<p>EXISTING PIPING (40 CFR 280.21 (c)) Two choices</p>	<ol style="list-style-type: none"> 1. Upgrade to new piping standards 2. Add cathodic protection system

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SPILL/OVERFILL PREVENTION

ALL TANKS** (40 CFR 280.20 (c), 40 CFR 280.21 (d))	1. Spill catchment basin and 1. Automatic shutoff device (approved by the One choice from each set regulatory agency) 2. Overfill alarm 3. Ball float valve
--	---

* Monthly tank gauging (40 CFR 280.43(d) through (h)) includes:
Automatic monitoring
Vapor monitoring
Interstitial monitoring
Groundwater monitoring
Other approved methods

+ New tanks are those installed after December 1988

++ Existing tanks are those installed before December 1988

** Spill/overfill prevention devices are not required for tanks filled by transfer of 25 gallons or less.

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C. WHEN DO YOU HAVE TO ACT?

IMPORTANT DEADLINES

TYPE OF TANK AND PIPING	LEAK DETECTION (40 CFR 280.40)	CORROSION PROTECTION (40 CFR 280.21)	STILL/OVERFLOW PREVENTION (40 CFR 280.21 (a))
New tanks and Piping *	At Installation of System	At Installation of System	At Installation of System
Existing tanks installed:			
Before 1965 or unknown	December 1989	December 1998	December 1998
1965-1969	December 1990	December 1998	December 1998
1970-1974	December 1991	December 1998	December 1998
1975-1979	December 1992	December 1998	December 1998
1980-1988	December 1993	December 1998	December 1998
Existing piping** Pressurized/suction	December 1990 Same as existing tanks	December 1998 December 1998	Does not apply Does not apply

* New tanks and piping are those installed after December 1988

** Existing tanks and piping are those installed before December 1988

APPENDIX G-2

RELEASE REPORTING REQUIREMENTS

A. RELEASE REPORTING REQUIREMENTS. All confirmed leaks, suspected leaks based on monitoring, or spills or overfills of fuels exceeding 25 gallons must be reported to the EPA or proper state agency within 24 hours. All spills or leaks of any size must be contained and cleaned up.

B. RELEASE INVESTIGATION AND CONFIRMATION. Immediate investigation using the following methods (or methods specified by the state EPA):

1. Inventory check;
2. Tank or pipeline isolation and monitoring system recheck;
3. If a leak is still suspected, a tightness or hydrostatic test must be used to locate the leak;
4. If the system fails a tightness test, soil coring or groundwater sampling should be conducted;
5. When conducting an evaluation of immediate risk to drinking water, explosive vapors, etc., the Installation Restoration program method or an updated risk assessment method should be used; and
6. Reporting of investigation results to the implementing agency.

C. A separate set of corrective actions is required for petroleum products versus hazardous substances. The procedures are listed in 40 CFR 280.60 to 280.67, but will vary based on state requirements and risk.

D. Small leaks can be cleaned up without removing the tank or pipeline. Often, even if loose joints and connections are causing the small leaks, the general condition of the tank is

still good. In such cases, the tank or pipeline must be repaired in accordance with 40 CFR 280.33 and the UST upgraded to meet new tank standards.

APPENDIX G-3

UNDERGROUND STORAGE TANKS
OPTIONS FOR RELEASE DETECTION

A. INTRODUCTION

1. The most immediate and demanding requirements of 40 CFR 280 concern the release-detection methods that must be implemented or installed on the Marine Corps UST systems. A synopsis of 40 CFR 280.40 to 280.45 follows.

2. The type of release-detection method used will vary with the type and age of the tank or pipeline. Furthermore, UST's used to store fuel for emergency generators are deferred from meeting the requirements for release detection. Emergency generator fuel tanks must comply with all other parts of this requirement.

B. RELEASE DETECTION FOR TANKS

1. Option 1-Combination of Precise Inventory Control and Tightness Testing. If UST's meet the new tank standards in 40 CFR 280.20, operators must conduct monthly inventory control and a tightness test every 5 years until 1998 or 10 years after upgrading.

2. Option 2-Combination of Precise Inventory Control and an Automated Gauging Device. The automatic gauging device must be able to detect a leak of 0.2 gallon/hour.

3. Option 3-Vapor Monitoring in Soils Surrounding Tanks. These monitoring requirements include:

- a. Only in sandy and gravelly soils,
- b. Monthly soil gas sampling,
- c. Must detect vapors above background levels,
- d. Groundwater must not impede monitoring, and
- e. Sufficient number of vapor monitoring wells.

4. Option 4-Groundwater Monitoring Near Tanks. Monitoring requirements include:

- a. Stored liquid must be immiscible in water and have a specific gravity less than one,
- b. Groundwater must be within 20 feet of the ground surface,
- c. Soils must have a hydraulic conductivity of 0.01 cm/sec or greater,
- d. Proper monitoring well design and proper number of wells, and
- e. Use of an automatic or manual method capable of detecting a 1/8-inch layer of floating fuel.

5. Option 5-Interstitial Monitoring. This method applies only to UST's surrounded by a secondary containment barrier. Monitoring wells must be placed between the primary tank and the containment barrier when the barrier is within the excavation zone. For double walled tanks and tanks fitted with internal liners ("bladders"), the interstitial space must be monitored.

6. Option 6-Another Method Approved by the Implementing Agency. The method must be able to detect a 0.2 gallon/hour leak or 150 gallons/month release with a 95 percent probability of detection and a 5 percent probability of false positives.

C. PIPING RELEASE MONITORING. EPA regulations place more stringent requirements on pipes that convey liquids under pressure. The following release detection requirements apply:

1. Pressurized Piping

- a. Must be equipped with automatic line leak detection (e.g., automatic flow restrictor, continuous alarm, or automatic shutoff capabilities).
- b. Must have annual tightness test or monthly monitoring system.

2. Suction Piping. Tightness test every 3 years or monthly monitoring. European suction piping requires no leak detection.

UNDERGROUND STORAGE TANKS
OUTLINE OF PERMANENT CLOSURE REPORT

- I. EXECUTIVE SUMMARY
- II. INTRODUCTION AND PURPOSE
 - a. Brief statement of report purpose and scope
 - b. Identify contractors involved and UST owner/operators
- III. SITE DESCRIPTION AND UST IDENTIFICATION
 - a. Identify and describe facility related to UST's and general setting
 - b. Identify and describe UST's included in the report
 - c. Scaled site drawings
- IV. NOTIFICATION AND PERMITTING
 - a. Regulatory notification/permits
 - b. Contractor certification/licensing
- V. UST CLOSURE PROCEDURES
 - a. Residual liquid removal
 - b. Tank/pipe cleaning and closure preparation
 - c. Tank/pipe removal or in-place closure
 - d. Excavated soil management
 - e. Safety measures and considerations
- VI. SITE ASSESSMENT PROCEDURES
 - a. Describe appropriate environmental conditions and factors
 - b. Visual observations
 - c. Field analyses and checks
 - d. Soil/water sampling procedures and Quality Assurance/Quality Control (QA/QC)
 - e. Soil/water analytical procedures and QA/QC
 - f. Results and conclusions of site assessment
- VII. NECESSARY ATTACHMENTS AND APPENDICES
 - a. Contractor certifications and licenses
 - b. Residual fuel disposal/reuse receipts
 - c. Tank sludge disposal manifests or receipts
 - d. Tank washwater disposal manifests or receipts
 - e. Contaminated soil manifests or receipts

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- f. UST disposal receipts/certificates of destruction
- g. Photographs of site work and conditions
- h. Laboratory chain-of-custody forms
- i. Laboratory analytical results
- j. Removal notifications and permits
- k. Related correspondence to/from regulators
- l. Well permits, if wells installed
- m. Drill cuttings and purged well water manifests, if needed.

APPENDIX H

EXCERPT FROM DEPARTMENT OF DEFENSE DIRECTIVE 4001.1 INSTALLATION
MANAGEMENT

September 4, 1986

ASD (A&L)

Refs: (a) Deputy Secretary of Defense Memorandum, "Defense-wide Application of the Model Installation Management Approach," 26 March 1986

A. PURPOSE. This Directive establishes the DoD installation management policy.

B. APPLICABILITY. This Directive applies to the Office of the Secretary of Defense (OSD), the Military Departments, the Organization of the Joint Chiefs of Staff (OJCS), and the Defense Agencies (hereafter referred to collectively as "DoD Components")

C. POLICY

1. The Commanding Officer of an installation is responsible for accomplishing the mission assigned to the installation, and should be delegated broad authority to decide how best to accomplish the mission, and is accountable for all resources applied to the mission.

2. Headquarters staff activities shall be directed toward facilitating any installation commander's ability to accomplish the mission. Regulations that limit installation commanders' freedom to do their jobs are contrary to the basic DoD installation management policy, and shall be canceled or revised. Exceptions should be rare.

3. Except where required to preserve essential wartime support capability, or constrained by law or federal regulation, installation commanders shall be free to purchase goods and services wherever they can get the combination of quality, responsiveness, and cost that best satisfies their requirements.

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4. Unless prohibited by law, a share of any resources saved or earned at an installation should be made available to the installation commander to improve the operations and working and living conditions at the installation.

D. RESPONSIBILITIES

1. Heads of DoD Components shall ensure that all regulations for which they are responsible comply with the policies contained in this Directive.

2. The Inspector General, DoD shall review and report compliance with these policies.

E. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective immediately. Forward one copy of implementing documents to the Assistant Secretary of Defense (Acquisition and Logistics) within 120 days.

William H. Taft IV
Deputy Secretary of Defense

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

APPENDIX I

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4150.7
PEST MANAGEMENT PROGRAM

NUMBER 4150.7

April 22, 1996

USD (A&T)

SUBJECT: DoD Pest Management Program

References: (a) DoD Directive 4715.1, "Environmental Security,"
February 24, 1996
(b) Section 125 of title 10, United States Code
(c) DoD 5025.1-M, "DoD Directives System Procedures," August
1994, authorized by DoD Directive 5025.1, June 24, 1994
(d) "DoD Plan for the Certification of Pesticide Applicators of
Restricted Use Pesticides," December 8, 19851
(e) Through (p), see enclosure 1

1. PURPOSE. This Instruction:

1.1. Implements policy, assigns responsibility, and prescribes procedures for the Department of Defense Pest Management Program, as established under references (a), (b), and the Joint Service Regulation, "Joint Field Operating Agencies of the Office of The Surgeon General of the Army," August 16, 1988.

1.2. Authorizes the publication of DoD 4150.7-M, "DoD Pest Management Training and Certification," in accordance with reference (c).

1.3. Authorizes the publication of DoD 4150.7-P, "DoD Plan for the Certification of Pesticide Applicators," in accordance with reference (c).

1.4. Designates the Secretary of the Army as the DoD Executive Agent for the Armed Forces Pest Management Board (AFPMB).

2. APPLICABILITY AND SCOPE. This Instruction:

2.1. Applies to the Office of the Secretary of Defense (OSD), the Military Departments (including the Coast Guard when it is operating as a Military Service in the Navy), the Chairman of the Joint Chiefs of Staff, the Unified Combatant Commands, the Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities (hereafter referred to collectively as "the DoD Components"). The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

2.2. Applies to all DoD operations, activities, and installations worldwide including appropriated fund activities; non-appropriated fund activities; contracted activities; and Government-owned, contractor-operated facilities.

2.3. Applies to all DoD buildings, structures, lands, public works, equipment, aircraft, vessels, and vehicles.

2.4. Applies to all DoD vector control and pest management operations performed worldwide during peacetime, wartime, and military deployments including those done by contract.

2.5. Outside the Continental United States (OCONUS), applies consistent with applicable international agreements, Status of Forces Agreements, Final Governing Standards (FGS) issued for the host nations, or where no such FGS have been issued, the criteria in the Overseas Environmental Baseline Guidance Document.

2.6. Does not apply to:

2.6.1. The civil works function of the Army Corps of Engineers.

2.6.2. State-owned or State-operated (funded) installations or facilities that the National Guard uses part-time or full-time.

3. DEFINITIONS. Terms used in this Instruction are defined in enclosure 2.

4. POLICY. It is DoD Policy under DoD Directive 4715.1 (reference (a)) to:

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4.1. Establish and maintain safe, effective, and environmentally sound integrated pest management (IPM) programs to prevent or control pests and disease vectors that may adversely impact readiness or military operations by affecting the health of personnel or damaging structures, materiel, or property.

4.2. Ensure DoD pest management programs achieve, maintain, and monitor compliance with all applicable Executive Orders and applicable Federal, State, and local statutory and regulatory requirements.

4.3. Incorporate sustainable IPM philosophy, strategies, and techniques in all aspects of DoD and Component vector control and pest management planning, training, and operations including installation pest management plans and other written guidance to reduce pesticide risk and prevent pollution.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology, through the Deputy Under Secretary of Defense (Environmental Security) (DUSD(ES)), shall:

5.1.1. Oversee the implementation of this Instruction and represent the Secretary of Defense for both internal and interagency matters on the DoD Pest Management Program.

5.1.2. Provide operational direction and supervision to the AFPMB.

5.1.3. Provide policy guidance and coordination for the DoD Pest Management Program.

5.1.4. Maintain and enforce the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)).

5.1.5. Monitor compliance with this Instruction, including the Components' use of the DoD Pest Management Program Measures of Merit (enclosure 3).

5.1.6. Coordinate pest management actions with the Assistant Secretary of Defense for Health Affairs when human health is an issue.

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5.2. The Director of Defense Research and Engineering, under the Under Secretary of Defense for Acquisition and Technology, shall, in coordination with DUSD(ES), ensure that an appropriate level of effort is provided in research, development, and transfer of technology to support DoD pest management requirements.

5.3. The Heads of the DoD Components shall:

5.3.1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in this Instruction including the program elements in enclosure 4.

5.3.2. Emphasize IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.

5.3.3. Exercise oversight and review of installation pest management programs from the Component's major command and headquarters level.

5.3.4. Maintain accurate and complete reporting and record-keeping of pest management operations and pesticide use.

5.3.5. Ensure that actions taken under the policy in section 4, above, are consistent with DoD Directive 4715.1 (reference (a)).

5.3.6. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, State, and local statutory and regulatory requirements for pest management.

5.3.7. Ensure that Commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.

5.3.8. Ensure that any pesticide applications, excluding arthropod skin and clothing repellents, performed during military operations are recorded using [DD Form 1532-1](#), "Pest Management Maintenance Report," or a computer-generated equivalent. The DoD Components shall establish a method to archive these records for permanent retention.

5.3.9. Ensure the implementation of IPM in Component pest management programs, operations, regulations, publications, pest

management training, and pesticide applicator certification programs.

5.3.10. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with State and local governments, and with host-nation agencies involved with pest management when human health is an issue.

5.3.11. Ensure that the Component's DoD pest management consultants review installation pest management programs on-site at least every 36 months and annually review installation pest management plans for adherence to DoD policy.

5.3.12. Establish procedures to ensure that recommendations from on-site pest management program reviews and annual reviews of pest management plans will result in appropriate corrective action.

5.3.13. Designate Component senior pest management consultants as the primary points of contact for the Component's pest management program and for membership on the AFPMB in support of the Defense Environmental Security Council and inform the Executive Director, AFPMB, of these designated consultants.

5.3.14. Designate pest management consultants, as certifying officials under the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)), to certify the competency of the Component's pesticide applicators; establish procedures for designating and certifying specific DoD pest management consultants in aerial application pest control to approve pest management projects requiring aerial application of pesticides; and inform the Executive Director, AFPMB, of these designated consultants.

5.3.15. Implement pest management measures of merit (enclosure 3) and answer data calls for the measures of merit from the DUSD(ES).

5.3.16. Monitor pesticides available for purchase in DoD commissaries and Component exchanges to ensure the pesticides available for sale are least-hazardous pesticides that are compatible with DoD IPM programs and are pesticides that comply with applicable Federal, State, and local laws. DoD commissaries and Component exchanges OCONUS shall comply with subsection 2.5., above.

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5.3.17. Cooperate with State and local government agencies involved with pest management.

5.3.18. Participate in the development of the Defense Environmental Security Corporate Information Management (DESCIM) process for pest management and use the pest management information system when fielded.

5.3.19. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure effective implementation of pest management programs at all organizational levels.

5.3.20. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.

5.3.21. Monitor the use of IPM and reduction of pesticide use in installation pest management programs.

5.3.22. Ensure that Installations:

5.3.22.1. Develop, maintain, annually review, and revise their pest management plans consistent with the program elements in enclosure 4 and AFPMB Technical Information Memorandum (TIM) 18, "Installation Pest Management Guide," February 1987.

5.3.22.2. Implement pest management programs approved by pest management consultants and performed by certified pesticide applicators in accordance with the pest management plan written for each installation.

5.3.22.3. Establish pest management self-help programs for military housing when cost effective and when IPM monitoring indicates a need for a self help program.

5.3.22.4. Have all pesticide applications to DoD installations made only by properly trained and certified personnel in accordance with DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) or by State-certified applicators.

5.3.22.5. Use pesticides in accordance with applicable laws including FIFRA (reference (e)), and the constraints of subsection 2.5., above.

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5.3.22.6. Use only pesticides that have been approved by a DoD pest management consultant. Consideration should be given to locally purchased pesticides to ensure conformance with State management plans for ground water protection and to facilitate use of recyclable pesticide containers when appropriate pesticides are not available in the Federal supply system. Pesticides may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that assignment of an NSN is not practical.

5.3.22.7. Maintain complete daily pesticide application and pest management operations records as required by FIFRA (reference (e)) and 7 U.S.C. 136i-1 (reference (f)) or for pest management measures of merit, using [DD Form 1532-1](#) or a computer-generated equivalent. Produce a monthly summary, using [DD Form 1532](#) or computer-generated equivalent, to provide data for regulatory, DoD, Federal, State, or local agency data calls; Component program review and oversight; and Measures of Merit. Installation commanders shall ensure these records are archived after 2 years for permanent retention.

5.3.22.8. Use pest management contracts when more cost-effective than in-house services. Ensure that firms and their employees performing contract pest management work on DoD installations, and in support of DoD operations overseas, comply with all certification, licensing, and registration requirements of the State or country where the work is performed. Ensure that the technical portions of contracts involving pest management reflect IPM methodology and are reviewed and approved by a DoD pest management consultant before solicitation.

5.3.22.9. Have quality assurance evaluators (QAEs), who have been trained in pest management at DoD-sponsored courses, inspect pest management operations and pesticide applications performed by contractors.

5.3.22.10. Report pest management operations and pesticide applications performed by contractors as required in paragraph 5.3.22.7., above.

5.4. The Secretary of the Air Force shall maintain a large-area, fixed-wing aerial pesticide application capability to control disease vectors, pest organisms, and vegetation and to treat oil spills in combat areas, on DoD installations, or in response to declared emergencies and shall provide sufficient training for aerial pesticide application air crews and ground support personnel.

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5.5. The Secretary of the Army, as Executive Agent, shall provide administrative and logistic support, through the Surgeon General, for operation of the AFPMB.

5.6. The Secretaries of the Military Departments shall ensure that the Surgeons General shall nominate qualified candidates and provide uniformed military entomologists for the directorate positions of the AFPMB and provide technical support for the development, testing, and evaluation of pest management equipment as described below:

5.6.1. The Surgeon General of the Army shall provide three military entomologists to the AFPMB staff and conduct studies on engineering and durability of pest management equipment.

5.6.2. The Surgeon General of the Navy shall provide 2 military entomologists to the AFPMB staff and conduct studies on efficacy and military application of pest management equipment.

5.6.3. The Surgeon General of the Air Force shall provide 2 military entomologists to the AFPMB staff.

5.7. The Deputy Under Secretary of Defense for Environmental Security, through the Armed Forces Pest Management Board, shall:

5.7.1. Recommend policy, provide scientific advice, and enhance coordination among the DoD Components on all matters related to pest management.

5.7.2. Serve as the coordinating office for the DoD Undesirable Plant Management Program required by the Federal Noxious Weed Act (FNWA) (reference (g)).

5.7.3. Review and update DoD Environmental Security Measures of Merit for Pest Management.

6. PROCEDURES

6.1. The Component's pest management programs shall include the elements in enclosures E3, E4, E6, E7, and E8.

6.2. The AFPMB, reestablished by DoD Directive 4715.1 (reference (a)), consisting of a Council and Committee Structure, Directorate, and Defense Pest Management Information Analysis Center (DPMIAC) shall operate as described in enclosure 5.

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7. INFORMATION REQUIREMENTS

The record-keeping and the reporting requirements prescribed herein are assigned Report Control Symbol DD-A&T(A&AR)1080. Existing data elements from DoD 8320.1-M-1 (reference (h)) shall be used in the reporting requirements to the greatest extent possible.

8. EFFECTIVE DATE. This Instruction is effective immediately.

Paul G. Kaminski
Under Secretary of Defense
(Acquisition and Technology)

Enclosures - 8

1. References
2. Definitions
3. DoD Environmental Security Measures of Merit for Pest Management
4. DoD Pest Management Program Elements
5. AFPMB Functions, Organizations and Management
6. Requirements for Installation Pest Management Programs
7. Procedures for the Acquisition of Pest Management Equipment and Pesticides
8. Content of Installation Pest Management Plans, Suggested Format

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E1. ENCLOSURE 1

REFERENCES

- (e) Section 136 et seq. of title 7, United States Code, "Federal Insecticide, Fungicide, and Rodenticide Act 1976 (FIFRA)," as amended
- (f) Section 136i-1 of title 7, United States Code, 1990, Food, Agriculture, Conservation, and Trade Act of 1990"
- (g) Section 10 of title 7 (2801), United States Code, Federal Noxious Weed Act of 1974 et seq., as amended
- (h) DoD 8320.1-M-1, "Data Element Standardization Procedures," January 1993, authorized by DoD Directive 8320.1, September 26, 1991
- (i) Sections 4321 to 4370a of title 42, United States Code, "National Environmental Policy Act (NEPA) of 1969," as amended
- (j) DoD 4500.54-G, "DoD Foreign Clearance Guide," current edition, authorized by DoD Directive 4500.54, May 1, 1991
- (k) Memorandum of Agreement between the United States Department of Agriculture (USDA) and the Department of Defense for Conduct of Forest Insect and Disease Suppression on Lands Administered by the U.S. Department of Defense, December 1990
- (l) Section 1531 et seq. of title 16, United States Code, "Endangered Species Act of 1973," as amended
- (m) Department of Defense-United States Department of Agriculture/Animal Plant Health Inspection Service/Animal Damage Control Memorandum of Agreement on Animal Damage Control, April 19901
- (n) Section 1001 et seq. of title 16, United States Code, "Aquatic Nuisance Prevention and Control Act of 1990"

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Available from the AFMB, Forest Glen Section/Walter Reed Army Medical Center, 20307-5001 Washington, D.C.

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- (o) Executive Order 11850, "Renunciation of Certain Uses in War of Chemical Herbicides and Riot Control Agents," April 8, 19752
- (p) DoD Directive 5105.18, "DoD Committee Management Program," January 18, 1990

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Available form the AFMB, Forest Glen Section/Walter Reed Army Medical Center, 20307-5001 Washington, D.C.

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E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Certifying Officials. Professional DoD pest management personnel designated, in writing by the Components to the Executive Director, AFPMB, who review and certify that qualifications of DoD applicators meet the DoD standards in DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)).

E2.1.2. Component Senior Pest Management Consultant. The professional DoD pest management individuals, designated in writing by the Components to the Executive Director, AFPMB, who are the primary points of contact for the Component's pest management program including technical guidance, management oversight, and information requirements.

E2.1.3. Direct Supervision. Supervision that includes being at the specific location where pest management work is conducted; providing instruction and control; and maintaining a line-of-sight view of the work performed. Certain circumstances may temporarily remove the line-of-sight view of the application of pesticide from the supervisor such as topographic constraints, vegetation constraints, or building structural constraints. Under these temporary circumstances, the supervisor shall be responsible for the actions of the pesticide applicators. (See Uncertified Installation Pesticide Applicator, Definition E2.1.13.5., below).

E2.1.4. Disease Vector. Any animal capable of transmitting the causative agent of a human disease; serving as an intermediate or reservoir host of a pathogenic organism; or producing human discomfort or injury, including (but not limited to) mosquitoes, flies, other insects, ticks, mites, snails, and rodents. It is recognized that certain disease vectors are predominately economic pests that as conditions change may require management or control as a disease vector.

E2.1.5. Disinsection. The procedure of killing or removing insects from ships or aircraft to prevent their importation into another port or country.

E2.1.6. Integrated Pest Management (IPM). A planned program, incorporating continuous monitoring, education, 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 (effective, economical, environmentally sound) methods including education, habitat modification, biological control, genetic control, cultural control, mechanical control, physical control, regulatory control, and where necessary, the judicious use of least-hazardous pesticides.

E2.1.7. Monitoring. Thorough inspections or surveys conducted on a regular basis to determine the presence and prevalence of pests or disease vectors.

E2.1.8. Nuisance Pests. Insects, other arthropods, and other organisms that do not cause economic damage or adversely affect human health, but which cause minor annoyance on occasion.

E2.1.9. On-Site Supervision. Supervision that includes being physically located on the installation, but not necessarily at the specific worksite, during the work performance and being able to be contacted and at the worksite within 30 minutes.

E2.1.10. Personal Relief. Pest management control efforts made by DoD personnel or their family members at their own expense for control of pests consistent with DoD and Component pest management policy.

E2.1.11. Pest Management Quality Assurance Evaluator. A quality assurance inspector who is a DoD employee, trained in pest management, who protects the Government's interest through on-site performance evaluation of commercial pest management contracts or other contracts that involve the use of pesticides.

E2.1.12. Pesticide. Any substance or mixture of substances, including biological control agents, that may prevent, destroy, repel, or mitigate pests and are specifically labeled for use by the U.S. Environmental Protection Agency (EPA). Also, any substance or mixture of substances used as a plant regulator, defoliant, desiccant, disinfectant, or biocide. (See Restricted-Use Pesticide, definition E2.1.21.) The AFPMB does not review or approve disinfectants or biocides.

E2.1.13. Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides by others.

E2.1.13.1. Certified Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides, and who has been authorized to do so by successfully

completing a training program approved by the EPA, followed by formal certification by the Department of Defense or a State, or, for OCONUS, the provisions of subsection 2.5. of the main body of this Instruction.

E2.1.13.2. DoD-Certified Pesticide Applicators. DoD military or civilian personnel certified in accordance with the DoD Plan for the Certification of Pesticide Applicators o Restricted Use Pesticides (reference (d)).

E2.1.13.3. Installation Pesticide Applicators. DoD employees or contract personnel whose job responsibilities involve the application of pesticides on DoD installations and property.

E2.1.13.4. State-Certified Pesticide Applicators. Persons certified in accordance with FIFRA (reference (e)) by a State with an EPA-approved certification plan.

E2.1.13.5. Uncertified Installation Pesticide Applicators. DoD employees who are not certified under the Department of Defense or State plan during an apprenticeship period not exceeding 2 years and who must apply pesticides under the supervision of a DoD or State-certified applicator.

E2.1.14. Pest Management. The prevention and control of disease vectors and pests that may adversely affect the DoD mission or military operations; the health and well-being of people; or structures, materiel, or property.

E2.1.15. Pest Management Consultant. Professional DoD pest management personnel located at Component Headquarters, field operating agencies, major commands, facilities engineering field divisions or activities, or area support activities who provide technical and management guidance for the conduct of installation pest management operations. Some pest management consultants may be designated by their Component as certifying officials.

E2.1.16. Pest Management Coordinator. The individual officially designated by the installation commander to coordinate and oversee the installation pest management program and installation pest management plan. Pest management coordinators shall be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

E2.1.17. Pest Management Materiel. Equipment or pesticides used to monitor, prevent, or control pests and disease vectors. Equipment items include, but are not limited to, all pesticide dispersal equipment, traps, nets, and pest-attracting or pest-repelling devices.

E2.1.18. Pest Management Plan. A long-range, comprehensive installation planning and operational document that establishes the strategy and methods for conducting a safe, effective, and environmentally sound integrated pest management program. Written pest management plans are required as a means of establishing and implementing an installation pest management program.

E2.1.19. Pests. Arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

E2.1.20. Professional Pest Management Personnel. DoD military officers commissioned in the Medical Service or Biomedical Sciences Corps or DoD civilian personnel with college degrees in biological or agricultural sciences who are in a current assignment that includes pest management responsibilities exercised regularly. DoD civilian employees also shall meet Office of Personnel Management (OPM) qualification standards. Based on assignment, some professional pest management personnel are pest management consultants.

E2.1.21. Restricted-Use Pesticide. A pesticide that the Administrator of the EPA (in accordance with FIFRA (reference (e))), or a State regulatory agency determines to have the potential to cause unreasonable adverse effects on the environment or human health, when applied in accordance with its directions for use, and therefore requires additional regulatory restrictions.

E2.1.22. State. Any one of the 50 United States of America; the District of Columbia; the Commonwealths of Puerto Rico, the Northern Marianas, Virgin Islands; and the Territories of Guam and American Samoa.

E2.1.23. Surveillance. Thorough inspections or surveys made before or after pest management treatments to determine the presence and prevalence of pests or disease vectors.

E2.1.24. Technical Information Memoranda. Technical guidance prepared by the AFPMB on specific pest management and disease vector control topics. Technical Information Memoranda (TIM) are available from the AFPMB, Forest Glen Section/Walter Reed Army Medical Center, Washington, DC 20307-5001.

E2.1.25. Training. Formal or informal instruction in one or more subject areas concerning IPM and disease vector control to increase the expertise and measurable competence of pest management personnel in performance of specific IPM and disease vector control skills. Training methods are varied and include workshops, seminars, conferences, symposia, training courses, apprenticeships, interactive models, satellite and video tele-training, correspondence courses, training support packages including video-based products, other distributive products, or materials.

E3. ENCLOSURE 3

DOD ENVIRONMENTAL SECURITY

MEASURES OF MERIT FOR PEST MANAGEMENT

E3.1.1. Measure of Merit 1. Installation Pest Management Plans;

E3.1.1.1. By the end of FY 97, 100 percent of DoD installations will have pest management plans prepared, reviewed, and updated annually by pest management professionals.

E3.1.2. Measure of Merit 2. Pesticide Use Reduction;

E3.1.2.1. By the end of FY 2000, the amount of pesticide applied annually on DoD installations will be reduced by 50% from the FY 93 baseline in pounds of active ingredient. The goal for this measure of merit shall not be obtained by substituting more toxic pesticides that have lower application rates than the pesticide in use.

E3.1.3. Measure of Merit 3. Installation Pesticide Applicator Certification;

E3.1.3.1. By the end of FY 98, 100 percent of DoD's installation pesticide applicators will be properly certified (either DoD or appropriate State). Direct hire employees have a maximum of 2-years to become certified after initial employment. Contract employees should have the appropriate State certification when the contract is let.

E4. ENCLOSURE 4

DOD PEST MANAGEMENT PROGRAM ELEMENTS

E4.1.1. DoD Pest Management Program Elements. DoD Pest Management Programs shall include the following elements that are described in this enclosure:

E4.1.1.1. Installation Pest Management Plans.

E4.1.1.2. Integrated Pest Management.

E4.1.1.3. Installation Consultative Support, Pest Management Program Reviews, and Audits.

E4.1.1.4. Training and Certification of Pest Management Personnel.

E4.1.1.5. Pesticides and Pest Management Equipment.

E4.1.1.6. Contracting for Commercial Pest Management Services.

E4.1.1.7. Specialized Pest Management Operations.

E4.1.1.8. Pest Management and Disease Vector Control in Military Contingency Operations,

E4.1.2. Installation Pest Management Plans. Each installation shall have a pest management plan as described in enclosure 6. The plan shall list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, materiel, or property. Installations that have more than 0.5 productive work-years of pest management work shall have their own plan. Installations with less than 0.5 productive work-years must have an individual plan, or be included in a supporting installation's pest management plan. Professional pest management personnel or certified pesticide applicators shall manage these installation programs.

E4.1.2.1. Component Role. The DoD Components shall ensure that each installation has a pest management plan and that the Component's pest management consultants maintain the program

through technical assistance, program review, and program oversight. The Components shall ensure that Installation Commanders:

E4.1.2.1.1. Plan and budget for the development and maintenance of the pest management plan.

E4.1.2.1.2. Ensure that qualified personnel develop and update the pest management plan annually.

E4.1.2.1.3. Designate a DoD-certified or State-certified pesticide applicator as the pest management coordinator to implement the plan.

E4.1.2.1.4. Ensure that the pest management coordinator formally coordinates appropriate portions of the pest management plan with the senior medical officer, environmental coordinator and senior engineering officer and ensure that these individuals sign the cover sheet of the pest management plan.

E4.1.2.1.5. Ensure that appropriate portions of the pest management plan are reviewed by the Natural Resources Program Manager for consistency with the Natural Resources Management Plan.

E4.1.2.1.6. Ensure that the pest management coordinator forwards the pest management plan to the cognizant component pest management consultant for review, technical approval, and signature on the cover sheet.

E4.1.2.1.7. Approve and sign the pest management plan for implementation.

E4.1.2.1.8. Ensure implementation of the pest management plan and oversight of the installation pest management program by the pest management coordinator.

E4.1.2.1.9. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant component pest management consultant.

E4.1.2.2. Content. Pest management plans shall be comprehensive, long-range, narrative documents, as outlined in enclosure E8, and shall:

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E4.1.2.2.1. Describe all installation and satellite installation pest management requirements and programs, including those for contracts, natural resources, golf courses, and out leases, and identify minimum pest management staffing requirements.

E4.1.2.2.2. Describe all IPM procedures required to monitor and control pests on the installation.

E4.1.2.2.3. Describe all IPM procedures for surveillance and control of disease vectors.

E4.1.2.2.4. Identify all resources, such as work-years, facilities, and equipment, required to support the installation pest management program.

E4.1.2.2.5. Identify all pesticides, including EPA registration numbers, approved by the respective Component pest management consultant for use in the installation pest management program.

E4.1.2.2.6. Describe all health and safety measures that will be taken to protect both pest management personnel and the general public from pesticide exposure and risk.

E4.1.2.2.7. Identify any planned measures to comply with DoD Memoranda of Agreement with State pesticide regulatory offices relating to use or application of pesticides.

E4.1.2.2.8. Describe pest management functions that can be done more economically through commercial contracts and provide or reference cost comparison analyses.

E4.1.2.2.9. Describe any pest management operation with special environmental considerations such as those that:

E4.1.2.2.9.1. Use a restricted-use pesticide.

E4.1.2.2.9.2. Use any pesticide application that may contaminate surface or ground water.

E4.1.2.2.9.3. Include 259 or more contiguous hectares (640 acres) in one pesticide operation.

E4.1.2.2.9.4. May adversely affect endangered or other protected species or their habitats.

E4.1.2.2.9.5. Involve aerial application of pesticides.

E4.1.2.2.9.6. Involve management or control of designated noxious weeds in accordance with 7 U.S.C. 10 (reference (g)) in cooperation with local control efforts.

E4.1.2.2.9.7. Involve permits for the use of experimental-use pesticides.

E4.1.2.2.10. Identify animal control efforts for feral cats, feral dogs, or wildlife.

E4.1.2.2.11. Identify active or potential vector-borne diseases and describe medical department collaboration with local and state agencies or host nations for vector surveillance and control matters.

E4.1.2.2.12. Identify golf course pest management operations.

E4.1.3. Integrated Pest Management

E4.1.3.1. Background. IPM is the method of choice for DoD pest management and disease vector control. IPM is a sustainable approach to managing pests and controlling disease vectors by combining applicable pest management tools in a way that minimizes economic, health, and environmental risks. IPM uses regular or scheduled monitoring to determine if and when treatments are needed and employs physical, mechanical, cultural, biological, genetic, regulatory chemical, and educational tactics to keep pest numbers low enough to prevent unacceptable damage or impacts. Treatments are not made according to a predetermined schedule; they are made only when and where monitoring has indicated that the pest will cause unacceptable economic, medical, or aesthetic damage. Treatments are chosen and timed to be most effective and least disruptive to natural controls of pests. Least hazardous, but effective, pesticides are used as a last resort.

E4.1.3.2. Process. IPM in the Department of Defense shall be based on seven steps that are routine procedures for addressing each pest problem. These steps are:

E4.1.3.2.1. Identification and assessment of pest or disease vector problems.

E4.1.3.2.2. Development of a written management plan or strategy that emphasizes natural controls and non-chemical tactics to deal with pest and disease vector problems.

E4.1.3.2.3. Establishment of an action threshold for each pest and disease vector problem to define when corrective action must be implemented.

E4.1.3.2.4. Use of a monitoring procedure, such as inspection, trapping, or surveillance, for each pest and disease vector.

E4.1.3.2.5. Application of corrective action when a threshold is reached for any pest or disease vector.

E4.1.3.2.6. Use of a documentation system to catalogue monitoring information and to document management problems.

E4.1.3.2.7. Verification and evaluation procedures to ensure that the IPM program is meeting stated risk reduction measures and that information exists to redesign the IPM plan where required.

E4.1.4. Installation Consultative Support, Program Reviews and Audits

E4.1.4.1. Consultative Support. The DoD Components shall ensure that installations receive state-of-the-art technical assistance in IPM.

E4.1.4.2. Command Program Reviews. To ensure adequate oversight of DoD Component Pest Management Programs, DoD Component pest management consultants or designated pest management professionals shall conduct on-site reviews of installation pest management programs at least every 36 months with the following exceptions:

E4.1.4.2.1. Installations requiring less than 0.5 work-years of pest management services shall be reviewed at the discretion of the cognizant pest management consultant.

E4.1.4.2.2. Installations that receive pest management support from another DoD installation shall be reviewed during the review of the supporting installation.

E4.1.4.2.3. Installations with documented pest management problems, such as deficiencies from environmental compliance

audits, State inspections, or Federal inspections, should be reviewed annually until the deficiencies are resolved.

E4.1.4.2.4. On-site review requirements can be met by formal program reviews, environmental audits or assistance visits.

E4.1.4.3. Environmental Compliance Audits

E4.1.4.3.1. The Components shall ensure that pest management consultants or designated pest management professionals are available, on request, to provide technical assistance for the pesticide portion of environmental audits, to provide follow-up assistance to audits, or to further evaluate audit findings.

E4.1.4.3.2. The Components shall ensure installations notify the appropriate pest management consultant whenever Federal, State, or local regulators ask to inspect pest management operations. As directed by the Components, pest management consultants shall provide technical coordination services for such inspections consistent with existing Memoranda of Agreement between the Department of Defense and State pesticide regulatory offices relating to use or application of pesticides.

E4.1.5. Training and Certification of Pest Management Personnel

E4.1.5.1. Personnel Qualifications. Installation pest management programs are comprehensive and include all pest management operations on an installation to support facilities engineering, non-appropriated funds, leased or out-leased activities, contract operations, materiel resources, etc. Therefore, the installation pest management coordinator shall have an appropriate position, educational background, and management skills to implement the plan for the Installation Commander. DoD pesticide applicators shall meet the job qualification standards specified by the OPM. Outside of the United States, DoD pesticide applicators shall comply with subsection 2.5. of the main body of this Instruction.

E4.1.5.2. Training and Certification. All installation pest management personnel who apply or supervise the application of pesticides shall be trained and certified within 2 years of employment in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides, reference

(d), or an EPA-approved State certification plan. Personnel who are undergoing apprenticeship training, but are not yet certified, shall apply pesticides only under the direct supervision of a certified pesticide applicator.

E4.1.5.2.1. IPM and pesticide application requirements may vary with installation mission, location, size, and environmental considerations. Some installations may have unique requirements. Training requirements for individual pesticide applicators may vary due to the pest management categories and complexity of the work to be performed. Therefore, the Component's senior pest management consultants shall determine the training and experience necessary to perform the pest management activities within their areas of responsibility. The minimum training for DoD installation pesticide applicators or contractors shall be that required by the EPA for certification in the applicable pesticide application categories. However, additional training beyond certification may be required due to the circumstances at a particular installation or the nature of the work to be done. These additional pest management training requirements may be fulfilled by successful completion of any DoD, other Federal agency, State, local, or private pest management training, provided the specific DoD requirements would be satisfied by the training.

E4.1.5.2.2. Both DoD-certified and State-certified pesticide applicators shall be recertified every 3 years in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) and FIFRA (reference (e)), respectively. Designated Component-certifying officials may administratively extend individual certifications for up to 6 months for cause.

E4.1.5.2.3. Contractor employees performing pest management work on a DoD installation shall be certified prior to the beginning of the contract under a State plan accepted in the State in which the work is performed. The contractor shall provide evidence of certification in all appropriate pest management categories. Additionally, the contractor shall provide evidence of training and experience equivalent to that determined by the Components as necessary to satisfy the performance requirements for the particular pest management function to be contracted. Successful bidders for contracts shall be afforded the opportunity to receive initial DoD pest management training on a space-available basis at the contractor's expense.

E4.1.5.2.4. QAEs, trained in pest management, shall monitor and evaluate contractor performance for pest management services, unless a DoD employee, certified in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)), is available to assist the QAE. If an installation's pest management contract efforts are less than 0.25 work-year, the presence of a trained QAE at the installation is recommended, but is not mandatory.

E4.1.5.2.5. The DoD Components shall encourage all eligible professional pest management personnel to obtain appropriate certification in accordance with reference (d) and FIFRA (reference (e)) and to obtain certification from applicable professional boards and professional certifying organizations. Professional pest management personnel shall be certified if their duties include:

E4.1.5.2.5.1. Making recommendations for the use of pesticides, applying pesticides, or directly supervising the application of pesticides.

E4.1.5.2.5.2. Conducting demonstrations on the proper use and techniques of pesticide application or the supervision of such demonstrations.

E4.1.5.2.5.3. Conducting field research that includes using or supervising the use of pesticides.

E4.1.5.2.6. DoD personnel and family members who apply pesticides under DoD installation self-help programs or for their own relief are exempted from the certification requirement. Requirements for operational and deployable military personnel are described in section E4.1.8. of this enclosure, below.

E4.1.6. Pesticides and Pest Management Equipment

E4.1.6.1. Procurement of Pest Management Materiel

E4.1.6.1.1. AFPMB shall approve all introduction, stockage, and deletion of pest management materiel managed by the Defense Logistic Agency (DLA) for use in DoD programs. Enclosure E7 provides specific procedures for AFPMB review and approval of pesticides and equipment.

E4.1.6.1.2. The DoD Components shall not procure or acquire pest management materiel that has not been recommended by the AFPMB or approved by the cognizant Component pest management

consultant. National Stock Numbers (NSNs) shall not be assigned to pest management materiel for use by the Department of Defense that has not been approved by the AFPMB. Upon approval by the appropriate pest management consultant, pest management materiel may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that assignment of an NSN is not practical.

E4.1.6.2. Pesticide Storage Facilities. The design of pesticide storage facilities shall comply with standards described in MIL-HDBK-1028/8A, "Military Handbook, Design of Pest Management Facilities," November 1991. Existing facilities shall comply with all applicable regulatory standards and shall, where feasible, be modified to meet the standards for new pesticide storage facilities.

E4.1.6.3. Pesticide Disposal. Installation Commanders shall ensure that installation pest management programs are managed to ensure pesticides do not become hazardous wastes. The installation pest management coordinator shall ensure that excess EPA-registered pesticides are either returned to the DLA Materials Return Program, transferred to a DoD installation able to use the materiel, or transferred to the servicing Defense Reutilization and Marketing Office. The appropriate DoD pest management consultant shall, if requested, provide assistance in identifying installations where usable pesticides could be used. When the EPA publishes a proposed pesticide regulatory action involving pesticide label suspension or cancellation that affects the Department of Defense, the Components and installations shall comply with administrative procedures developed between the DLA and AFPMB. The Components shall use the guidance in AFPMB TIM 21, "Pesticide Disposal for Pest Control Shops," October 1986, for pesticide disposal.

E4.1.6.4. Pesticide Safety. To ensure the safe use of pesticides, DoD personnel shall handle and apply pesticides in accordance with the product's label directions and AFPMB TIM 14, "Personal Protective Equipment for Pest Management Personnel," May 1992; TIM 15, "Pesticide Spill Prevention and Management, June 1992; TIM 16, "Pesticide Fires: Prevention, Control and Cleanup," January 1981; and TIM 21, "Pesticide Disposal Guide for Pest Control Shops," October 1986. DoD policy prohibits construction of buildings with heating, ventilation and air conditioning (HVAC) ducts located in and below the floor to prevent accidental contamination of the ducts with termiticides. Similarly, DoD policy prohibits post-construction treatment of

structures with HVAC ducts without a waiver from the Component pest management consultant.

E4.1.6.5. Electrically Operated Devices. It is DoD policy to not use electromagnetic exclusion or control devices, ultrasonic repellent or control devices, and outdoor devices for electrocuting flying insects on DoD installations, except as noted in AFPMB TIM 25, "Devices for Electrocution of Flying Insects," August 1988. However, indoor devices for electrocuting flying insects can be used when selected, purchased, located, and used in accordance with AFPMB Technical Information Memorandum 25. Pest surveillance traps and monitoring equipment, such as non-electrocuting mosquito light traps, shall be used as integral tools for IPM programs.

E4.1.6.6. Paints and Coatings Containing Pesticides and other Biocides. DoD policy prohibits use of paints containing insecticides on DoD property. This guidance applies to both interior or 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.

E4.1.6.7. Preventive or Scheduled Pesticide Treatments. DoD policy prohibits the use of regularly scheduled, periodic pesticide applications except in situations where the installation pest management plan clearly documents that no other technology or approach is available to protect personnel or property of high value. Installations shall not use preventive pesticide treatments unless the appropriate pest management consultant has given approval based upon current surveillance information or records documenting past disease vector or pest problems that require this approach.

E4.1.7. Pest Management Contracting

E4.1.7.1. Background. The Department of Defense shall use pest management contracts when cost-effective or when advantageous for non-routine, large-scale, or emergency services, especially when specialized equipment or expertise is needed. Contractors shall comply with State regulatory requirements in the State where the work will be performed regarding certification, licensing, and registration of pest management

companies and their employees. Outside of the United States, contractors shall comply with section 2.5. of the main body of this Instruction.

E4.1.7.2. Review and Approval. Pest management consultants shall review and approve contract documents for pest management operations including augmentation contracts to ensure that appropriate pest management standards and IPM are specified. Contracting offices shall award augmentation contracts only when the respective pest management consultant has verified that the contract will provide necessary services beyond the capability of any in-house staff. The Components shall encourage installations that lack expertise in pest management to request the services of a DoD pest management consultant to develop the technical portions of pest management contracts in accordance with DoD/AFPMB Guideline Performance Work Statement (GPWS) for Contract Pest Control, July 1986. Pest management consultants shall act as technical consultants during the performance of contracted work.

E4.1.7.3. Quality Assurance.

E4.1.7.3.1. The Components shall ensure that QAEs, who inspect the performance of contractor-provided pest management services, are trained in pest management.

E4.1.7.3.2. Installation Commanders shall base pest management QAE staffing decisions on the following factors:

E4.1.7.3.2.1. The number of pest management operations requiring 100 percent inspection.

E4.1.7.3.2.2. The number of different functions being performed simultaneously.

E4.1.7.3.2.3. The scope of the contract including required productive work-years.

E4.1.7.3.2.4. The level of monitoring or surveillance required for each operation.

E4.1.8. Specialized Pest Management Operations

E4.1.8.1. Aerial Application of Pesticides. Documentation for aerial application projects shall be in accordance with DoD and Component environmental requirements including compliance with the requirements of the NEPA (reference (i)). The DoD

Components shall ensure that a designated pest management consultant at the major command level or higher, who is certified in the aerial application pest control category, approves all proposed pest management projects that involve the aerial application of pesticides. Approval shall be obtained before aerial application operations commence. DoD Component pest management consultants shall collaborate, as appropriate, with the 910th Airlift Wing (Air Force Reserve) during the review and approval process for aerial spray projects to be completed by the 910th. Installation commanders shall ensure that installation personnel update documentation for project approval if subsequent aerial application operations are planned.

E4.1.8.2. Disinsection of Military Aircraft. DoD personnel shall disinsect military aircraft for disease vectors and agricultural pests only when:

E4.1.8.2.1. Required by a foreign nation as a prerequisite to entry as specified in the DoD Foreign Clearance Guide (reference (j)).

E4.1.8.2.2. Mandated by the U.S. Department of Health and Human Services or the U.S. Department of Agriculture.

E4.1.8.2.3. Directed by a command-level or higher authority who, consistent with Joint Service regulation, "Quarantine Regulations of the Armed Forces," January 24, 1992, has determined that the point of embarkment has active vector-borne disease.

E4.1.8.2.4. No passengers are on board (except when mandated by the DoD Foreign Clearance Guide (reference (j))).

E4.1.8.3. Forest Pests. The Components shall cooperate with the USDA, Forest Service, on applicable pest management programs including annual USDA funding for forest insect and disease suppression projects on DoD-controlled land in accordance with the MOA between the USDA and the Department of Defense (reference (k)) and Joint Service Technical Manual, "Weed Control and Plant Growth Regulation," May 24, 1989.

E4.1.8.4. Medically Important Pests. The DoD Components shall ensure that responsibilities for surveillance and control of medically important insects and other arthropods are clearly delineated in installation pest management plans and operational plans. Specific guidance on the surveillance and control of

Lyme disease vectors is found in AFPMB TIM 26, "Lyme Disease- Vector Surveillance and Control," March 1990.

E4.1.8.5. Nuisance Pests. Installation pest management personnel shall not apply pesticides or other control procedures for nuisance pests unless such measures have been approved by the appropriate pest management consultant.

E4.1.8.6. Pesticide Applications in the Range of Endangered Species. The Components shall comply with regulations, including 16 U.S.C. 1531 et seq. (reference (1)), requiring Federal Agencies to ensure their actions will not jeopardize endangered or threatened species (ETS) or associated habitats. Installation Commanders shall ensure that their installation pest management plans identify areas within their installation that contain ETS and that personnel using pesticides on the installation know the potential impact that pesticide applications could have on ETS. DoD pest management plans shall comply with the ETS protection efforts of the U.S. Fish and Wildlife Service (FWS) and FWS limitations on pesticide usage. To prevent consultations before every pesticide application or operation in the habitat of an ETS, pertinent sections of installation pest management plan shall be submitted to the regional FWS office for review and comment. After initial coordination, only changes to the plan shall be forwarded to the FWS for review. Further coordination with the FWS is not required unless the conditions of the pesticide application(s) are changed as indicated by county bulletins, pesticide labels, ETS status, or land use. If the FWS arrive at a finding of "may affect" the ETS, and the pesticide application is considered a firm DoD requirement by the Installation Commander and cognizant pest management professional, the Installation Commander shall request a formal consultation with the FWS. OCONUS installations shall comply with section 2.5. of the main body of this Instruction.

E4.1.8.7. Pests in Health Care Facilities. Components shall ensure that pest management in health care facilities are conducted according to the guidance in AFPMB TIM 20, "Pest Management in Health Care Facilities," October 1989.

E4.1.8.8. Pest Management in Child Care and Food Service Facilities. DoD Components shall ensure that responsibilities for surveillance and control of insects and other arthropods in child care and Food Service are clearly delineated in installation pest management plans and operations.

E4.1.8.9. Pest Management in Military Quarters and Housing

E4.1.8.9.1. Background. Installation Commanders shall ensure that residents of military quarters and housing practice good sanitation and correct minor nuisance pest problems. Quarters and housing occupants are responsible for controlling pests such as cockroaches, household infesting ants, and mice not originating in other quarters. Control of medically important pests, including venomous arthropods, which could affect human health, and structural pests, which could damage property, shall not be an occupant's responsibility.

E4.1.8.9.2. Installation Role

E4.1.8.9.2.1. Installation Commanders shall ensure that installation pest management services are provided in military housing only when the pest threatens Government property or the occupants' health, and the occupants have been unable to control the pests through self-help efforts. Exceptions shall only be made with the concurrence of the appropriate pest management consultant.

E4.1.8.9.2.2. Installation Commanders may allow residents of military housing to contract with licensed pest management companies at their own expense.

E4.1.8.9.3. Self-Help Program

E4.1.8.9.3.1. The DoD Components shall establish installation self-help pest management for military housing when cost-effective and when IPM monitoring indicates the need for a self-help program. Self-help pest management materials issued to occupants of military housing may include cockroach and ant baits and/or traps, mouse traps, glue boards, and general-use pesticide aerosols with crack and crevice devices as recommended by the cognizant pest management consultant. Liquid pesticides should not be issued. The office designated to manage the installation's self-help program should coordinate procurement and storage of pest management materials with the installation pest management shop, hazardous material manager, and the DLA Supply Center.

E4.1.8.9.3.2. Installation Commanders shall ensure that self-help personnel provide written instructions and appropriate precautions, beyond those on pesticide labels, to military quarters and housing occupants to ensure proper pesticide application and safety.

E4.1.8.9.3.3. If pesticides are issued to occupants, records must be maintained as described in subparagraph 5.3.22.7. of the main body of this Instruction. These records should enable installation self-help personnel to validate the occupant's attempts to control target pests before providing installation pest management services. Pest management consultants should review these records during annual reviews to evaluate the efficiency of the installation's self-help program.

E4.1.8.10. Pest Management at Closing Installations. Because pests may cause serious damage to unused facilities, the Components shall ensure that pest management consultants provide guidance needed to protect all closing or closed facilities from pests from the beginning of deactivation until property disposal.

E4.1.8.11. Quarantinable Pests. The Joint Service, "Quarantine Regulations of the Armed Forces," January 24, 1992, contains policy for quarantine regulations applicable to the Armed Forces.

E4.1.8.12. Stored Products Pests. The DoD Components shall implement measures to minimize insect and vertebrate pest damage to subsistence, clothing and textiles, medical, and other infestible stored materiel according to AFPMB TIM 27, "Stored Products Pest Monitoring Techniques," June 1992. The Components shall ensure fumigation of subsistence stocks follows the guidance provided in AFPMB TIM 11, "Hydrogen Phosphide Fumigation with Aluminum Phosphide," February 1987. Guidance for protecting Meal, Ready-to-Eat Rations is available from Component pest management consultants. DLA Regulation 4145.31, "Stored Product Pest Management Program," June 8, 1990, provides pest management guidance on infestible stored products.

E4.1.8.13. Turf and Ornamental Pests. Installation Commanders shall implement measures to prevent unacceptable damage to shade trees, ornamental plantings, and turf (including golf courses) by insects, diseases and weeds. Further, they shall ensure that pesticide applications, if required, are based on specific identification of the target pest by trained personnel. The pest management plan shall identify recurring infestations. Installation Commanders shall ensure the installation pest management plan describes the use of IPM for turf and ornamental pests, and environmentally and economically beneficial land management practices, such as the use of native plants, to reduce pesticide use.

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E4.1.8.14. Undesirable Plants. The DoD Components shall develop programs to comply with the FNWA (reference (g)). The Components shall:

E4.1.8.14.1. Designate an office or person adequately trained in the management of undesirable plant species to develop and coordinate the Component's undesirable plant management program.

E4.1.8.14.2. Plan, program, and budget to achieve, maintain, and monitor compliance with the FNWA (reference (g)).

E4.1.8.14.3. Ensure that installations complete and carry out cooperative agreements with State agencies regarding the management of undesirable plant species on installations.

E4.1.8.14.4. Establish integrated management systems to control or contain undesirable plant species targeted under cooperative agreements. The FNWA (reference (g)) does not require the Components to carry out programs on installations unless similar programs are being implemented on State or private lands in the vicinity of the installation.

E4.1.8.15. Vertebrate Pests. The Components shall manage vertebrate pests, in accordance with the MOA between the Department of Defense and USDA/APHIS/ADC (reference (m)), and:

E4.1.8.15.1. Implement vertebrate pest management programs including wildlife aircraft strike hazard reduction programs to prevent interference with operations, destruction of real property, and adverse impacts on health and morale.

E4.1.8.15.2. Cooperate with Federal, State and local agencies that have implemented animal damage control programs on adjacent public and private lands.

E4.1.8.15.3. Identify the potential for secondary and non-target effects to other organisms and design programs to preclude or minimize the risks.

E4.1.8.15.4. Obtain all applicable Federal, State and local permits.

E4.1.8.15.5. Use guidance in AFPMB TIM 37, "Feral Cats," February 1996, for conducting feral cat control programs.

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E4.1.8.16. Weed Control. Installation Commanders shall ensure that weed control is performed according to 16 U.S.C. 1001 (reference (n)) and Joint Service Technical Manual, "Weed Control and Plant Growth Regulation," May 24, 1989, on DoD installations. Herbicides will not be used in war except as provided for in E.O. 11850 (reference (o)).

E4.1.8.17. Wood-Destroying Organisms. The DoD Components shall ensure that:

E4.1.8.17.1. Pest management consultants review construction, repair, and termite control contract specifications for proper protection of wood where wood-destroying fungi and insects are present, and specify that termiticides, when needed, are applied at the highest EPA-labeled concentration and application rate.

E4.1.8.17.2. DoD-certified pesticide applicators or QAEs trained in pest management inspect contract applications of pesticides for the control of termites and other wood-destroying organisms.

E4.1.8.17.3. Trained personnel inspect wooden buildings and structures in the range of termites: annually in USDA geographic Region 1 or if Formosan or drywood termites are present; biennially in USDA Region 2; or triennially in Region 3 as determined by the cognizant pest management professional. Installation Commanders shall follow the guidance in AFPMB TIM 35, "Termite Inspection," February 1996, for these inspections.

E4.1.8.18. Wood Preservation. NAVFAC MO 312, "Wood Protection," May 1990, provides information on wood preservation. Components shall ensure that DoD pest management professionals review construction specifications and procurement contracts to minimize losses to real property and materiel by specifying:

E4.1.8.18.1. Proper use of wood products treated with preservatives (pesticides) where required to protect against losses caused by wood-destroying fungi and insects.

E4.1.8.18.2. Inspection of treated wood products, performed by trained installation personnel. This inspection shall require as a minimum:

E4.1.8.18.2.1. Examination of treated wood products to determine the presence of the American Lumber Standard Committee accredited inspection agency quality marking. Quality markings

indicate conformance with the appropriate American Wood Preservers' Association (AWPA) and American National Standard Institute standards. Quality markings indicate the product has been tested by the agency indicated, the date it was tested, the type of use (above ground, ground contact, or marine contact suited), and the minimum amount of chemical preservative present. Unmarked material shall be tested by an independent third party. Certificates of Conformance from the treating company shall not be acceptable in place of physical inspection and testing.

E4.1.8.18.2.2. Random or planned sampling and testing.

E4.1.8.18.3. Programs to protect waterfront structures from decay and marine borers.

E4.1.9. Pest Management and Disease Vector Control during Military Contingency Operations, Readiness Training Exercises, and Deployments.

E4.1.9.1. Military personnel and contractors responsible for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments shall apply pesticides consistent with the policies and procedures described in this Instruction.

E4.1.9.2. The application of pesticides for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments shall be under the overall direction of personnel certified in accordance with the DoD Plan for the Certification of Applicators of Restricted Use Pesticides (reference (d)). Individuals who apply pesticides in these situations shall be certified in accordance with reference (d) or shall be under the direct or on-site supervision of individuals in accordance with reference (d). Shipboard independent duty technicians and other military personnel who have received special training for limited site application of pre-selected pesticides during military operations or deployments are exempt from the certification requirement. However, these individuals shall be fully trained, including hands-on training for these specific applications. The Military Services shall develop specific site training programs for these individuals and a means to document who has received this training. At a minimum, the training shall include the safe use and proper application of the limited, pre-selected pesticides for the specific site for which these individuals are trained.

E4.1.9.3. Contractors who apply pesticides in these situations shall comply with the policy in subsection 2.5. in the main body of this Instruction.

E4.1.9.4. The Military Services shall ensure that pesticide use in these situations is recorded as stated in paragraph 5.3.4. of the main body of this Instruction.

E4.1.10. Reports and Records

E4.1.10.1. The DoD Components shall ensure that all DoD installations maintain complete daily records of pesticide applications and non-chemical pest management operations using [DD Form 1532-1](#) or a computer-generated equivalent as stated in section 5.3.22.7. of the main body of this Instruction. These records shall account for all shop operations and shall provide a historical record of pest management operations and pesticide applications for each building, structure, or outdoor site.

E4.1.10.1.1. Records shall include information on kinds, amounts, uses, dates, places of application, and applicators names and certification numbers.

E4.1.10.1.2. The record shall include all pesticide applications performed on the installation, including work done on golf courses, by non-appropriated fund activities, by contract services, and as part of out leases and land management and forestry programs, as well as work performed by installation pest management shops.

E4.1.10.2. [DD Form 1532](#), "Pest Management Report," or an equivalent computer product, shall be produced monthly using [DD Form 1532-1](#) information and shall be forwarded at least quarterly to major command headquarters for review and oversight.

E4.1.10.3. Pest management consultants shall use this data to evaluate the efficiency of the overall installation pest management program and pest management operations.

E4.1.10.4. Pesticides applied by installation personnel for their own relief are excluded from the recordkeeping requirement.

E5. ENCLOSURE 5

AFPMB FUNCTIONS, ORGANIZATION AND MANAGEMENT

E5.1.1. Functions. The purpose of the AFPMB is to recommend policy, provide scientific advice, and provide coordination among the DoD Components on all matters related to pest management. The AFPMB shall:

E5.1.1.1. Develop and recommend policy to the Under Secretary of Defense (Acquisition & Technology) for the DoD Pest Management Program.

E5.1.1.2. Coordinate pest management activities in the Department of Defense.

E5.1.1.3. Develop, issue, and maintain manuals and other guidance necessary to implement the technical requirements of FIFRA (reference (e)).

E5.1.1.4. Implement the DoD Plan for Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) and develop comprehensive training guidance for DoD pest management personnel.

E5.1.1.5. Coordinate DoD contingency disease vector and pest management with the Chairman of the Joint Chiefs of Staff, the Combatant Commands and other contingency planning organizations.

E5.1.1.6. Serve as an advisory body to the DoD Components and provide timely scientific and professional pest management advice.

E5.1.1.7. Develop and distribute technical information and guidance on pest management to the Components by means of Technical Information Memoranda, Disease Vector Ecology Profiles and similar publications.

E5.1.1.8. Review and approve any introduction, stockage, and deletion of pest management materiel by the DLA in the DoD supply system. The AFPMB does not review or approve disinfectants or biocides.

E5.1.1.9. Operate the DPMIAC.

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E5.1.1.10. Coordinate and develop requirements for pest management research, development, and testing in the Department of Defense:

E5.1.1.10.1. Provide technical coordination for the annual review of USDA pest management research of interest to the Department of Defense;

E5.1.1.10.2. Provide research requirements and recommendations to the Director of Defense Research Engineering, or designee, and to other organizations performing pest management research, development, and testing for the Department of Defense.

E5.1.1.11. Establish committees that shall function in accordance with DoD Directive 5105.18 (reference (p)) to facilitate the performance of AFPMB functions.

E5.1.1.12. Support the Defense Environmental Security Council and the Environmental Safety and Occupational Health Policy Board in the area of pest management.

E5.1.1.13. Perform other functions as assigned.

E5.1.2. Organization and Management. The AFPMB, a joint DoD activity comprised of the Council and Committee structure, the Directorate, and the DPMIAC, shall be organized and managed as follows:

E5.1.2.1. The Council, a part-time approval, coordination and advisory body of the AFPMB, shall be composed of 13 voting members appointed from the Military Departments and DLA. Each Military Department may appoint up to 4 members. The DLA may appoint one member. Members shall be professional pest management personnel whenever possible. Other DoD Components with operational pest management programs may request membership. Other DoD Components or Federal Agencies may be invited by the Council to participate in Council meetings when matters of common interest are under consideration. However, invited participants may not vote.

E5.1.2.1.1. The Council shall elect from among its membership a chair of the AFPMB and a vice-chair who will serve in the absence of the chair. They shall serve 2-year terms that may be extended by reelection. The chair shall preside over meetings of the Council and the Board; establish standing and ad hoc committees and task groups to assist the Council in

performing its functions; and call at least three meetings annually to carry out the mission of the Board.

E5.1.2.1.2. The Council may develop procedural rules necessary to accomplish its mission.

E5.1.2.2. The Directorate shall be the full-time administrative and operational body of the Board. It shall be composed of an Executive Director; an Assistant Executive Director; a Contingency Liaison Officer (CLO); a Research Liaison Officer (RLO); the Chief, Defense Pest Management Information Analysis Center; and any professional, technical, and clerical personnel necessary for its operation and administration.

E5.1.2.2.1. The Executive Director shall be an active duty military medical entomology officer, preferably in the grade 0-6, nominated by the respective Surgeon General of the Military Departments, and appointed by the DUSD(ES) for a period of 4 years. When practical, appointees shall rotate in the order of the Army, Navy, and Air Force. The Executive Director shall supervise the Directorate, provide assistance to the Council as required, and perform other tasks the DUSD(ES) may assign. The Executive Director shall also serve as the Director of Defense Pest Management, Office of the DUSD(ES).

E5.1.2.2.2. The Assistant Executive Director shall be an active duty military medical entomology officer, with a minimum grade of 0-5. Length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The Assistant Executive Director shall serve in the absence of the Executive Director.

E5.1.2.2.3. The CLO shall be an appropriately trained active duty medical entomology officer, with a minimum grade of 0-5 and extensive field and staff experience. Length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The CLO shall serve as the principal contact between the AFPMB and the Chairman of the Joint Chiefs of Staff, Unified Combatant Commands, and Component service organizations lacking a staff medical entomologist. The CLO shall support the contingency, readiness, and deployment functions of the AFPMB. The CLO shall provide updated information on specific vector-borne disease threats in any country in the world in coordination with the DPMIAC, shall assist in the development of appropriate sections of operational

plan medical annexes, and shall identify resources for surveillance and control of disease vectors for specific operations.

E5.1.2.2.4. The RLO shall be an active duty military medical entomology officer, with a minimum grade of O-5, with experience in both research and administration. The length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The RLO shall coordinate the research and evaluation function of the AFPMB and shall serve as the principal contact between the AFPMB and other Federal agencies' pest management research offices.

E5.1.2.2.5. The DPMIAC shall be the center for collection and analysis of scientific and technical integrated pest management and disease vector information. It shall, upon request, distribute this information to the DoD Components, the Chairman of the Joint Chiefs of Staff and Combatant Commands. It shall also assist committees, task groups, and the AFPMB Council; provide resource material; and develop pest management TIMs, bulletins, and other guidance for the DoD Components, the Chairman of the Joint Chiefs of Staff and Combatant Commands. Each of the Military Departments shall provide one medical entomology officer to the staff of the DPMIAC. Medical entomology consultants of the three Military Departments shall nominate personnel for approval by the Executive Director.

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E6. ENCLOSURE 6

REQUIREMENTS FOR INSTALLATION PEST MANAGEMENT PROGRAMS

Pest Management Requirement (Productive Work-years)	Installation Pest Management Plan Requirement	On-site Program Review Requirement
Less than 0.49	Individual plan is not required, but requirements shall be included in supporting installation's pest management plan	Review interval determined by the pest management consultant that reviews the supporting installation's pest management plan
0.50 or more	Individual pest management plan is required	At least 36 months

E7. ENCLOSURE 7

PROCEDURES FOR THE ACQUISITION OF PEST MANAGEMENT EQUIPMENT
AND PESTICIDES

E7.1.1. The AFPMB, shall:

E7.1.1.1. Operate as the single point of contact for, and maintain liaison with, other Government agencies in all professional and technical matters involving pest management materiel.

E7.1.1.2. Coordinate the introduction and standardization of pest management materiel.

E7.1.1.3. Continually evaluate pest management materiel that is in the Federal supply system.

E7.1.1.4. Coordinate with the appropriate commodity integrated material managers (CIMMs) for the introduction, revision, and deletion of pest management materiel.

E7.1.2. The appropriate CIMM shall submit cataloging actions only for pest management materiel that has been approved by the AFPMB. Unapproved materiel shall be referred to the AFPMB for consideration.

E7.1.3. The DoD Components shall request approval of stocking of pest management materiel through command channels to the AFPMB. Such requests shall include the necessary technical and supply management information. Once approved by the AFPMB, the request shall be given to the CIMM for cataloging action. Proposals from the Components recommending revision to and deletion of pest management materiel from the supply system shall be submitted to the AFPMB in the same manner. When pest management materiel is decentralized for procurement from local sources, procuring activities shall ensure that item identification changes are proposed when such materiel requires changes to the Federal item identification. Proposed item identification changes shall be processed through the AFPMB to the CIMM. When items no longer are available for procurement, procurement activities shall inform the AFPMB so that deletion and replacement recommendations, when appropriate, can be made by the AFPMB through the appropriate CIMM.

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E7.1.4. Except as specifically authorized in this Instruction, the Components may not procure or acquire pest management materiel that has not been approved by the AFPMB. NSNs will not be assigned to pest management materiel for DoD use that has not been approved by the AFPMB.

E7.1.5. When approved by the pest management consultant concerned, pest management materiel may be procured locally if needed for an emergency, required due to unique local situations, or used in quantities so small that assignment of an NSN is not feasible. Installations shall make every effort to use pest management materiel in the DoD Supply System before requesting local purchase authority. In answer to AFPMB data calls, the Components shall provide the AFPMB with memoranda listing all locally procured pest management materiel they have approved. The listings shall include the amount purchased, the proposed use, and any other information needed by the AFPMB. The AFPMB shall monitor the appropriateness of locally procured pest management materiel for use in the Department of Defense. When justified, the AFPMB shall request that an NSN be assigned to pest management materiel.

E7.1.6. The AFPMB shall base its decisions upon data from all available sources. When additional testing and evaluation are required, the U.S. Navy Bureau of Medicine and Surgery shall provide data from studies on user efficacy and military application of commercial equipment, and the U.S. Army Medical Department shall provide data from studies on pest management equipment engineering and durability.

E8. ENCLOSURE 8

CONTENT OF INSTALLATION PEST MANAGEMENT PLANS, SUGGESTED
FORMAT

Installation pest management plans shall include the following basic elements listed below as the elements apply to each individual installation:

1. Cover Sheet

- a. Title
- b. Installation Name
- c. Approval and Technical Review (signatures):
 - (1) Installation Pest Management Coordinator
 - (2) Installation Environmental Coordinator
 - (3) Installation Medical Officer
 - (4) Senior Installation Engineer
 - (5) Component Pest Management Consultants
 - (6) Installation Commander
- d. Date of Last Annual Review
- e. Date of Last On-Site Review

2. Executive Summary

3. Installation Implementation Authority (Installation instruction, standard operating procedure, etc.), if applicable.

4. Introduction

- a. Objective of the pest management plan
- b. Installation description and mission

- c. Responsibilities for conduct of the pest management program.

5. Pest Management Requirements and Strategies for Applicable Pest/Disease Vector Categories (for each pest/disease vector category describe the IPM strategy as outlined on page 6-6).

- a. Disease Vectors and Other Health-Related Pests
- b. General Household and Nuisance Pests
- c. Structural Pests
- d. Weed Control
- e. Stored Products Pests
- f. Pests of Ornamental Plants and Turf
- g. Pests of Natural Resources
- h. Golf Course Pests
- i. Miscellaneous Pests
- j. Vertebrate Pests
- k. Other categories

6. Administration

- a. Job Orders
- b. Contracts
- c. Inter-Service Support Agreements
- d. Outleases
- e. Resources (Current and Proposed)
 - (1) Funding
 - (2) Staffing

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(3) Materials (Pesticides, Equipment, Supplies, etc.)

(4) Facilities

f. Reports and Records

g. Training Plans

h. Coordination with Food Service Managers, Maintenance Personnel,
etc.

i. Termite Inspection Plan

7. Health and Safety Measures

a. Requirements

b. Methods to Reduce Potential Hazards to:

(1) Pest Management Personnel

(2) Installation Personnel (including housing occupants)

(3) Public

c. Safety and Health Measures Associated with the Pest
Management/Control Shops.

d. Safety and Health Measures Associated with Pest
Management Vehicles

8. Public Laws and Regulations

9. Coordination with other Organizations and Agencies

10. Measures for Compliance with Memorandum of Understanding with State
Pesticide Regulatory Office(s)

11. Pest Management Operations with Special Environmental Considerations

a. Operations using Restricted Use Pesticides

b. Operations with Potential to Contaminate Surface or Groundwater

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- c. Operations more than 640 Acres.
- d. Operations in Areas with Endangered or Protected Species
- e. Operations involving Aerial Application
- f. Operations involving Designated Noxious Weeds
- g. Operations involving Experimental-Use Permits
- h. Operations involving Environmentally Sensitive Areas

12. Other Pest Management Plan Issues

- a. Applicable Pollution Control Projects
- b. Applicable Pollution Abatement Procedures
- c. Pesticides Sold in Commissaries and Exchanges

13. Pest Management Plan for Services Provided to other Activities or Installations

- a. On Installation
- b. Off Installation

14. Annexes

- a. Installation Map
- b. Annual Pesticide Procurement Approval Obtained from the Cognizant Component Pest Management Consultant prior to Procurement of Pesticides
- c. Pesticide Inventory including pesticide name, manufacturer, unit of issue, concentration, quantity, NSN, etc.
- d. Pesticide Labels, Material Safety Data Sheets, and Consumer Protection Information Sheets for Preservative Treated Wood Products
- e. Operational Control and Maintenance Records from Previous Years

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- f. Applicable Instructions and Procedures
- g. Contracting Standards, Specifications, and Statements of Work
- h. Manpower Surveys
- i. Shop Equipment and Sources
- j. List of Safety Items and Personal Protective Equipment
- k. Technical Information
- l. Spill Plan and Pesticide Clean-up Guidance
- m. Industrial Hygiene Surveys of Pest Management Shop
- n. Cost Comparison Analyses

IPM PLAN OR STRATEGY OUTLINE

- 1. Pest or Disease Vector Problem
 - a. Target life stage or stages
 - b. Reason this pest or disease vector is a problem
- 2. Ongoing Monitoring Plan
 - a. Responsible organization or official
 - b. Techniques and procedures
 - c. Location or locations (specify)
 - d. Schedule
 - e. Threshold for management and/or control
- 3. IPM Strategy and Methods
 - a. Responsible organization or official

b. Nonchemical controls (biological, cultural, mechanical, etc.)

- (1) Techniques or procedures
- (2) Method of application, if applicable
- (3) Sites/locations to receive non-chemical control

c. Pesticide Applications

- (1) Common name
- (2) EPA Registration number
- (3) Formulation
- (4) Percent of active ingredient
- (5) Source or NSN
- (6) Application concentration
 - (a) Finished formulation
 - (b) Diluent
 - (c) Application rate
 - (e) Method of application

(7) Location or locations to be treated. For each specific site include units (such as square feet or acres) treated, number of applications, schedule of treatment, and climate or weather constraints.

4. Evaluation Procedures and Standards Used to Verify the IPM Strategy such as Acceptable Quality Levels (AQL) for in-house functions or Maximum Defect Rates (MADR) for contractor performance.

5. Education Necessary for Installation Personnel to Support the IPM Strategy

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6. Sensitive Areas (with respect to each pest or disease vector) to be:
 - a. Avoided by either nonchemical or chemical controls.
 - b. Treated with caution.
7. Special Health and Safety Measures Required.
8. Control Procedures that Require Pest Management Consultant Approval or Coordination.
9. Other Procedures such as Emergency Requirements for Control of Vector-borne Disease.
10. Manpower Requirement for IPM Strategy (include method used to identify the personnel required).

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APPENDIX J

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4165.57
AIR INSTALLATIONS COMPATIBLE USE ZONES

NUMBER 4165.57

November 8, 1977

ASD (MRA&L)

References:

- (a) Department of the Air Force Manual 86-8, "Airfield and Airspace Criteria," November 10, 1964
- (b) Department of the Navy Publication, NavFac P-272, "Definitive Designs for Naval Shore Facilities," July 1962
- (c) Department of the Navy Publication, NavFac P-80, "Facility Planning Factor Criteria for Navy and Marine Corps Shore Installations"
- (d) through (j), see enclosure 1

A. PURPOSE. This Instruction (1) sets forth Department of Defense policy on achieving compatible use of public and private lands in the vicinity of military airfields; (2) defines (a) required restrictions on the uses and heights of natural and manmade objects in the vicinity of air installations to provide for safety of flight and to assure that people and facilities are not concentrated in areas susceptible to aircraft accidents; and (b) desirable restrictions on land use to assure its compatibility with the characteristics, including noise, of air installations operations; (3) describes the procedures by which Air Installations Compatible Use Zones (AICUZ) may be defined; and (4) provides policy on the extent of Government interest in real property within these zones which may be retained or acquired to protect the operational capability of active military airfields (subject in each case to the availability of required authorizations and appropriations).

B. APPLICABILITY. This Instruction applies to air installations of the Military Departments located within the United States, its territories, trusts, and possessions.

C. CRITERIA

1. General. The Air Installations Compatible Use Zone for each military air installation shall consist of (a) land areas upon which certain uses may obstruct the airspace or otherwise be hazardous to aircraft operations, and (b) land areas which are exposed to the health, safety or welfare hazards of aircraft operations.

2. Height of Obstructions. The land area and height standards defined in AFM 86-8 (reference (a)), NavFac P-272 (reference (b)), and P-80 (reference (c)), and TM 5-803-4 (reference (d)) will be used for purposes of height restriction criteria.

3. Accident Potential

a. General

(1) Areas immediately beyond the ends of runways and along primary flight paths are subject to more aircraft accidents than other areas. For this reason, these areas should remain undeveloped, or if developed should be only sparsely developed in order to limit, as much as possible, the adverse effects of a possible aircraft accident.

(2) DoD fixed wing runways are separated into two types for the purpose of defining accident potential areas. Class A runways are those restricted to light aircraft (see enclosure 2) and which do not have the potential for development for heavy or high performance aircraft use or for which no foreseeable requirements for such use exists. Typically these runways have less than 10% of their operations involving Class B aircraft (enclosure 2) and are less than 8000 feet long. Class B runways are all other fixed wing runways.

(3) The following descriptions of Accident Potential Zones are guidelines only. Their strict application would result in increasing the safety of the general public but would not provide complete protection against the effects of aircraft accidents. Such a degree of protection is probably impossible to achieve. Local situations may differ significantly from the assumptions and data upon which these guidelines are based and require individual study. Where it is desirable to restrict the density of development of an area, it is not usually possible to state that one density is safe and another is not. Safety is a

relative term and the objective should be the realization of the greatest degree of safety that can be reasonably attained.

b. Accident Potential and Clear Zones (See Enclosure 3)

(1) The area immediately beyond the end of a runway is the "Clear Zone," an area which possesses a high potential for accidents, and has traditionally been acquired by the Government in fee and kept clear of obstructions to flight.

(2) Accident Potential Zone I (APZ I) is the area beyond the clear zone which possesses a significant potential for accidents.

(3) Accident Potential Zone II (APZ II) is an area beyond APZ I having a measurable potential for accidents.

(4) Modifications to APZs I and II will be considered if:

(a) The runway is infrequently used.

(b) The prevailing wind conditions are such that a large percentage (i.e., over 80 percent) of the operations are in one direction.

(c) Most aircraft do not overfly the APZs as defined herein during normal flight operations (modifications may be made to alter these zones and adjust them to conform to the line of flight).

(d) Local accident history indicates consideration of different area.

(e) Other unusual conditions exist.

(5) The takeoff safety zone for VPR rotary-wing facilities will be used for the clear zone; the remainder of the approach-departure zone will be used as APZ 1.

(6) Land use compatibility with clear zones and APZs is shown in enclosure 4.

4. Noise

a. General. Noise exposure is described in various ways. In 1964, the Department of Defense began using the

Composite Noise Rating (CNR) system to describe aircraft noise. Several years ago the Noise Exposure Forecast (NEF) system began to replace CNR. In August 1974, the Environmental Protection Agency notified all Federal agencies of intent to implement the Day-Night Average Sound Level (Ldn) noise descriptor, and this was subsequently adopted by the DoD. This Ldn system will be used for air installations. Where AICUZ studies have been published using the CNR or NEF systems or where studies have progressed to the point that a change in the descriptor system is impractical or uneconomical, such studies may be published and continued in use. However, in such cases, data necessary for conversion to Ldn should be collected and studies should be revised as soon as time and budgetary considerations permit. However, if state or local laws require some other noise descriptor, it may be used in lieu of Ldn.

b. Noise Zones

(1) As a minimum, contours for Ldn 65, 70, 75 and 80 shall be plotted on maps as part of AICUZ studies.

(2) See section G. for a further discussion of Ldn use and conversion to Ldn from previously used systems.

D. POLICY

1. General. As a first priority step, all reasonable, economical and practical measures will be taken to reduce and/or control the generation of noise from flying and flying-related activities. Typical measures normally include siting of engine test and runup facilities in remote areas if practical and provision of sound suppression equipment where necessary, and may include additional measures such as adjustment of traffic patterns to avoid built-up areas where such can be accomplished with safety and without significant impairment of operational effectiveness. After all reasonable noise source control measures have been taken, there will usually remain significant land areas wherein the total noise exposure is such as to be incompatible with certain uses.

2. Compatible Use Land

a. General

(1) DoD policy is to work toward achieving compatibility between air installations and neighboring civilian

communities by means of a compatible land use planning and control process conducted by the local community.

(2) Land use compatibility guidelines will be specified for each Clear Zone, Accident Potential Zone, Noise Zone and combination of these as appropriate.

(3) The method of control and regulation of land usage within each zone will vary according to local conditions. In all instances the primary objective will be to identify planning areas and reasonable land use guidelines which will be recommended to appropriate agencies who are in control of the planning functions for the affected areas.

b. Property Rights Acquisition

(1) General. While noise generated by aircraft at military air installations should be an integral element of land use compatibility efforts, the acquisition of property rights on the basis of noise by the Department of Defense may not be in the long term best interests of the United States. Therefore, while the complete requirement for individual installations should be defined prior to any programming actions, acquisition of interests should be programmed in accordance with the following priorities.

(2) Priorities

(a) The first priority is the acquisition in fee and/or appropriate restrictive easements of lands within the clear zones whenever practicable.

(b) Outside the clear zone, program for the acquisition of interests first in Accident Potential Zones and secondly in high noise areas only when all possibilities of achieving compatible use zoning, or similar protection, have been exhausted and the operational integrity of the air installation is manifestly threatened. If programming actions are considered necessary, complete records of all discussions negotiations, testimony, etc., with or before all local officials, boards, etc., must be maintained. This will ensure that documentation is available to indicate that all reasonable and prudent efforts were made to preclude incompatible land use through cooperation with local government officials and that all recourse to such action has been exhausted. Such records shall accompany programming actions and/or apportionment requests for items programmed prior to the date of this Instruction. In addition, a

complete economic analysis and assessment of the future of the installation must be included.

(i) Costs of establishing and maintaining compatible use zones must be weighed against other available options, such as changing the installation's mission and relocating the flying activities, closing the installation, or such other courses of action as may be available. In performing analyses of this type, exceptional care must be exercised to assure that a decision to change or relocate a mission is fully justified and that all aspects of the situation have been thoroughly considered.

(ii) When, as a result of such analysis, it is determined that relocation or abandonment of a mission will be required, then no new construction shall be undertaken in support of such activities except as is absolutely necessary to maintain safety and operational readiness pending accomplishment of the changes required.

(3) Guidelines. This Instruction shall not be used as sole justification for either the acquisition or the retention of owned interests beyond the minimum required to protect the Government.

(a) Necessary rights to land within the defined compatible use area may be obtained by purchase, exchange, or donation, in accordance with all applicable laws and regulations.

(b) If fee title is currently held or subsequently acquired in an area where compatible uses could be developed and no requirement for a fee interest in the land exists except to prevent incompatible use, disposal actions shall normally be instituted. Only those rights and interests necessary to establish and maintain compatible uses shall be retained. Where proceeds from disposal would be inconsequential, consideration may be given to retaining title.

(c) If the cost of acquiring a required interest approaches closely the cost of fee title, consideration shall be given to whether acquisition of fee title would be to the advantage of the Government.

3. Rights and Interests Which May Be Obtained. When it is determined to be necessary for the Federal Government to acquire interests in land, a careful assessment of the type of interest to be acquired is mandatory. Section F. of this Instruction

contains a listing of possible interests which should be examined for applicability.

4. Environmental Impact Statements

a. Any actions taken with respect to safety of flight, accident hazard, or noise which involve acquisition of interests in land must be examined to determine the necessity of preparing an environmental impact statement in accordance with DoD Directive 6050.1, "Environmental Considerations in DoD Actions," March 19, 1974 (reference (e)).

b. All such environmental impact statements must be forwarded to appropriate Federal and local agencies for review in accordance with reference (e).

c. Coordination with local agencies will be in accordance with OMB Circular A-95 (reference (f)).

E. THE AIR INSTALLATION COMPATIBLE USE PROGRAM

1. The Secretaries of the Military Departments will develop, implement and maintain a program to investigate and study all air installations in necessary order of priority to develop an Air Installation Compatible Use Zone (AICUZ) program for each air installation consistent with Section D. AICUZ studies which contain an analysis of land use compatibility problems and potential solutions shall be developed and updated as necessary. As a minimum, each study shall include the following:

a. Determination by detailed study of flight operations, actual noise and safety surveys if necessary, and best available projections of future flying activities, desirable restrictions on land use due to noise characteristics and safety of flight;

b. Identification of present incompatible land uses;

c. Identification of land that if inappropriately developed would be incompatible;

d. Indication of types of desirable development for various land tracts;

e. Land value estimates for the zones in question.

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f. Review of the airfield master plans to ensure that existing and future facilities siting is consistent with the policies in this Instruction.

g. Full consideration of joint use of air installations by activities of separate Military Departments whenever such use will result in maintaining operational capabilities while reducing noise, real estate and construction requirements.

h. Recommendations for work with local zoning boards, necessary minimum programs of acquisition, relocations, or such other actions as are indicated by the results of the study.

2. Procedures. In developing AICUZ Studies the Secretaries of Military Departments shall:

a. Follow the review and comment procedures established under OMB Circular A-95 (reference (f));

b. Ensure that appropriate environmental factors are considered; and

c. Ensure that other local, state, or Federal agencies engaged in land use planning or land regulation for a particular area have an opportunity to review and comment upon any proposed plan or significant modification thereof.

3. Coordination with State and Local Governments. Secretaries of the Military Departments shall develop procedures for coordinating AICUZ Studies with the land use planning and regulatory agencies in the area. Developing compatible land use plans may require working with local governments, local planning commissions, special purpose districts, regional planning agencies, state agencies, state legislatures, as well as the other Federal agencies. Technical assistance to local, regional, and state agencies to assist them in developing their land use planning and regulatory processes, to explain an AICUZ Study and its implications, and generally to work toward compatible planning and development in the vicinity of military air fields, should be provided.

4. Property Rights Acquisition. The AICUZ Study shall serve as the basis for new land acquisitions, property disposal, and other proposed changes in Military Departments real property holdings in the vicinity of military airfields where applicable.

5. Required Approvals. Based on the results of the AICUZ Studies, each Military Department will prepare recommendations for individual installations AICUZ programs for approval as follows:

a. The Secretaries of the Military Departments or their designated representatives will review and approve the AICUZ Studies establishing the individual air installation AICUZ program.

b. When relocation or abandonment of a mission or an installation is apparently required, the Secretaries of the Military Departments will submit the proposed plan for the installation, with appropriate recommendations, to the Secretary of Defense for approval.

c. A time-phased fiscal year plan for implementation of the AICUZ program in priority order, consistent with budgetary considerations, will be developed for approval by the Secretary of the Military Departments, or their designated representatives. These plans will serve as the basis for all AICUZ actions at the individual installations.

6. Coincident Actions. The Secretaries of the Military Departments will also take action to assure in accordance with section D.1. and D.2. that:

a. As the first priority action in developing an AICUZ program, full attention is given to safety and noise problems.

b. In all planning, acquisition, and siting of noise generating items, such as engine test stands, full advantage is taken of available alleviating measures, such as remote sites or sound suppression equipment.

c. The noise exposure of on-installation facilities personnel are considered together with that off the installation.

d. There is development or continuation with renewed emphasis of programs to inform local governments, citizens groups, and the general public of the requirements of flying activities, the reasons therefore, the efforts which may have been made or may be taken to reduce noise exposure, and similar matters which will promote and develop a public awareness of the complexities of air installation operations, the problems associated therewith, and the willingness of the Department of

Defense to take all measures possible to alleviate undesirable external effects.

7. Responsibilities for the acquisition, management, and disposal of real property are defined in DoD Directive 4165.6, "Real Property, Acquisition, Management and Disposal," December 22, 1976 (reference (g)).

8. The Deputy Assistant Secretary of Defense (Installations and Housing) will examine the program developed pursuant to this Instruction, and from time to time review the progress thereunder to assure conformance with policy.

F. REAL ESTATE INTERESTS TO BE CONSIDERED FOR CLEAR ZONES AND ACCIDENT POTENTIAL ZONE

1. The right to make low and frequent flights over said land and to generate noises associated with:

- a. Aircraft in flight, whether or not while directly over said land,
- b. Aircraft and aircraft engines operating on the ground at said base, and
- c. Aircraft engine test/stand/cell operations at said base.

2. The right to regulate or prohibit the release into the air of any substance which would impair the visibility or otherwise interfere with the operations of aircraft, such as, but not limited to, steam, dust, and smoke.

3. The right to regulate or prohibit light emissions, either direct or indirect (reflective), which might interfere with pilot vision.

4. The right to prohibit electrical emissions which would interfere with aircraft and aircraft communications systems or aircraft navigational equipment.

5. The right to prohibit any use of the land which would unnecessarily attract birds or waterfowl, such as, but not limited to, operation or sanitary landfills, maintenance of feeding stations or the growing of certain types of vegetation attractive to birds or waterfowl.

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6. The right to prohibit and remove any buildings or other nonfrangible structures.

7. The right to top, cut to ground level, and to remove trees, shrubs, brush, or other forms of obstruction which the installation commander determines might interfere with the operation of aircraft, including emergency landings.

8. The right of ingress and egress upon, over and across said land for the purpose of exercising the rights set forth herein.

9. The right to post signs on said land indicating the nature and extent of the Government's control over said land.

10. The right to prohibit land uses other than the following:

a. Agriculture.

b. Livestock grazing.

c. Permanent open space.

d. Existing water areas.

e. Rights or way for fenced two lane highways, without sidewalks or bicycle trails and single track railroads.

f. Communications and utilities right of way, provided all facilities are at or below grade.

11. The right to prohibit entry of persons onto the land except in connection with activities authorized under 1., 2., 3., and 6., of this section.

12. The right to disapprove land uses not in accordance with enclosure 4.

13. The right to control the height of structures to insure that they do not become a hazard to flight.

14. The right to install airfield lighting and navigational aids.

G. AIR INSTALLATIONS COMPATIBLE USE ZONE NOISE DESCRIPTORS

1. Composite Noise Rating (CNR) and Noise Exposure Forecast (NEF) values as previously required by Sections III., IV., and V. of DoD Instruction 4165.57, "Air Installations Compatible Use Zones," July 30, 1973 (reference (j)) will no longer be used.

2. Where CNR 100 (or the quietest boundary of CNR Zone 2 if otherwise computed) or NEF 30 would previously have been used, data shall be collected sufficient to permit computation of Ldn 65 noise contours and these noise contours shall be plotted on maps accompanying AICUZ studies.

3. Where CNR 115 (or the boundary of CNR Zone 3 if otherwise computed) or NEF 40 would previously have been used, data shall be collected sufficient to permit computation of Ldn 75 noise contours, and these noise contours shall be plotted on maps accompanying AICUZ studies.

4. Where previous studies have used CNR or NEF, for matters of policy, noise planning and decision making, areas quieter than Ldn 65 shall be considered approximately equivalent to the previously used CNR Zone 1 and to areas quieter than NEF 30. The area between Ldn 65 and Ldn 75 shall be considered approximately equivalent to the previously used CNR Zone 2 and to the area between NEF 30 and 40. The area of higher than Ldn 75 shall be considered approximately equivalent to the previously used CNR Zone 3 and to noise higher than NEF 40. The procedures shall remain in effect only until sufficient data to compute Ldn values can be obtained.

5. When computing helicopter noise levels using data collected from meters, a correction of +7db shall be added to meter readings obtained under conditions where blade slap was present until and unless meters are developed which more accurately reflect true conditions.

6. Noise contours less than Ldn 65 or more than Ldn 80 need not be plotted for AICUZ studies.

7. Since CNR noise levels are not normally directly convertible to Ldn values without introducing significant error, care should be exercised to assure that personnel do not revise previous studies by erroneously relabeling CNR contours to the approximately equivalent Ldn values.

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8. Where intermittent impulse noises are such as are associated with bombing and gunnery ranges are of importance, such noises will be measured using standard "C" weighting of the various frequencies to insure a description most representative of actual human response.

H. EFFECTIVE DATE AND IMPLEMENTATION. This Instruction is effective immediately. Forward two copies of implementing regulations to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) within 90 days. (Final Rule of this Instruction was published in the Code of Federal Regulations under 32 CFR 256.)

JOHN P. WHITE
Assistant Secretary of
Defense (Manpower,
Reserve Affairs and
Logistics)

Enclosures - 4

1. List of additional references.
2. Runway Classification by Aircraft Types.
3. Accident Potential Zone Guidelines.
4. Land Use Compatibility Guidelines for Accident Potential Zones.

Additional References

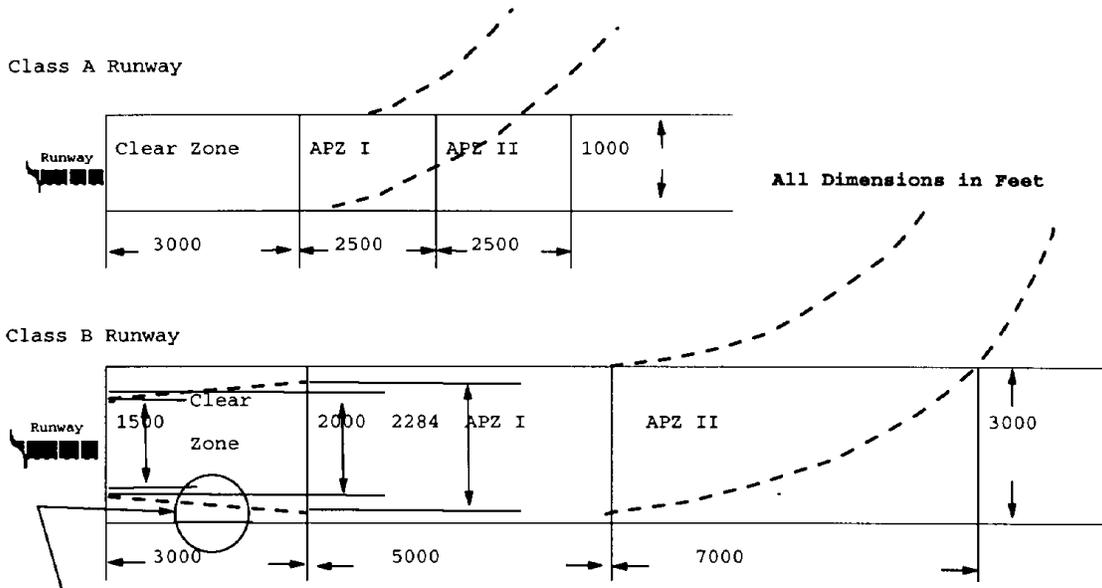
- (d) Department of the Army Technical Manual, TM 5-803-4, "Planning of Army Aviation Facilities, "March 1970
- (e) DoD Directive 6050.1, "Environmental Considerations in DoD Actions," March 19, 1974
- (f) Office of Management and Budget Circular A-95, "Evaluation, Review and Coordination of Federal and Federally Assisted Programs and Projects," February 9, 1971
- (g) DoD Directive 4165.6, "Real Property, Acquisition, Management, and Disposal," December 22, 1976
- (h) DoD Instruction 4170.7, "Natural Resources - Forest Management," June 21, 1965
- (i) DoD Instruction 7310.1, "Accounting and Reporting for Property Disposal and Proceeds from Sale of Disposable Personal Property and Lumber or Timber Products," July 10, 1970
- (j) DoD Instruction 4165.57, "Air Installations Compatible Use Zones," July 30, 1973 (hereby canceled)

Runway Classification by Aircraft TypeClass A RunwaysClass B Runways

S-2	U-10	A-1	F-106	C-121
VC-6	U-11	A-3	F-5	EC-121
C-1	LU-16	A-4	F-15	WC-121
C-2	TU-16	A-5		C-123
TC-4C	HU-16	A-6	S-3	C-130
C-7	U-21	A-7	T-29	HC-130B
C-8	QU-22	A-38	T-33	C-131
C-12	E-1	AV-8	T-37	C-140
C-47	E-2	P-2	T-39	C-5A
C-117	0-1	P-3	T-1	KC-97
U-1	0-2	F-9	T-2	C-124
U-3	0V-1	F-14	T-38	EC-130E
U-6	0V-10	F-4	B-52	HC-130
U-8	T-28	F-8	B-57	C-135
U-9	T-34	F-111	B-57F	VC-137
	T-41			
	T-42	YF-12	B-66	C-141
		SR-71	C-9	KC-135
		F-100	C-54	EC-135
		F-101	C-97	RC-135
		F-102	C-118	U-2
		F-104	C-119	
		F-105		
				J-15

Accident Potential Zone Guidelines}

Accident Potential Zone Guidelines



Width of clear zone may be based on individual service analysis of highest accident potential area for specific runway use and varied based on acquisition constraints. 3000 foot wide clear zone is desirable for new construction.

Land Use Compatibility Guidelines for Accident Potential

Zones and Footnotes

Land Use Category

Compatibility¹

Clear Zone APZ I APZ II

Residential

Single family	NO	NO	YES ²
2-4 family	NO	NO	NO
Multi-family dwellings	NO	NO	NO
Group quarters	NO	NO	NO
Residential hotels	NO	NO	NO
Mobile home parks or courts	NO	NO	NO
Other residential	NO	NO	NO

Industrial/Manufacturing³

Food and kindred products	NO	NO	YES
Textile mill products	NO	NO	YES
Apparel	NO	NO	NO

1 A "Yes" or "No" designation for compatible land use in to be used only for gross comparison. Within each, uses exit where further definition may be needed as to whether it is clear or normally acceptable/unacceptable owing to variations in densities of people and structures.

2 Suggested maximum density 1-2 DU/AC, possibly increased under a Planned Unit Development where maximum lot covered less than 20%.

3 Factors to be considered: Labor intensity, structural coverage, explosive characteristics, air pollution.

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Lumber and wood products	NO	YES	YES
Furniture and Fixtures	NO	YES	YES
Paper and allied products	NO	YES	YES
Printing, publishing	NO	YES	YES
Chemicals and allied products	NO	NO	NO
Petroleum refining and related industries	NO	NO	NO
Rubber and misc. plastic goods	NO	NO	NO
Stone, clay, and glass products	NO	YES	YES
Primary metal industries	NO	YES	YES
Fabricated metal products	NO	YES	YES
Professional, scientific, and controlling instruments	NO	NO	NO
Misc. manufacturing	NO	YES	YES
<u>Transportation, Communications & Utilities⁴</u>			
Railroad, rapid rail transit (on-grade)	NO	YES ⁴	YES
Highway and street ROW	YES	YES	YES
Auto parking	NO	YES	YES
Communication	YES	YES	YES
Utilities	YES	YES ⁴	YES
Other transportation, communications & utilities	YES	YES	YES
Commercial/retail trade			
Wholesale trade	NO	YES	YES

⁴ No passenger terminals and no major above ground transmission lines in APZ I.

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Building materials-retail	NO	YES	YES
General merchandise-retail	NO	NO	YES
Food-retail	NO	NO	YES
Automotive, marine, aviation-retail	NO	YES	YES
Apparel and accessories-retail	NO	NO	YES
Furniture, home furnishing-retail	NO	NO	YES
Eating and drinking places	NO	NO	NO
Other retail trade	NO	NO	YES
Personal and Business Services ⁵			
Finance, insurance, and real estate	NO	NO	YES
Personal services	NO	NO	YES
Business services	NO	NO	YES
Repair services	NO	YES	YES
Professional services	NO	NO	YES
Contract construction services	NO	YES	YES
Indoor recreation services	NO	NO	YES
Other services	NO	NO	YES
Public and Quasi-Public Services			
Government services	NO	NO	YES ⁵
Educational services	NO	NO	NO
Cultural activities	NO	NO	NO
Medical and other health services	NO	NO	NO

⁵ Low intensity office uses only. Meeting places, auditoriums, etc., not recommended.

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Cemeteries	NO	YES ⁶	YES ⁶
Non-profit organization incl. churches	NO	NO	NO
Other public and quasi-public services	NO	NO	YES

6 Excludes chapels.

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Outdoor Recreation

Playground's neighboring parks	NO	NO	YES
Community and regional parks	NO	YES ⁷	YES ⁷
Nature exhibits	NO	YES	YES
Spectator sports incl. arenas	NO	NO	NO
Golf course ⁸ , riding stables ⁹	NO	YES	YES
Water based recreational areas	NO	YES	YES
Resort and group camps	NO	NO	NO
Entertainment assembly	NO	NO	NO
Other outdoor recreation	NO	YES ⁷	YES

Resource Production & Extraction and Open Land

Agriculture ¹⁰	YES	YES	YES
Livestock farming, animal breeding ¹¹	NO	YES	YES
Forestry activities ¹²	NO ¹³	YES	YES

7 Facilities must be low intensity.

8 Clubhouse not recommended.

9 Concentrated rings with large classes not recommended.

10 Includes livestock grazing but excludes feedlots and intensive animal husbandry.

11 Includes feedlots and intensive animal husbandry.

12 No structures (except airfield lighting), buildings or above ground utility/communication lines should be located in the clear to the clear zone. For further runaway safety clearance limitations pertaining to the clear zone see AFM 86-6 (reference (a)), TM 5-803- 4 (reference (d)) and NAVFAC P-80 (reference (c)).

13 Lumber and timber products removed due to establishment, expansion or maintenance of clear zones will be disposed of in accordance with DoD Instruction 4170.7, "Natural Resources - Forest Management," June 21, 1965 (reference (h)) and DoD Instruction 7310.1, "Accounting and Reporting for Property Disposal and Proceeds from Sale of Disposable Personal Property and Lumber or Timber Products, " July 10, 1970 (reference (I))

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Fishing activities & related services ¹⁴	NO ¹⁵	YES ¹⁴	YES
Mining activities	NO	YES	YES
Permanent open space	YES	YES	YES ¹⁴
Water areas ¹⁴	YES	YES	YES

14 Includes hunting and fishing.

15 Controlled hunting and fishing may be permitted for the purpose of wildlife control.

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APPENDIX K

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4715.5,
MANAGEMENT OF ENVIRONMENTAL COMPLIANCE AT OVERSEAS INSTALLATIONS

NUMBER 4715.5

April 22, 1996

USD (A&T)

SUBJECT: Management of Environmental Compliance at Overseas Installations

References: (a) DoD Directive 6050.16, "DoD Policy for Establishing and Implementing Environmental Standards at Overseas Installations," September 20, 1991 (canceled)
(b) DoD Directive 4715.1, "Environmental Security," February 24, 1996
(c) Section 342(b) of Public Law 101-510, "National Defense Authorization Act Fiscal Year 1991," November 4, 1990, referred to in 10 U.S.C. 2701, note
(d) Executive Order 12344, "Naval Nuclear Propulsion Program," February 1, 1982
(e) through (m), see enclosure 1

1. PURPOSE. This Instruction:

1.1. Replaces reference (a), which was canceled by reference (b).

1.2. As required by reference (c), implements policy, assigns responsibilities, and prescribes procedures under reference (b), establishing environmental compliance standards for protection of human health and the environment at DoD installations in foreign countries.

1.3. Provides for designation of DoD Environmental Executive Agents in accordance with subsection 6.1., below.

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2. APPLICABILITY AND SCOPE

2.1. This Instruction:

2.1.1. Applies to the Office of the Secretary of Defense, the Military Departments (including the Coast Guard when it is operating as a Military Service in the Navy), the Chairman of the Joint Chiefs of Staff, the Unified Combatant Commands, the Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities, including any other integral DoD organizational entity or instrumentality established to perform a governmental function (hereafter referred to collectively as "the DoD Components").

2.1.2. Applies to the actions of the DoD Components at installations outside the United States, its territories, and possessions.

2.1.3. Does not apply to DoD installations that do not have the potential to affect the natural environment (e.g., offices whose operations are primarily administrative, including defense attach, offices, security assistance offices, foreign buying offices, and other similar organizations) or for which the DoD Components exercise control only on a temporary or intermittent basis.

2.1.4. Does not apply to the operations of U.S. military vessels, to the operations of U.S. military aircraft, or to off-installation operational and training deployments. Off-installation operational deployments include cases of hostilities, contingency operations in hazardous areas, and when United States forces are operating as part of a multi-national force not under full control of the United States. Such excepted operations and deployments shall be conducted in accordance with applicable international agreements, other DoD Directives and Instructions and environmental annexes incorporated into operation plans or operation orders. However, it does apply to support functions for U.S. military vessels and U.S. military aircraft provided by the DoD Components, including management or disposal of off-loaded waste or material.

2.1.5. Does not apply to facilities and activities associated with the Naval Nuclear Propulsion Program, which are covered under E.O. 12344 (reference (d)) and conducted under 42 U.S.C. 7158 (reference (e)).

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2.1.6. Does not apply to the determination or conduct of remediation to correct environmental problems caused by the Department of Defense's past activities.

2.1.7. Does not apply to environmental analyses conducted under E.O. 12114 (reference (f)).

2.2. Nothing in this Instruction shall create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person.

3. DEFINITIONS. Terms used in this Instruction are defined in enclosure 2.

4. POLICY. It is DoD policy under reference (b) that:

4.1. The Department of Defense shall establish, maintain, and, as described in subsection 6.3., below, comply with Final Governing Standards (FGS) to protect human health and the environment for each foreign country where the Department of Defense maintains substantial installations. Using the procedures described in section 6., below, the FGS will reconcile the requirements of applicable international agreements, applicable host-nation environmental standards under E.O. 12088 (reference (g)), and the Overseas Environmental Baseline Guidance Document (OEBGD).

4.2. The DoD Components shall not dispose of wastes overseas that are generated by overseas DoD actions and that are considered hazardous under either U.S. law or host-nation standards without concurrence, as set out in subsection 6.4., below, of the nation where the disposal takes place.

4.3. Pollution prevention shall be the preferred means for attaining compliance, where economically advantageous and consistent with mission requirements.

4.4. The DoD Components shall use cooperative solutions for environmental facilities or services (e.g., waste storage and disposal facilities, solid waste collection and disposal services, water or wastewater treatment works), where economically advantageous and consistent with mission requirements, to include the use of acquisition authority and

cross-servicing agreements negotiated under DoD Directive 2010.9 (reference (h)).

4.5. The DoD Components should use commercially proven solutions, where possible, to achieve, maintain, and monitor compliance.

4.6. The DoD Components shall establish and conduct a program for regular assessment of environmental compliance at installations overseas.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology, in coordination with the Chairman of the Joint Chiefs of Staff and the Under Secretary of Defense for Policy, shall have authority and responsibility for DoD environmental policy for overseas installations and shall coordinate DoD environmental policy for overseas installations with the other DoD Components, the Department of State, and other Federal Agencies, as appropriate.

5.2. The Deputy Under Secretary of Defense for Environmental Security shall implement this Instruction on behalf of the Under Secretary of Defense for Acquisition and Technology and shall:

5.2.1. Designate DoD Environmental Executive Agents as set out in subsection 6.1., below.

5.2.2. Resolve issues raised by environmental policy principals of the DoD Components under subsection 6.9., below.

5.2.3. Provide policy and guidance, oversight, advocacy, and representation for environmental security compliance programs.

5.2.4. Monitor compliance with this Instruction, including development of appropriate Measures of Merit and periodic review of the compliance programs of the DoD Components.

5.3. The Heads of the DoD Components shall:

5.3.1. Ensure actions at installations in foreign countries, including administration and support under 10 U.S.C. 165 (reference (i)) of forces assigned to the Unified Combatant

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Commanders, as well as planning, budgeting, programming, and execution, comply with the applicable standards described in subsections 4.4. and 4.5., above.

5.3.2. Carry out the responsibilities of Executive Agents for particular nations when designated by the Department of Defense or delegate such authority as provided in paragraph 5.3.5., below, including the following:

5.3.2.1. Plan, budget, and program for preparation and maintenance of the FGS.

5.3.2.2. Identify applicable host-nation environmental standards, monitor regulatory trends, and maintain copies of applicable host-nation environmental documents, standards, and regulations.

5.3.2.3. Consult with host-nation authorities on environmental issues, as required, to maintain effective cooperation on environmental matters.

5.3.2.4. Consult with the Chief of the U. S. 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.

5.3.2.5. Prepare and maintain the FGS for the designated host nation, technical, legal and programmatic support to the process.

5.3.2.6. Resolve requests for waivers from the DoD Components under subsection 6.4., below.

5.3.2.7. Keep DoD Components informed of current environmental developments and trends.

5.3.3. Provide technical, legal and programmatic support to the process for maintenance of the OEBGD.

5.3.4. Establish and implement an environmental compliance assessment program for overseas installations that will include internal and external environmental assessments. Conduct internal self-assessments at least annually. Conduct external compliance self-assessments at least once every three years at all major installations.

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5.3.5. Designate Component Commanders or other officials who are authorized to apply for waivers under subsection 6.6., below, or to initiate appeals under subsection 6.9., below.

5.3.6. Promptly notify the Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)) and all affected elements of command of significant environmental events.

5.3.7. Coordinate with, cooperate with, and provide timely notice to each other regarding environmental items of common interest affecting overseas installations.

5.4. The Secretary of the Air Force shall have lead responsibility for maintaining the OEBGD, including printing and distribution of any revisions.

5.5. The Commanders of the Unified Combatant Commands shall:

5.5.1. Coordinate and approve implementation of this Instruction by the DoD Environmental Executive Agents in their geographic areas of responsibility, as necessary, to carry out their mission.

5.5.2. Resolve disputes between the DoD Components and the Executive Agent as provided in subsection 6.9., below.

6. PROCEDURES

6.1. Designation of DoD Environmental Executive Agents

6.1.1. The DUSD(ES) shall designate a DoD Component as the DoD Environmental Executive Agent for environmental matters in foreign countries where DoD installations are located and where the DUSD(ES) determines that the level of DoD presence justifies establishment of FGS. Current designations are listed in enclosure 3.

6.1.2. Military Departments, the Unified Combatant Commander or an appropriate component or subunified commander may be designated as DoD Environmental Executive Agent. When a Military Department is designated as Executive Agent, the Department should delegate authority via the chain of command to an appropriate general or flag-level commander.

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6.1.3. Each Unified Combatant Commander with a geographic area of responsibility encompassing foreign countries may recommend changes adding, substituting or eliminating DoD Environmental Executive Agents. Such recommendations shall be submitted to the Chairman of the Joint Chiefs of Staff for coordination with the Military Departments prior to submittal to DUSD(ES).

6.1.4. The DUSD(ES) shall coordinate with the Chairman of the Joint Chiefs of Staff and any affected DoD Components before adding, substituting, or eliminating DoD Environmental Executive Agents.

6.2. Maintenance of the Overseas Environmental Baseline Guidance Document

6.2.1. The Department of Defense shall establish, maintain, and, as described in subsection 6.3.8., below, comply with the OEBGD. The OEBGD shall be designed to protect human health and the environment; shall consider generally accepted environmental standards applicable to DoD installations, facilities, and actions in the United States; and shall incorporate requirements of U.S. law that have extraterritorial application to the Department of Defense.

6.2.2. The OEBGD shall be reviewed as needed, but at least biennially, to ensure that it protects human health and the environment, and reflects consideration of current, generally accepted environmental standards applicable to similar DoD installations and actions in the United States, and incorporates requirements of U.S. law that have extraterritorial application.

6.2.3. The Department of the Air Force shall conduct the OEBGD review process, chairing a multidisciplinary committee consisting of, at a minimum, representatives of the Military Departments, the Chairman of the Joint Chiefs of Staff, and the Defense Logistics Agency. Field comments will be solicited during the review process.

6.2.4. Revisions to the OEBGD proposed by the committee shall be forwarded to DUSD(ES) for coordination, final approval, and distribution, in accordance with DoD 5025.1-M (reference (j)), to the DoD Components and DoD Environmental Executive Agents.

6.3. Development and Maintenance of Final Governing Standards for Overseas Installations

6.3.1. The DoD Components in a foreign nation shall consult with other DoD Components with similar environmental issues and shall coordinate environmental matters with the environmental executive agent designated under this Instruction.

6.3.2. The DoD Environmental Executive Agent shall identify applicable host nation environmental standards. In identifying these standards, the DoD Environmental Executive Agent shall:

6.3.2.1. Identify published host-nation law, including transnational enforceable standards, and applicable international agreements for the protection of human health and the environment within the host nation.

6.3.2.2. Determine the extent to which the host-nation environmental standards are adequately defined and generally in effect and enforced against host-government and private sector activities. Laws of local governmental units are not included unless they implement national laws that delegate authority to, or recognize the authority of, the local governmental unit.

6.3.2.3. Consider whether responsibility for construction, maintenance, and operation of the installation rests with the United States or the host nation.

6.3.3. The DoD Environmental Executive Agent shall determine the Final Governing Standards as follows:

6.3.3.1. The DoD Environmental Executive Agent shall use the OEBGD to establish the FGS 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 case of inconsistency, the DoD Executive Agent shall normally use the more protective standard to establish the FGS unless a specific international agreement with the host nation establishes a different standard applicable to U.S. installations.

6.3.3.2. The DoD Environmental Executive Agent normally should base the comparison of standards on individual standards. Where, however in the judgment of the Executive Agent, a standard cannot be considered individually because it is part of a comprehensive regulatory regime for a particular environmental

subject, the comparison may be made on a broader scope. In such cases, the Executive Agent may compare the overall regulatory regime for the threat to human health or the environment in the OEBGD with the corresponding regulatory regime of the applicable host nation environmental standards or standards under applicable international agreements. The more protective regime normally shall then be used to establish the FGS.

6.3.3.3. If a particular environmental threat is not addressed by the OEBGD but is addressed by relevant host-nation environmental standards or standards under applicable international agreements, the DoD Environmental Executive Agent shall consider the applicable host-nation environmental standards or standards under applicable international agreements to establish the FGS. Until the DoD Environmental Executive Agent establishes a standard for that threat in the FGS, the host nation or international agreement standard shall apply.

6.3.4. The DoD Environmental Executive Agent shall issue the FGS after consultation with the appropriate in-country or theater representatives of the other DoD Components operating in the country, approval of the Unified Combatant Commander, and notification to the U.S. Diplomatic Mission.

6.3.5. The DoD Components in a foreign nation for which FGS have been established shall comply with the FGS established for that country.

6.3.6. The DoD Environmental Executive Agent shall revalidate and update the FGS on a periodic basis, but at least every two years.

6.3.7. The DoD Environmental Executive Agent shall forward a copy of the new or revised FGS for each country via the Unified Combatant Commander and the Chairman of the Joint Chiefs of Staff to the Military Departments and DUSD(ES) for information.

6.3.8. The DoD Components in a foreign nation for which no FGS have been established shall comply with applicable international agreements, applicable host nation environmental standards under E.O. 12088 (reference (g)), and the OEBGD, and in cases of conflicting requirements, shall comply with the standard that is more protective of human health or the environment. Such DoD Components shall consult with the DoD Environmental Executive Agent (or if no Executive Agent has been designated, with the Unified Combatant Commander) on actions that involve a substantial commitment of funds or that could set a precedent.

6.3.9. The Reserve component commander, in consultation with the DoD Environmental Executive Agent, shall establish an awareness and training package instructing Reserve component units on Final Governing Standards (FGS) or other standards described in paragraphs 6.3.5. and 6.3.8., above, as appropriate.

6.4. Additional Procedures for Hazardous Wastes. In addition to the FGS or OEBGD (where no FGS have been issued), the following additional procedures shall be followed for the disposal of hazardous waste:

6.4.1. The DoD Components shall not dispose of wastes in a foreign nation that are generated by DoD actions and that are considered hazardous under either U.S. law or applicable host-nation standards, unless the disposal complies with either the OEBGD or FGS (under paragraphs 6.3.5. and 6.3.8., above, as appropriate) and is in accordance with any applicable international agreement. Absent an applicable international agreement that grants disposal authority, explicit or implicit concurrence is required by the appropriate authorities of the nation where the disposal takes place.

6.4.2. When the requirements of paragraph 6.4.1., above, cannot be met, the hazardous waste shall be disposed of in the United States or in another foreign nation where the applicable conditions can be met, unless other disposal arrangements are approved by DUSD(ES).

6.4.3. The determination of whether a DoD-generated hazardous waste may be disposed of in a foreign nation shall be made by the DoD Environmental Executive Agent, in coordination with the applicable Unified Combatant Commander, Director of the Defense Logistics Agency (DLA), the other relevant DoD Components, and the Chief of the U.S. Diplomatic Mission. If there is no DoD Environmental Executive Agent, the determination shall be made by the Director of the DLA in coordination with the other relevant DoD Components, and the Chief of the U.S. Diplomatic Mission.

6.4.4. In addition to compliance with the applicable standards described in paragraphs 6.3.5. and 6.3.8., above, the DoD Components must comply with provisions of the Status of Forces Agreement (SOFA) and other applicable international agreements on the shipping and storage of hazardous wastes.

6.5. Planning, Programming, Budgeting of Funds and Execution. Planning, programming and budgeting of funds and other resources required for compliance with this Instruction shall be accomplished in accordance with DoD procedures generally applicable to environmental compliance and the following:

6.5.1. For planning, programming, and budgeting, the DoD Components shall treat the applicable set of environmental compliance standards for the host nation under paragraphs 6.3.5. or 6.3.8., above, as validated budgetary requirements and the functional equivalents of generally accepted environmental standards for similar installations, facilities, and operations in the United States. The DoD Components shall plan, program and budget for these requirements over the length of the first Program Objectives Memorandum (POM) cycle following the effective date of this Instruction or, for modifications to the applicable set of environmental compliance standards, the effective date of the modification.

6.5.2. Standards contained in the FGS or OEBGD shall be given the highest priority for funding and execution and shall be funded in the current or the immediately following fiscal year if leaving them unremedied would result in one or more of the following:

6.5.2.1. An imminent and substantial threat to human health;

6.5.2.2. A direct threat to ongoing U.S. operations or U.S. access to an overseas base or installation; or

6.5.2.3. A U.S. default on a standard made directly applicable to U.S. overseas operations in a basing agreement, SOFA or other international agreement.

6.5.2.4. All other requirements should be addressed according to a risk-based prioritization, based on local circumstances and long-term objectives.

6.5.3. This Instruction does not require or authorize the DoD Components to expend funds or use other resources to meet requirements that are the responsibility of host nations, as stipulated in applicable international agreements. Nor, however, does this Instruction restrict the authority of a commander to protect the human health and safety of the command from environmental threats.

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6.6. Waivers. A DoD Component may request a waiver of an otherwise applicable standard under subsections 6.3.5. or 6.3.8., above, only if compliance with the standards at particular installations or facilities would seriously impair their actions, adversely affect relations with the host nation or would require substantial expenditure of funds for physical improvements at an installation that has been identified for closure or at an installation that has been identified for a realignment that would remove the requirement. Waivers may not be granted to standards if noncompliance would constitute a breach of applicable U.S. law with extraterritorial effect or applicable international agreements.

6.6.1. A DoD Component submitting a request for waiver shall:

6.6.1.1. Identify the particular standard for which a waiver is requested;

6.6.1.2. Describe the extent of the relief requested and the period that the waiver will be in effect;

6.6.1.3. Describe the anticipated impact of the waiver, if any, on human health and the environment over the period of the waiver; and,

6.6.1.4. Describe the justification for the waiver and if a complete waiver of the standard is requested, why a partial and/or temporary deviation would not be sufficient.

6.6.2. Upon receipt of a request for waiver, the DoD Environmental Executive Agent shall consult with the relevant DoD Components and the Unified Combatant Command with geographic responsibility. Where the waiver or deviation is from a host-nation standard, the DoD Environmental Executive Agent should normally consult through the appropriate U.S. Diplomatic Mission (or other agencies established by applicable international agreements) with the responsible host-nation authority.

6.6.3. The DoD Environmental Executive Agent may grant or deny the request for waiver in whole, in part or upon conditions. Pending action by the DoD Environmental Executive Agent, the Unified Combatant Commanders may, consistent with applicable international agreements and other law, authorize temporary emergency waivers and deviations in countries in their geographic area when they determine that such a waiver or deviation is

essential to the accomplishment of an operational mission directed by the National Command Authorities. Such waivers shall be no broader than appropriate to accomplish the mission.

6.6.4. If, as a result of consultation with host-nation authorities by the Executive Agent, it is determined that the waiver or deviation from the applicable host-nation standards should not be approved, the DoD Environmental Executive Agent or the DoD Component requesting the waiver may forward the request along with a complete report to the DUSD(ES), who shall attempt to resolve the issue through consultation with relevant authorities and other Federal Agencies as appropriate.

6.6.5. Where the Military Department or Defense Agency requesting the waiver is also the DoD Environmental Executive Agent, the waiver shall be referred to the Unified Combatant Commander for decision.

6.6.6. A DoD Environmental Executive Agent, Unified Combatant Commander or the DUSD(ES), as appropriate, shall maintain a written record of its decision on each waiver requested.

6.7. Pollution Prevention Guidance. Additional pollution prevention guidance can be found in DoD Instruction 4715.4 (reference (k)).

6.8. Annual Information. The DoD Components shall provide information to DUSD(ES) required and requested to comply with paragraphs 6.3.5. and 6.3.8., above, for each military installation. Under 10 U.S.C. 2706(b), (reference (l)), this information shall be compiled and submitted as part of the Department of Defense's annual report to Congress on environmental quality. The DoD Components should also notify DUSD(ES) of noteworthy environmental achievements such as major environmental initiatives, milestones, and good news stories that show leadership, as appropriate.

6.9. Dispute Resolution. If a DoD Component disagrees with the establishment of one or more FGS by an Executive agent, the failure to fully approve a request for a waiver, or another determination of the DoD Environmental Executive Agent, the DoD Component may seek resolution of the disagreement directly with the applicable Unified Combatant Commander, who shall issue a decision after consultation with the DoD Environmental Executive Agent. If the DoD Component still disagrees with the resolution of the issue, the Component's senior environmental policy

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principal may refer the matter to the DUSD(ES) for final determination after notice to the Chairman of the Joint Chiefs of Staff.

7. INFORMATION REQUIREMENTS

7.1. The annual report to Congress on the Department of Defense's Environmental Quality compliance in subsection 6.8., above, has been assigned Report Control Symbol DD-ANT (A) 1997. This information is required before the President's Budget submission to Congress under reference (1).

8. EFFECTIVE DATE. This Instruction is effective immediately.

Enclosures - 3

1. References
2. Definitions
3. Designated DoD Environmental Executive Agents

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E1. ENCLOSURE 1

REFERENCES

- (e) Section 7158 of title 42, United States Code
- (f) Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions," January 4, 1979
- (g) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (h) DoD Directive 2010.9, "Mutual Logistic Support Between the United States and Governments of Eligible Countries and NATO Subsidiary Bodies," September 30, 1988
- (i) Section 165 of title 10, United States Code
- (j) DoD 5025.1-M, "DoD Directives System Procedures," August 1994, authorized by DoD Directive 5025.1, June 24, 1994
- (k) DoD Instruction 4715.4, "Pollution Prevention," June 18, 1996
- (l) Section 2706(b) of title 10, United States Code
- (m) DoD Directive 5530.3, "International Agreements," June 11, 1987

E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Final Governing Standards (FGS). A comprehensive set of country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or a specific management practice.

E2.1.2. Installation. A base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a Military Department that is located outside the United States and outside any territory, commonwealth, or possession of the United States.

E2.1.3. International Agreement. A multilateral or bilateral agreement, such as a base rights or access agreement, a status of forces agreement, including practices and standards established pursuant to such agreement, or any other instrument defined as a binding international agreement under DoD Directive 5530.3 (reference (m)).

E2.1.4. Applicable Host-Nation Environmental Standards. Either those specific management practices to control pollution or those objective, numeric or qualitative pollution control standards that are generally in effect and enforced against host-government and private sector activities. Laws of local governmental units are not included unless they implement national laws that delegate authority to, or recognize the authority of, the local governmental unit. Limitations on discharges, emissions, effluents, and disposal are included, but procedural or administrative requirements, such as permitting, licenses, fees, fines, penalties, or other sanctions, are not.

E2.1.5. Overseas Environmental Baseline Guidance Document (OEBGD). A set of objective criteria and management practices developed by the Department of Defense, pursuant to this Instruction, to protect human health and the environment. The OEBGD also contains procedures for use by the Department of Defense to establish the FGS for a particular geographic area or, as described in subsection 6.3.8., above, to provide standards for environmental compliance where no FGS have been established.

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E3. ENCLOSURE 3

DESIGNATED DOD ENVIRONMENTAL EXECUTIVE AGENTS

COUNTRY	EXECUTIVE AGENT
EUROPEAN COMMAND	
United Kingdom	CINCUSAFE
Germany	CINCUSAREUR
Italy	CINCUSNAVEUR
Spain	CINCUSNAVEUR
Greece	CINCUSNAVEUR
Belgium	CINCUSAREUR
Netherlands	CINCUSAREUR
Turkey	CINCUSAFE
CENTRAL COMMAND	
Azores	USAF Air Combat Command
Ascension Island	USAF Space Command
Antigua	USAF Space Command
Bahamas	CINCLANTFLT
Cuba	CINCLANTFLT
Greenland	USAF Space Command
Iceland	CINCLANTFLT
SOUTHCOM	
Panama and all countries in AOR	CG,USARSO
PACIFIC COMMAND	
Japan	COMUSFORJAPAN
Korea	CINCUSFORKOREA
Diego Garcia	CINCPACFLT

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APPENDIX L

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4715.7
ENVIRONMENTAL RESTORATION PROGRAM

April 22, 1996

USD(A&T)

- References:
- (a) DoD Directive 4715.1, "Environmental Security," February 24, 1996
 - (b) Sections 2701-2708 and 2810 of title 10, United States Code, "Department of Defense Environmental Restoration Program" (Section 211 of Superfund Amendments and Reauthorization Act of 1986 (SARA))
 - (c) Sections 6901-6992k and implementing regulations concerning corrective action of title 42, United States Code, "Resource Conservation and Recovery Act" (RCRA)
 - (d) Sections 9601-9675 of title 42, United States Code, "Comprehensive Environmental Response, Compensation, and Liability Act," as amended (CERCLA or "Superfund")
 - (e) through (z), see enclosure 1

A. PURPOSE. This Instruction:

1. Implements reference (a) with respect to the Defense Environmental Restoration Program (DERP) and the Base Realignment and Closure (BRAC) environmental restoration program consistent with references (b) through (w).
2. Implements and refines policies, assigns responsibilities, and prescribes procedures for the DERP, funded by the environmental restoration accounts; and the BRAC environmental restoration program, funded by the BRAC account.
3. Assigns responsibilities for planning, programming, budgeting, executing, and reporting for the DERP and the BRAC environmental restoration program.

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4. Establishes requirements for evaluating the relative risk posed by a site and for using that information for program planning and execution.

5. Establishes measures of merit for assessing the progress towards established goals and accomplishments of the DERP and the BRAC environmental restoration program.

6. Implements the Fast-Track Cleanup (FTC) Program to expedite restoration and transfer or lease of property at closing and realigning installations.

7. Establishes the Environmental Security Cleanup Committee (ESCC).

8. Designates the Secretary of the Army as the DoD Executive Agent for the Formerly Used Defense Sites (FUDS) Program, and as the lead agency for Defense and State Memorandum of Agreement (DSMOA)/Cooperative Agreements and the Agency for Toxic Substances and Disease Registry (ATSDR) programs.

B. APPLICABILITY AND SCOPE. This Instruction:

1. Applies to the Office of the Secretary of Defense (OSD), the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Inspector General of the Department of Defense, the Defense Agencies with land management responsibilities, and the DoD Field Activities, including any other integral DoD organizational entity or instrumentality established to perform a governmental function (hereafter referred to collectively as "the DoD Components").

2. Applies to facilities or installations within the United States and its territories and possessions that are controlled by the Department of Defense, or under the jurisdiction of the Department of Defense or one of the DoD Components (including installations designated for closure or realignment under BRAC). Restoration activities may be conducted beyond the boundaries of a DoD facility or installation when it has been determined that contamination has migrated from a source within such a facility or installation or when hazardous substances from a DoD facility have come to be placed outside the facility. Contamination on facilities outside the United States and its territories is covered under the Deputy Secretary of Defense Memorandum (reference (x)).

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3. Applies to FUDS that were under the jurisdiction of the Department of Defense at the time of actions that caused the release of hazardous substances or other environmental damage.

4. Applies to other sites for which the Department of Defense may be a potentially responsible party, as defined by the Deputy Under Secretary of Defense (Environmental Security) Memorandum (reference (s)).

5. Does not apply to contractor-owned and contractor-operated facilities that are not on real property controlled by the Department of Defense; contamination caused by non-military civil works activities of the Commander, the U.S. Army Corps of Engineers; and responses to spill incidents associated with current operations, and as specified in reference (s).

C. DEFINITIONS. Terms used in this Instruction are defined in enclosure 2.

D. POLICY. The goal of the DERP and BRAC environmental restoration program is to reduce, in a cost-effective manner, the risks to human health and the environment attributable to contamination resulting from past DoD activities. This goal is accomplished through the following policies:

1. Identify, evaluate, and, where appropriate, remediate contamination resulting from past DoD activities.

2. Ensure immediate action to remove imminent threats to human health and the environment.

3. Comply with statutes, regulations, Executive Orders and other legal requirements governing cleanup of contamination.

4. Conduct DERP and BRAC environmental restoration program activities to meet program goals as stated in the Defense Planning Guidance (DPG).

5. Develop partnerships regarding restoration activities with the U.S. Environmental Protection Agency (EPA) and appropriate State, local, and territorial regulatory agencies.

6. Promote and support public participation in the DERP and the BRAC environmental restoration program.

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7. Support the development and use of cost-effective innovative technologies and process improvements in the restoration process.

8. Support community reinvestment initiatives at closing and realigning installations through the selection of remedies, where practicable, that are consistent with redevelopment actions.

E. RESPONSIBILITIES

1. The Under Secretary of Defense for Acquisition and Technology shall:

a. Serve as the Decision Authority for the DERP and BRAC environmental restoration program.

b. Issue policy and guidance for the DERP and BRAC environmental restoration program, including establishing program scope, goals, and priorities.

c. Provide oversight of the DERP and BRAC environmental restoration program, including ensuring that program implementation is consistent with guidance and is consistent across DoD Components.

d. Delegate program authority, as appropriate.

2. The Deputy Under Secretary of Defense for Environmental Security, under the Under Secretary of Defense for Acquisition and Technology, shall:

a. Subject to the concurrent authority of the Under Secretary of Defense for Acquisition and Technology (USD(A&T)), exercise all responsibilities and authorities of the Secretary of Defense under 10 U.S.C. 2701-2708 and 2810 (reference (b)) and E.O. 12580 (reference (m)) necessary to execute the DERP and BRAC environmental restoration program.

b. Prepare policy and guidance for the DERP and BRAC environmental restoration program.

c. Conduct analysis and oversight of the DERP and BRAC environmental restoration program.

d. Propose updates to the DPG to the USD(Policy) through the USD(A&T).

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e. Coordinate efforts with the Assistant Secretary of Defense (Economic Security) (ASD(ES)) to prepare policy, guidance, goals, objectives, and funding requirements for the BRAC environmental restoration program.

f. Establish a DoD-wide management information system that is the central source for all site and programmatic information in accordance with DoD Directive 8000.1 (reference (y)). Data in this system shall be consistent with data in the DoD Planning, Programming, and Budgeting System (PPBS). Provide for regularly scheduled data collection, and issue other data calls as required.

g. Establish performance goals and measures to implement the DERP and BRAC environmental restoration program.

h. Conduct in-progress reviews (IPR) of the DERP and BRAC environmental restoration program and report the results to USD(A&T).

i. Provide liaison with other Federal Agencies, States, and territories. Support the Assistant Secretary of Defense (Legislative Affairs) liaison with Congress.

j. Prepare and issue the DERP Annual Report to Congress in accordance with references (b), and (i) through (k).

k. Consolidate, submit, and defend environmental restoration Program Objective Memoranda (POMs) and budgets for the Defense-wide account, which includes non-BRAC funding for the Deputy Under Secretary of Defense (Environmental Security) (DUSD(ES)), the Defense Logistics Agency, the Defense Nuclear Agency, and FUDS.

l. Propose to the Under Secretary of Defense (Comptroller) (USD(C)) and the Director, Program Analysis and Evaluation (PA&E), updates of displays of the annual budget preparation instructions and POM preparation instruction (PPI) that adequately depict program requirements for the DERP and BRAC environmental restoration program.

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Propose to the Under Secretary of Defense (Comptroller) (USD)) and the Director, Program Analysis and Evaluation (PA&E), updates of displays of the annual budget preparation instructions and POM preparation instructions (PPI) that adequately depict program requirements for the DERP and BRAC environmental restoration program/

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m. Review and evaluate DoD Components' POMs, budget submissions, and funding. Make recommendations to the Director, PA&E and the USD(C).

n. Evaluate DoD Components' execution of the DERP and BRAC environmental restoration program based on goals and measures of merit.

o. Establish and direct the ESCC and its operation.

p. Sign DSMOAs with interested States and territories to expedite restoration by securing technical support services at operational installations, closing and realigning installations, and WDS.

q. Establish a Memorandum of Understanding (MOU) with the Agency for Toxic Substances and Disease Registry (ATSDR), in coordination with the DoD Components, to transfer funds in support of public health activities.

r. Enter into other agreements, on behalf of the Department of Defense, regarding environmental restoration.

s. Delegate program authority, as appropriate.

3. The Assistant Secretary of Defense for Economic Security, under the Under Secretary of Defense for Acquisition and Technology, shall coordinate efforts with the DUSD(ES) to establish the goals, objectives, and funding requirements of the BRAC environmental restoration program in accordance with the DPG.

4. The Under Secretary of Defense (Comptroller) shall:

a. Incorporate appropriate changes to the DERP and BRAC environmental restoration program budget preparation formats to ensure that appropriate, meaningful data are collected.

b. Consult with the DUSD(ES) regarding DERP and BRAC environmental restoration program budget submissions.

c. Review and adjust DoD Component DERP and BRAC environmental restoration program budget submissions.

d. Coordinate with the DUSD(ES) to implement financial reports on DERP and BRAC environmental restoration program funding to ensure accurate reporting.

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5. The Under Secretary of Defense (Comptroller) shall ensure that the Director, Program Analysis and Evaluation, shall:

a. Review and analyze DoD Component DERP and BRAC environmental restoration program POM submissions.

b. Coordinate with the DUSD(ES) on DoD Component DERP and BRAC environmental restoration programming, including Program Planning Instruction requirements, POM submissions, and program review decisions.

6. The Secretaries of the Military Departments Directors of the Defense Agencies with land management responsibilities under OSD Principal Staff Assistants and those that report directly to the Secretary or Deputy Secretary of Defense, and to the extent applicable, the Heads of other DoD Components shall:

a. Subject to the concurrent authority of the USD(A&T) and the DUSD(ES), exercise all responsibilities and authorities of the Secretary of Defense under 10 U.S.C. 2701-2708 and 2810 (reference (b)), and E.O. 12580 (reference (m)), necessary to execute the DERP and BRAC environmental restoration program. Those authorities derived from paragraphs 2(j) and 4(e) of reference (m) may be redelegated in writing only to a member of the Senior Executive Service or a General/Flag Officer with principal responsibility for the execution of the DERP; all remaining authorities may be redelegated in writing as appropriate.

b. Establish DERP and BRAC environmental restoration programs with scope, goals, and priorities prescribed by USD(A&T); and implement and execute DoD policies and guidance for these programs.

c. Designate an executive to oversee implementation of DERP and BRAC environmental restoration program policy and guidance within the DoD Component. Authorities and responsibilities for executing the programs in a manner consistent with this guidance may be delegated further within the DoD Component.

d. Plan, program, and budget DERP and BRAC environmental restoration program requirements in a manner consistent with the DPG, budget guidance, and other appropriate instructions. Defend those requirements, and execute the programs in a manner consistent with the DoD fiscal and programmatic guidance.

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e. Collect and maintain data and documentation by site, including program estimates, schedules, and performance measures necessary to plan, program, budget, and track execution of the DERP and BRAC environmental restoration program.

f. Monitor and report on program execution, providing information for each site regarding status, schedule, and cost to the DUSD(ES) by updating regularly the Restoration Management Information System (RMIS), or its successor tracking system.

g. Provide DERP and BRAC environmental restoration program status information during IPRs and other data calls.

h. Negotiate and sign Federal Facility Agreements (FFA) and other types of Federal and State restoration agreements, as appropriate. Agreements shall address the relationships between agencies, reflect budget constraints, and allow for flexibility of schedules.

i. Select preferred alternatives at remedial action sites and sign and execute restoration decision documents.

j. Provide liaison with other Federal and State environmental agencies, as appropriate.

k. Support the DSMOA program by reviewing work plans, documents, and progress reports, and by providing funds.

l. Comply with and support agreements, as appropriate, with other organizations such as ATSDR and EPA.

m. Integrate the relative risk concept into program planning and execution in accordance with the Risk-Based Site Evaluation Primer (reference (u)).

n. Expedite the restoration process. For example, where appropriate, take interim remedial actions and removal actions, and use generic cleanup strategies.

o. Encourage public participation in the DERP and BRAC environmental restoration program.

p. Support and facilitate the development and use of innovative technologies.

q. Participate in the preparation of the DERP Annual Report to Congress.

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r. Address third-party site claims arising from disposal of waste by the DoD Component.

7. The Director Defense Logistics Agency, under the Under Secretary of Defense for Acquisition and Technology, shall address third-party site claims arising from a Defense Reutilization and Marketing Service sale or disposal contract.

8. The Secretary of the Army shall:

a. Act as the DoD Executive Agent for the FUDS program. This includes identifying to the DUSD(ES) funding required, and conducting restoration activities at eligible properties on behalf of the DoD Components, and reporting on program progress. Funds for FUDS will be programmed and budgeted in the Defense-wide environmental restoration account.

b. Act as lead agency for:

(1) DSMOA and Cooperative Agreements programs. This includes negotiating DSMOAs, for DUSD(ES) signature, with interested States and territories to facilitate their participation and technical support in restoration at operational installations, closing and realigning installations, and FUDS. Notify the DoD Components of the costs of each cooperative agreement in a timely manner to enable the DoD Components to plan, program, and budget accordingly. Report on program progress.

(2) Carrying out DoD responsibilities under the MOU with ATSDR. This includes notifying the DoD Components of the costs in a timely manner to enable the them to plan, program, and budget accordingly. Report on program progress.

F. PROCEDURES

1. Conduct DERP activities at operational installations to:

a. Plan, program, and execute activities using the results of relative risk site evaluations in accordance with the Risk-Based Site Evaluation Primer (reference (u)), and other criteria to meet program goals as stated in the DPG.

b. Measure program progress in terms of:

(1) Reduction of relative risk at sites.

- (2) Progression of sites through the restoration phases.
- (3) Accomplishment of milestones leading to site completion.

2. Conduct BRAC environmental restoration activities at closing and realigning installations to:

a. Plan, program, and execute activities that support property reuse, using the results of relative risk site evaluations in accordance with reference (u), and other criteria to meet program goals as stated in the DPG.

b. Measure program progress in terms of:

- (1) Reduction of relative risk at sites.
- (2) Progression of sites through the restoration phases.
- (3) Accomplishment of milestones leading to site completion.
- (4) Acres of land environmentally suitable for transfer.

3. Conduct the FTC program to expedite restoration and transfer or lease of property at closing and realigning installations. This includes improving the efficiency of the restoration process, partnering with Federal and State regulatory agencies, and working with local communities and other stakeholders.

4. Ensure that actions necessary to protect human health, safety, and the environment are taken before the property is transferred or leased. Environmental response actions found to be necessary subsequent to property transfer at BRAC properties shall normally be addressed by the losing DoD Component.

5. Negotiate and sign FFA and other types of Federal and State restoration agreements, as appropriate. Agreements shall address the relationships between agencies, reflect budget constraints, and allow for flexibility of schedules.

6. Conduct public participation in a manner consistent with the requirements of the Comprehensive Environmental Response,

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Compensation, and Liability Act (CERCLA), the National Contingency Plan, and other applicable laws and regulations by ensuring timely public access to information, opportunity for public comment on proposed activities, and consideration of public comments in the decision-making process. Establish Technical Review Committees (TRC) or Restoration Advisory Boards (RAB) that include representatives of the community, in accordance with the Deputy Under Secretary of Defense (Environmental Security) Memorandum (reference (s)).

7. Develop management plans for each installation that identify all sites, planned activities, schedules, and costs.

G. INFORMATION REQUIREMENTS

1. The information requirement at E.2.f. has been assigned Report Control Symbol (RCS) DD-A&T(A& AR)1995 in accordance with DoD 8910.1-M (reference (z)).

2. The DoD Components will present program status information at regular IPRs. Other information will be provided as necessary.

H. EFFECTIVE DATE. This Instruction is effective immediately.

Paul G. Kaminski
Under Secretary of Defense
(Acquisition and Technology)

Enclosures - 2

1. References
2. Definitions

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Enclosure 1

REFERENCES

- (e) Section 2687 of title 10, United States Code, note, (Title II of Public Law 100-526), "Defense Authorization Amendments and Base Closure and Realignment Act of 1988," October 24, 1988
- (f) Section 2687 of title 10, United States Code, note, (Title XXIX of Public Law 101-510), "Defense Base Closure and Realignment Act of 1990," November 5, 1990
- (g) Sections 331-336 of Public Law 102-190, "National Defense Authorization Act for Fiscal Years 1992 and 1993," December 5, 1991
- (h) Sections 321-332 of Public Law 102-484, "National Defense Authorization Act for Fiscal Year 1993," October 23, 1992
- (i) Sections 1001-1005 of Public Law 103-160, "National Defense Authorization Act for Fiscal Year 1994," November 30, 1993
- (j) Sections 321-329 of Public Law 103-421, "National Defense Authorization Act for Fiscal Year 1995," October 5, 1994
- (k) Sections 321-325 of Public Law 104-106, "National Defense Authorization Act for Fiscal Year 1996," January 22, 1996
- (l) Title 40, Code of Federal Regulations, Part 300, "National Oil and Hazardous Substances Pollution Contingency Plan," current edition
- (m) Executive Order 12580, "Superfund Implementation," January 23, 1987
- (n) Executive Order 12088, "Federal Compliance with Pollution Controls Standards," October 13, 1978
- (o) Executive Memorandum, "Five-Part Plan for Revitalizing Base Closure Communities," President William Clinton, July 2, 1993
- (p) Deputy Secretary of Defense Memorandum, "Fast-Track Cleanup at Closing Installations," September 9, 1993, or current edition
- (q) DoD Directive 5134. 1, "Under Secretary Of Defense of Acquisition and Technology (USD (A&T))," June 8, 1994
- (r) DoD 7000. 14-R, Department of Defense Financial Management Regulations, Volume 2, "Budget Formulation and Presentation," May 1994
- (s) Deputy Under Secretary of Defense (Environmental Security) Memorandum, "Program Management Guidance for Execution of the FY94/95 and the Development of the FY96 Defense Environmental Restoration Program," April 14, 1994

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- (t) Federal Register, Volume 57, pages 28835-28841, "Defense Environmental Restoration Program, Notice of Fund Availability and Application Instructions for Defense and State Memoranda of Agreement," June 29, 1992
- (u) Office of the Deputy Under Secretary of Defense (Environmental Security), "Risk-Based Site Evaluation Primer," Summer 1994, or current edition
- (v) Deputy Under Secretary of Defense (Environmental Security) Memorandum, "Environmental Security Program Measures of Merit," May 16, 1995
- (w) Joint Department of Defense and U. S. Environmental Protection Agency Guidance, "Restoration Advisory Board (RAB) Implementation Guidelines," September 27, 1994
- (x) Deputy Secretary of Defense Memorandum, "Environmental Remediation Policy for DoD Activities Overseas," October 18, 1995
- (y) DoD Directive 8000.1, "Defense Information Management (IM) Program," October 27, 1992
- (z) DoD 8910.1-M, "DoD Procedures for Management of Information Requirements," November 28, 1986

Enclosure 2

DEFINITIONS

1. Agency for Toxic Substance and Disease Registry (ATSDR). A branch of the U.S. Public Health Service that performs public health assessments at DoD National Priorities List installations in accordance with the agency's authority and responsibility under CERCLA.

2. Base Realignment and Closure (BRAC) Environmental Restoration Program. Environmental restoration activities at closing and realigning installations affected by 10 U.S.C. 2687, note (references (e) and (f)), and funded by the DoD Component BRAC accounts. This program is analogous to the DERP and funds the same activities that are eligible under the DERP. It does not include Building Demolition/Debris Removal or Ordnance and Explosive Waste activities. Closure-related environmental compliance requirements are not included in this program.

3. Contamination. The existence of biological, chemical, low-level radiological, or other substances including petroleum, oil, and lubricants that may present a hazard to human health or that may render some portion of the environment unsuitable for use.

4. Decision Authority. The highest level decision-maker for the DERP and BRAC environmental restoration program.

5. Defense and State Memorandum of Agreement (DSMOA). Agreement between the Department of Defense and a State or territory whereby the State or territory can be compensated for providing technical support of environmental restoration activities at operational installations, closing and realigning installations, and FUDS.

6. Defense Environmental Restoration Program (DERP). Program established by Congress in 1986 under Section 211 of SARA (10 U.S.C. 2701-2707 and 2810) (reference (b)) to provide funding for cleanup of contaminated DoD sites in a manner consistent with the requirements of CERCLA (reference (d)).

7. Environmental Restoration. Studies, cleanup, and other actions taken to address contamination from past DoD activities to protect human health and the environment.

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8. Environmental Restoration Accounts. Accounts established by each Military Department and the Defense-wide account (DUSD(ES), DLA, DNA and FUDS), used to fund environmental restoration activities at operational installations and formerly owned or used properties.

9. Environmental Security Cleanup Committee (ESCC). A committee under the Environmental Security Council, comprised of senior representatives of OSD and the DoD Components. The Committee is chaired by the Assistant Deputy Under Secretary of Defense (Environmental Security)/Cleanup and meets regularly to identify and resolve programmatic issues.

10. Environmental Security Program. The program that institutionalizes DoD environmental, safety, and occupational health awareness, making it an integral part of DoD daily activities. The DUSD(ES) is responsible for activities related to restoration, compliance, conservation, pollution prevention, safety, occupational health, fire and emergency services, pest management, explosives safety, environmental security technology, and international programs.

11. Executive Agent. The agency directly responsible for program implementation.

12. Fast-Track Cleanup (FTC). The program established under the President's five point reinvestment plan (reference (o)) to expedite the restoration and transfer of property at closing and realigning installations.

13. Federal Facilities Agreement (FFA). The agreement between regulators and the Department of Defense for the accomplishment of all necessary remedial actions. Agreements signed in accordance with CERCLA section 120 are Interagency Agreements.

14. Formerly Used Defense Sites (FUDS). Real property that formerly was used by, leased to, or otherwise was under the operational control of the Department of Defense. The restoration program at FUDS properties is similar to that at DoD installations. However, information concerning the origin of contamination, land transfer, and current ownership must be evaluated to determine whether a site is eligible for DoD funding. Sites that were transferred under the BRAC program shall not normally be considered FUDS.

15. Generic Cleanup Strategy. A strategy that has been implemented successfully and can be used to expedite the cleanup process at sites having similar characteristics.

16. Innovative Technology. Newly developed technologies, or adaptations of existing technologies, that are not normally considered certified or proven for use in site remediation.

17. Lead Agency. The agency that coordinates activities for the Department of Defense.

18. Management Plan. A plan that identifies each contaminated site on an installation, planned restoration activities, a schedule for accomplishing these activities, and costs. At closing and realigning installations, this is known as a BRAC Cleanup Plan.

19. Measure of Merit. An indicator of progress toward established goals. These measures are established by the DUSD(ES) to evaluate the status and progress of programs.

20. Relative Risk. The evaluation of individual sites to determine high, medium, or low relative risk to human health and the environment, based on contaminant hazards, migration pathways and receptors, in accordance with DoD's Risk-Based Site Evaluation Primer (reference (u)). The movement of any site from a higher to lower relative risk category as a result of natural attenuation, interim remedial, remedial, or removal actions taken is called risk reduction.

21. Restoration Advisory Board (RAB). A group of stakeholders, including representatives from the installation, the affected community, Federal and State regulatory agencies, the local government and/or redevelopment authority, and others. The RAB provides a forum for the discussion and exchange of information regarding restoration activities.

22. Restoration Management Information System (RMIS). A computerized database used by the OSD and the DoD Components to track the status of sites in the DERP and BRAC environmental restoration program. RMIS is the central source of all site and programmatic information.

23. Site. Area containing one or more releases or threatened releases of hazardous substances that, for response purposes, is treated as a discrete entity, including any building, impoundment, landfill, storage container, or other site or area

where a hazardous substance has or had come to be located and including formerly used defense sites.

24. Technical Review Committee (TRC). A committee, established in accordance with 10 U.S.C. 2705 (reference (b)) composed of representatives of the Department of Defense, regulatory agencies, and the affected community. The TRC is a mechanism for exchanging information about restoration activities at an installation.

25. Third-Party Site. A site where the Department of Defense has no current or past ownership interest and where the Department of Defense has a responsibility for cleanup under CERCLA (reference (d)).

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APPENDIX M

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4715.8
ENVIRONMENTAL REMEDIATION FOR DOD ACTIVITIES OVERSEAS

NUMBER 4715.8

February 2, 1998

USD (A&T)

SUBJECT: Environmental Remediation for DoD Activities Overseas

- References: (a) Deputy Secretary of Defense Memorandum, "Environmental Remediation Policy for DoD Activities Overseas," October 18, 1995
- (b) DoD Instruction 4715.5, "Management of Environmental Compliance at Overseas Installations," April 22, 1996
- (c) DoD Directive 5530.3, "International Agreements," June 11, 1987

1. PURPOSE. This Instruction:

1.1. Implements policy, assigns responsibilities and prescribes procedures under reference (a) for remediation of environmental contamination on DoD installations or facilities or caused by DoD operations outside the United States.

1.2. Is for the internal management of the Department of Defense and does not create any independent right enforceable against the Department of Defense, the United States, or their officers, agents, or employees.

1.3. Supersedes previous guidance that is inconsistent with its provisions.

1.4. Does not supersede or amend any existing agreement respecting remediation of DoD environmental contamination outside the United States.

2. APPLICABILITY AND SCOPE.

2.1. This Instruction applies to:

2.1.1. The Office of the Secretary of Defense, the Military Departments (including the Coast Guard when it is operating as a Military Service in the Navy), the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities, including any other integral DoD organizational entity or instrumentality established to perform a government function (hereafter referred to collectively as "the DoD Components").

2.1.2. Remediation of environmental contamination on DoD facilities or installations outside the United States, including DoD activities on host-nation installations or facilities.

2.1.3. Remediation of environmental contamination caused by current DoD operations, including training, that occur off a DoD installation or facility outside and the United States. Such operations do not include operations connected with actual or threatened hostilities, security assistance programs, peacekeeping missions, or relief operations. Such operations also do not include logistics, maintenance, or administrative support functions provided by a contractor off base.

2.2. This Instruction does not apply to:

2.2.1. Actions to remedy environmental contamination that are covered by requirements in environmental annexes to operation orders and similar operational directives, or to requirements issued under DoD Instruction 4715.5 (reference (b)), either in country-specific Final Governing Standards or, where no Final Governing Standards have been issued, in the Overseas Environmental Baseline Guidance Document.

2.2.2. The civil works function of the Department of the Army.

2.3. For purposes of this Instruction, "United States" means the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of Northern Marianas, any other territory or possession over which the United States has jurisdiction, and associated navigable waters, contiguous zones,

and ocean waters of which the natural resources are under the exclusive management authority of the United States.

3. POLICY

The DoD Components shall, in accordance with the specific limitations contained in Sections 5 and 6 of this Instruction, remedy known environmental contamination caused by DoD operations outside the United States.

4. RESPONSIBILITIES

4.1. The Deputy Under Secretary of Defense for Environmental Security, under the Under Secretary of Defense for Acquisition and Technology, shall:

4.1.1. Provide guidance on policy for remediation of overseas environmental contamination.

4.1.2. Resolve a DoD Component's objections to a Combatant Commander's resolution of a dispute between the DoD Component and the Executive Agent if such objection is properly referred to the Deputy Undersecretary of Defense for Environmental Security.

4.2. The Heads of the DoD Components shall:

4.2.1. Remedy known environmental contamination to the extent required by this Instruction and the country-specific policy established by Environmental Executive Agents as set out in paragraph 4.2.3.1., below.

4.2.2. Resolve site-specific issues such as approving strategies for remediation and determining how best to use DoD Component resources.

4.2.3. Carry out or delegate the responsibilities of Environmental Executive Agents for particular nations when designated by the Department of Defense under DoD Instruction 4715.5 (reference (b)), including the following:

4.2.3.1. Establish country-specific remediation policy to ensure consistent remediation of DoD-contaminated sites in the host nation. Consistent with this Instruction and subject to the specific limitations contained in Sections 5 and 6, below, the country-specific policy shall:

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4.2.3.1.1. Define, or provide procedures to define, the appropriate level of remediation at contaminated sites;

4.2.3.1.2. Provide procedures for negotiating the scope of any required remedial measures with the host nation that are consistent with the policy and procedures for negotiating and concluding international agreements in DoD Directive 5530.3 (reference (c)); and

4.2.3.1.3. Provide procedures for furnishing documentation to the host government.

4.2.3.2. Negotiate, or coordinate and approve the negotiations of the DoD Components, with host nations on implementation of this Instruction, and regularly inform the cognizant Combatant Commander of such negotiations.

4.2.3.3. Consult with one another to ensure in-theater consistency in implementing this Instruction.

4.3. The Commanders of the Combatant Commands shall:

4.3.1. Coordinate and approve implementation of the overall policy within their geographic areas of responsibility, as necessary, to carry out their mission.

4.3.2. Resolve disputes between a DoD Component and the Environmental Executive Agent on country-specific policy.

5. PROCEDURES. Subject to the availability of funds and the other provisions of this Instruction, the following requirements apply to remediation of environmental contamination overseas:

5.1. DoD Installations or Facilities That Are Open and Have Not Been Designated for Return

5.1.1. The DoD Components shall take prompt action to remedy known imminent and substantial endangerments to human health and safety due to environmental contamination that was caused by DoD operations and that is located on or is emanating from a DoD installation or facility.

5.1.2. After consultation with the DoD Environmental Executive Agent, if any, the in-theater commander of the DoD Component may approve additional remediation of environmental contamination if the commander determines the additional remedial

measures are required to maintain operations or protect human health and safety.

5.1.3. International agreements may also require the United States to fund environmental remediation.

5.1.3.1. Such remediation may be more extensive than that necessary to remedy known imminent and substantial endangerments to human health and safety.

5.1.3.2. Before a DoD Component begins remediation under such an agreement, it shall consult with the DoD Environmental Executive Agent, if any, and shall obtain a legal determination that the requirement for environmental remediation is mandatory and arises from a binding international agreement that pertains to U.S. military operating rights in the host country.

5.1.4. Remediation beyond that specified in paragraphs 5.1.1. through 5.1.3., above, may be undertaken by the host nation using its own resources during U.S. occupancy of the installation or facility. The DoD Components shall encourage such remediation and cooperate with host-nation efforts by providing the information specified in section 6., below, and appropriate access to contaminated sites, subject to operational and security requirements.

5.2. DoD Installations or Facilities That Have Been Designated for Return or That Are Already Returned

5.2.1. The DoD Components shall take prompt action to remedy known imminent and substantial endangerments to human health and safety that are due to environmental contamination that was caused by DoD operations and that is located on or is emanating from a DoD installation or facility designated for return to the host nation.

5.2.1.1. Such remediation may be completed after return of the installation or facility to the host nation, but shall be limited to the essential elements in a remediation plan approved by the DoD Component before return. If remediation will continue after return, to ensure consistency among Do Components before finally approving a remediation plan, the appropriate DoD Component shall consult with the DoD Environmental Executive Agent, if any.

5.2.1.2. The remediation plan is developed for a particular installation by application of this Instruction and

country-specific policy to the particular circumstances of the installation, and shall include, but is not limited to sites to be remedied, a real and vertical extent of the contamination, contaminants to be addressed, and cleanup levels.

5.2.2. After consultation with the DoD Environmental Executive Agent, if any, the in-theater commander of the DoD Component may approve additional remediation of environmental contamination on installations or facilities that have been designated for return if the commander determines, in light of the projected return date, that the additional remedial measures are required to maintain operations or protect human health and safety.

5.2.3. International agreements may also require the United States to fund environmental remediation.

5.2.3.1. Such remediation may be more extensive than that necessary to remedy known imminent and substantial endangerments to human health and safety.

5.2.3.2. Before a DoD Component begins remediation under such an agreement, it shall consult with the DoD Environmental Executive Agent, if any, and shall obtain a legal determination that the requirement for environmental remediation is mandatory and arises from a binding international agreement that pertains to U.S. military operating rights in the host country.

5.2.3.3. After return of an installation or facility, the Department of Defense shall not fund any environmental remediation in excess of that required by binding international agreement or that which is pursuant to an approved remediation plan under paragraph 5.2.1., above.

5.2.4. Remediation beyond that specified in paragraphs 5.2.1. through 5.2.3., above, may be undertaken by the host nation using its own resources during U.S. occupancy of the installation or facility. The DoD Components shall encourage such remediation and cooperate with host-nation efforts by providing the information specified in section 6., below, and appropriate access to contaminated sites, subject to operational and security requirements.

5.3. Environmental Contamination Off a DoD Installation or Facility

5.3.1. The DoD Components shall take prompt action to remedy known imminent and substantial endangerments to human health and safety due to environmental contamination caused by current DoD operations at locations within the territory of a nation other than the United States and that is not located on or emanating from a DoD installation or facility.

5.3.2. After consultation with the DoD Environmental Executive Agent, if any, the in-theater commander of the DoD Component may approve additional remediation of environmental contamination caused by current DoD operations if the commander determines the additional remediation is required to maintain operations.

5.3.3. International agreements may also require the United States to fund environmental remediation.

5.3.3.1. Such remediation may be more extensive than that necessary to remedy known imminent and substantial endangerments to human health and safety.

5.3.3.2. Before a DoD Component begins remediation under such an agreement, it shall consult with the DoD Environmental Executive Agent, if any, and shall obtain a legal determination that the requirement for remediation is mandatory and arises from a binding international agreement that pertains to U.S. military operating rights in the host country.

5.3.4. Remediation beyond that specified in paragraphs 5.3.1. through 5.3.3., above, may be undertaken by the host nation using its own resources. The DoD Components shall encourage such remediation and cooperate with host-nation efforts by providing the information specified in section 6., below, and appropriate access to contaminated sites, subject to operational and security requirements.

5.4. Determination of Known Imminent and Substantial Endangerment and Extent of Remedy

5.4.1. The decision as to whether a contaminated site poses an imminent and substantial endangerment shall be made by the in-theater commander of the DoD Component after consultation with the appropriate DoD medical authority and the DoD Environmental Executive Agent, if any, for the respective host nation.

5.4.2. The authority to make this decision may be delegated by the in-theater commander of the DoD Component to an

installation or facility commander, as appropriate, but consultation as set out in paragraph 5.4.1., above, is still required.

5.4.3. Projects designed to remedy an imminent and substantial endangerment are considered complete when the contamination no longer poses an imminent and substantial endangerment to human health, environment, and safety. Commanders have the discretion to make risk-based decisions on how to carry out the remediation, ranging from institutional responses, such as restricting access, to more permanent remedies.

5.5. Residual Value Adjustment for Host-Nation Contributions. Consistent with the provisions of applicable international agreements, actual or anticipated environmental remediation costs incurred by the host nation for DoD-caused contamination on or emanating from DoD installations or facilities or caused by current DoD operations may be considered as an offset against the residual value of DoD capital improvements.

5.6. Host-Nation Contribution. To the extent consistent with applicable international agreements, the responsible official under section 4., above, shall seek host-nation or third country contribution, including assistance in kind, for remediation funded by the United States.

5.7. Negotiations with Host Nation. Negotiations with the host nation, whether by the DoD Environmental Executive Agent or DoD Component, shall be conducted in accordance with this Instruction; DoD Directive 5530.3 (reference (c)), and other applicable Directives.

6. INFORMATION REQUIREMENTS

6.1. The DoD Components may develop information, and shall maintain existing information, about environmental contamination at DoD locations for five years after the location is returned to the host nation and all claims or other issues about contamination are finally resolved.

6.2. Information on contamination not located on or emanating from a DoD installation or facility that was caused by DoD operations shall be collected and maintained for five years after issues about the contamination are finally resolved with the host nation.

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6.3. Subject to security requirements, this information shall be provided, through the DoD Environmental Executive Agent and the Embassy, where required, to host-nation authorities upon request.

7. EFFECTIVE DATE. This Instruction is effective immediately.

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APPENDIX N

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 4715.9
ENVIRONMENTAL PLANNING AND ANALYSIS

NUMBER 4715.9

May 3, 1996

USD (A&T)

SUBJECT: Environmental Planning and Analysis

References: (a) DoD Directive 4715.1, "Environmental Security," February 24, 1996
(b) DoD Instruction 4715.6, "Environmental Compliance," April 24, 1996
(c) DoD Instruction 4715.4, "Pollution Prevention," June 18, 1996
(d) DoD Instruction 4715.3, "Environmental Conservation Program," May 3, 1996
(e) through (k), see enclosure 1

1. PURPOSE. This Instruction:

1.1. Implements policy and assigns responsibilities for integration of environmental considerations into DoD activity and operational planning.

1.2. Assigns responsibilities and prescribes procedures for implementing reference (a) in accordance with references (b) through (f).

2. APPLICABILITY AND SCOPE. This Instruction:

2.1. Applies to the Office of the Secretary of Defense, the Military Departments (including the Coast Guard when it is operating under the Department of the Navy), the Chairman of the Joint Chiefs of Staff, the Unified Combatant Commands (as appropriate), the Office of Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities, including any other integral DoD organizational entity or instrumentality established to perform a governmental function) (hereafter referred to collectively as "the DoD Components").

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The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

2.2. Does not apply to the civil works function of the Department of the Army.

2.3. Supplements the requirements of the National Environmental Policy Act (NEPA) (reference (g)) and the Council On Environmental Quality (CEQ) regulations under 40 CFR 1500-1508 (reference (h)). Policies specific to reference (g) are included in enclosure 2.

2.4. Requires the DoD Components to implement policy and prescribe procedures specific to their activities and operations to comply with this Instruction.

2.5. Is limited to DoD activities and operations that may have environmental effects within the United States.

3. DEFINITIONS

3.1. Domestic Maritime Boundary of the United States. The seaward limits of the geographic area within a distance of 3 nautical miles seaward of the baseline for all states, territories, and possessions, except the Gulf Coast of Florida and Texas, where it means a distance of 3 marine leagues (9 nautical miles) seaward of the baseline.

3.2. Environmental Partnering. Joint and systematic efforts of the DoD Components to formally engage other governmental agencies (Federal, State, local), non-profit groups, and private contractors and other parties, as appropriate, to implement specific programs and projects dealing with restoration, conservation, compliance, or pollution-prevention activities.

3.3. Environmental Planning. The process of identifying and considering environmental factors that impact on, or are impacted by, planned DoD activities and operations.

3.4. Proponent. The organization that exercises primary management responsibility for a proposed action or activity.

3.5. United States. All States, territories, and possessions of the United States and all waters and airspace within the domestic maritime boundary of the United States.

4. POLICY. It is DoD policy to:

4.1. Integrate environmental considerations into DoD plans for defense activities and operations. DoD activity and operational planning should fully consider the environmental consequences of proposed actions in conjunction with national security requirements and other considerations of national policy.

4.2. Prepare necessary documentation required under references (g) and (h) whenever a proponent develops a proposal for an action that has the potential for significant environmental impacts and the Component is actively preparing to make a decision on one or more alternative means of accomplishing that proposal.

4.3. Integrate environmental considerations into installation master planning and operational planning.

4.4. Integrate environmental considerations into acquisition programs in accordance with DoD 5000.2-R (reference (e)) and DoD Directive 5000.1 (reference (f)).

4.5. Require the proponent of an action to program for funding of the costs of any environmental planning and analysis necessitated by the action.

5. RESPONSIBILITIES

5.1. The Deputy Under Secretary of Defense for Environmental Security, under the Under Secretary of Defense for Acquisition and Technology shall:

5.1.1. Provide policy and oversight for integration of environmental considerations into DoD activity planning and, as appropriate, operational planning.

5.1.2. In consultation with appropriate Assistant Secretaries of Defense and other applicable DoD Components, resolve disagreements over departmental policy about environmental planning issues when agreement among the DoD Components cannot be reached.

5.1.3. Support DoD budget requests to manage and implement this Instruction.

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5.1.4. Be the principal point of contact for the Department of Defense on environmental issues brought before the CEQ, the Office of Management and Budget, the Advisory Council on Historic Preservation, Headquarters U.S. Environmental Protection Agency, the Federal Aviation Administration, and other Federal Agencies at the Headquarters level on environmental planning issues that have DoD-wide applicability. This provision does not apply to the National Security Council and National Security Council-chartered working groups for which the Chairman of the Joint Chiefs of Staff is the principal point of contact.

5.1.5. Oversee DoD Component implementation of this Instruction.

5.1.6. Establish and maintain a multi-Service manual as an adjunct to this Instruction addressing installation-compatible use zone and noise issues.

5.2. The Heads of the DoD Components shall:

5.2.1. Integrate environmental considerations into planning for all applicable DoD Component-level activities and operations.

5.2.2. Plan, program, and budget for environmental planning and analysis and execute such environmental planning and analysis consistent with DoD guidance and fiscal policies.

5.2.3. Ensure that decisionmakers are cognizant of the potential environmental impacts of their decisions.

5.2.4. Provide policy and procedures for implementing the requirements of this Instruction.

5.2.5. Support outreach processes on environmental planning and analysis.

5.2.6. Coordinate with other DoD Components on environmental issues that affect them.

6. PROCEDURES

6.1. The Deputy Under Secretary of Defense (Environmental Security) shall transmit to Congress environmental impact analyses prepared to support DoD legislative proposals.

6.2. The Heads of DoD Components shall:

6.2.1. Issue environmental planning policies and procedures to promote the early integration of environmental considerations into activity and operational planning to ensure that:

6.2.1.1. Decisionmakers are informed of the consequences, alternatives, costs, and mitigation factors that must be considered about DoD decisions that have potential significant environmental impacts;

6.2.1.2. Decisionmakers consider, during activity and operational planning, constraints imposed by applicable Federal, State, interstate, and local environmental laws and regulations, and Executive Orders; and,

6.2.1.3. Potential delays and conflicts in mission execution are minimized.

6.2.2. To the extent practicable and appropriate, and subject to the availability of funds, include in any environmental policies and procedures issued under paragraph 6.2.1., above, provisions that encourage installations to engage in advance environmental planning, including development of environmental baseline information to support activity and operational planning. Such information should be included in master plans or such other plans developed for installation-wide activities and operations. This information should be available in a format that provides ready-access to managers and staff responsible for environmental compliance and to decisionmakers who require early information to identify environmental impacts and alternatives.

6.2.3. Adopt, as necessary, procedures to supplement 42 U.S.C. 4321 et seq. (reference (g)) and 40 CFR 1500-1508 (reference (h)).

6.2.4. Develop intergovernmental and other public consultation procedures, as appropriate, with State and local elected officials and governmental bodies, Indian tribes, native Hawaiian organizations, citizen groups, and the general public for proposed activities that have potentially significant impacts on the human environment.

6.2.5. Develop interagency consultation procedures with other Federal Departments and Agencies for proposed actions that are of potential interest to these Agencies. Include

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environmental partnering approaches and processes, as appropriate, with Federal and State agencies under 42 U.S.C. 2701 et seq. (reference (i)).

6.2.6. Develop, implement, and maintain noise and Installation Compatible Use Zone programs that promote compatibility between the activities and operations within the installation, and between the activities and operations of the installation and neighboring civilian communities.

7. EFFECTIVE DATE. This Instruction is effective immediately.

Paul G. Kaminski
Under Secretary of Defense
(Acquisition and Technology)

Enclosures - 2

1. References
2. Policies Specific to Section 4321 et seq. of title 42, United States Code (reference (g)).

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E1. ENCLOSURE 1

REFERENCES

- (e) DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," March 15, 1996 authorized by DoD Directive 5000.1, March 15, 1996
- (f) DoD Directive 5000.1, "Defense Acquisition," March 15, 1996
- (g) Section 4321 et seq. of title 42, United States Code, "National Environmental Policy Act of 1969" as amended
- (h) Title 40, Code of Federal Regulations, Parts 1500-1508, "Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act"
- (i) Section 2701 et seq. of title 42, United States Code, "Intergovernmental Cooperation Act 1968
- (j) Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994
- (k) Section 9601 et seq. of title 42, United States Code, Comprehensive Environmental Response, Compensation, and Liability Act of 1980," as amended

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E2. ENCLOSURE 2

POLICIES SPECIFIC TO SECTION 4321 ET SEQ. OF TITLE 42,
UNITED STATES CODE (REFERENCE (G))

E1.1.1. Emergencies. When emergency actions are taken that have potential for significant environmental impacts and that make it necessary to consult with the Council on Environmental Quality, Heads of the DoD Components (or designees) will, as soon as practicable, advise the Office of the Deputy Under Secretary of Defense (Environmental Security). The DoD Component Head (or designee), the DUSD(ES), and General Counsel of the Department of Defense (GC, DoD) will jointly consult with CEQ. Because of the importance of engaging the CEQ, the DoD Component may unilaterally consult with CEQ concerning the emergency action if the DUSD(ES) and the GC, DoD are not available. (40 CFR 1506.11) (reference (h)).

E1.1.2. Environmental Justice. The DoD Component documentation under 42 U.S.C. 4321 et seq. (reference (g)) must contain an analysis of the impacts of the proposed action and alternatives considered, including impacts that may have disproportionately high adverse human health or environmental effects on populations covered by E.O. 12898 (reference (j)).

E1.1.3. Filing of Reference (g) Documentation. The DoD Components shall provide to the DUSD(ES) a copy of notices of intent or similar notice documents issued to announce the preparation of reference (g) documentation. Upon request, copies of any reference (g) documents shall be furnished to the DUSD (ES). The DoD Components shall maintain official record copies of all reference (g) documents prepared by the DoD Component for a time period commensurate with the significance of the proposed action.

E1.1.4. Electronic Filing. The DoD Components shall file, electronically, copies of all draft and final environmental impact statements, and Records of Decision with the Defense Technical Information Center as part of their public distribution procedures. Components may exclude graphics and/or figures from the document filed. This provision does not apply to documentation being prepared under contracts that exist at the time this Instruction becomes effective.

E1.1.5. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (reference (k)) and National Environmental Policy Act (NEPA) (reference (g)) Relationship. The procedural requirements for preparation of documentation to meet the statutory requirements for remediation and/or restoration projects undertaken under reference (k) are substantially the same as prescribed under reference (g). Consequently, Components are not required to prepare separate reference (g) documents for CERCLA actions.

E1.1.6. Mitigation Measures. The DoD Components shall establish procedures for identifying and tracking mitigation measures committed to in environmental planning documents.

E1.1.7. Self Audit Programs. The DoD Components shall evaluate through self-audit programs whether mitigation measures were implemented.

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APPENDIX O

EXCERPT FROM DEPARTMENT OF DEFENSE DIRECTIVE 5000.1
DEFENSE ACQUISITION

NUMBER 5000.1

March 15, 1996

USD (A&T)

SUBJECT: Defense Acquisition

References: (a) DoD Directive 5000.1, "Defense Acquisition," February 23, 1991 (hereby canceled)
(b) DoD Directive 8120.1, "Life-Cycle Management of Automated Information Systems," January 14, 1993 (hereby canceled)
(c) DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems," 1996
(d) Office of Management and Budget Circular A-109, "Major Systems Acquisitions," April 1976
(e) through (ggg), see enclosures 1 and 2

1. PURPOSE. This Directive:

1.1. States policies and principles for all DoD acquisition programs and identifies the Department's key acquisition officials and forums.

1.2. Replaces DoD Directive 5000.1, "Defense Acquisition," February 23, 1991 (reference (a)) and DoD Directive 8120.1, "Life-Cycle Management of Automated Information Systems," January 14, 1993 (reference (b)).

1.3. Authorizes publication of DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems" (reference (c)).

1.4. In accordance with OMB Circular A-109 (reference (d)), establishes a disciplined yet flexible management approach for acquiring quality products that satisfy the operational user's needs.

1.5. Cancels the documents identified at Enclosure 2.

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These cancellations will be replaced by DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems" (reference (c)).

2. APPLICABILITY AND SCOPE. This Directive applies to all elements of the DoD. This includes the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Unified Combatant Commands, the Defense Agencies, and DoD Field Activities (hereafter referred to collectively as "DoD Components"). This Directive and 5000.2-R (reference (c)) rank first and second in order of precedence for providing mandatory policies and procedures for the management of acquisition programs, except when statutory requirements override. If there is any conflicting guidance pertaining to contracting, the Federal Acquisition Regulation and/or Defense Federal Acquisition Regulation Supplement shall take precedence over this Directive and DoD Regulation 5000.2-R (reference (c)). This Directive describes broad management principles that are applicable to all DoD acquisition programs. Highly sensitive classified programs, cryptologic, and intelligence programs, shall follow the guidance contained in this Directive. DoD 5000.2-R (reference(c)) describes operating procedures that are mandatory only for Major Defense Acquisition Programs (MDAPs), Major Automated Information System (MAIS) acquisition programs, and for other acquisition programs as specifically stated in the Instruction. DoDD 8000.1 (reference (e)) describes management principles that are mandatory for all information management activities, including those related to acquisition of information systems, resources, services, and infrastructures. Providing quality products needed by the United States Armed Forces requires a highly disciplined, yet flexible management framework that effectively translates operational needs into stable, affordable acquisition programs. The policies and principles stated in this Directive are intended to serve as broad guidelines for acquisition personnel throughout the DoD. The accompanying document, DoD 5000.2-R (reference (c)), focuses on MDAPs, MAIS acquisition programs, and other programs as specifically identified, and describes more detailed mandatory procedures necessary for the effective operation of the defense acquisition system.

3. DEFINITIONS

3.1. Acquisition Executive. The individual, within the Department and Components, charged with overall acquisition

management responsibilities within his or her respective organizations. The Under Secretary of Defense (Acquisition and Technology (A&T)) is the Defense Acquisition Executive (DAE) responsible for all acquisition matters within the Department of Defense. The Component Acquisition Executives (CAEs) for each of the Components are the Secretaries of the Military Departments or Heads of Agencies with power of redelegation. The CAEs, or designee, are responsible for all acquisition matters within their respective Components.

3.2. Acquisition Phase. All the tasks and activities needed to bring a program to the next major milestone occur during an acquisition phase. Phases provide a logical means of progressively translating broadly stated mission needs into well defined system-specific requirements and ultimately into operationally effective, suitable, and survivable systems. An example of an acquisition phase is Program Definition and Risk Reduction.

3.3. Acquisition Program. A directed, funded effort that is designed to provide a new, improved, or continuing weapons system or automated information system (AIS) capability in response to a validated operational need. Acquisition programs are divided into categories, which are established to facilitate decentralized decision-making and execution and compliance with statutory requirements.

3.4. Automated Information System (AIS). A combination of computer hardware and software, data, or telecommunications, that performs functions such as collecting, processing, transmitting, and displaying information. Excluded are computer resources, both hardware and software, that are: physically part of, dedicated to, or essential in real time to the mission performance of weapon systems.

3.5. Major Automated Information System (MAIS) Acquisition Program. An AIS acquisition program that is (1) designated by ASD(C3I) as a MAIS, or (2) estimated to require program costs in any single year in excess of 30 million in fiscal year (FY) 1996 constant dollars, total program costs in excess of 120 million in FY 1996 constant dollars, or total life-cycle costs in excess of 360 million in FY 1996 constant dollars. MAIS Acquisition Programs do not include highly sensitive classified programs (as determined by the Secretary of Defense). For the purpose of determining whether an AIS is a MAIS, the following shall be aggregated and considered a single AIS: (1) the separate AISs that constitute a multi-element program; (2) the separate AISs

that make up an evolutionary or incrementally developed program; or (3) the separate AISS that make up an a multi-component AIS program.

3.6. Major Defense Acquisition Program (MDAP). An acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and that is: (1) designated by the USD(A&T) as an MDAP, or (2) estimated by the USD(A&T) to require an eventual total expenditure for research, development, test and evaluation of more than 355 million in FY 1996 constant dollars or, for procurement, of more than 2.135 billion in FY 1996 constant dollars (10 USC Sec. 2430, reference (f)).

3.7. Major Milestones. A major milestone is the decision point that separates the phases of an acquisition program. MDAP milestones include, for example, the decisions to authorize entry into the engineering and manufacturing development phase, or to begin full-rate production. MAIS milestones may include, for example, the decision to begin program definition and risk reduction.

3.8. Milestone Decision Authority (MDA). The individual designated in accordance with criteria established by DoD 5000.2-R (reference (c)) to approve entry of an acquisition program into the next phase.

3.9. OSD Principal Staff Assistants (PSAs). The PSAs represent the user community in the functional area under their direction on acquisition and requirements matters. The OSD PSAs are the Under Secretaries of Defense (USDs), the Director of Defense Research and Engineering (DDR&E), the Assistant Secretaries of Defense (ASDs), the Director, Operational Test and Evaluation (DOT&E), the General Counsel of the Department of Defense (GC, DoD), the Inspector General of the Department of Defense (IG, DoD), the Assistants to the Secretary of Defense (ATSDs), and the OSD Directors or equivalents, who report directly to the Secretary or the Deputy Secretary of Defense.

4. POLICY. The primary objective of the defense acquisition system is to acquire quality products that satisfy the needs of the operational user with measurable improvements to mission accomplishment, in a timely manner, at a fair and reasonable price. Successful acquisition programs are fundamentally dependent upon competent people, rational priorities, and clearly defined responsibilities. The following policies and principles

govern the operation of the defense acquisition system and are divided into three major categories: (1) Translating Operational Needs into Stable, Affordable Programs, (2) Acquiring Quality Products, and (3) Organizing for Efficiency and Effectiveness. These principles shall guide all defense acquisition programs:

4.1. Translating Operational Needs into Stable, Affordable Programs

4.1.1. Integrated Management Framework. The policies stated herein are intended to forge a close and effective interface among the Department's three principal decision support systems: 1) the Requirements Generation System, 2) the Acquisition Management System, and 3) the Planning, Programming, and Budgeting System. The requirements generation system, governed by CJCS MOP 77 (reference (g)), produces information for decision-makers on projected mission needs for MDAPs and MAISs, with missions requiring interface to the joint warfighter. The DoDD 8000.1 (reference (e)) provides complementary guidance for MAIS functional areas. The acquisition management system governed by this Directive provides for a streamlined management structure and event-driven management process that emphasizes risk management and affordability and that explicitly links milestone decisions to demonstrated accomplishments. The planning, programming, and budgeting system, governed by DoDD 7045.14 (reference (h)), provides the basis for making informed affordability assessments and resource allocation decisions on defense acquisition programs. All three systems operate continuously and concurrently to assist the Secretary of Defense and other senior officials in making critical decisions. The information derived from these systems permits senior DoD officials to plan for the future, allocate resources to meet the highest national priorities, and execute the current budget. The interaction of these systems enables the United States to acquire the quality products needed by the nation's Armed Forces.

4.1.2. Integrated Product and Process Development (IPPD). PMs and other acquisition managers shall apply the concept of IPPD throughout the acquisition process to the maximum extent practicable. IPPD is a management technique that integrates all acquisition activities starting with requirements definition through production, fielding/deployment and operational support in order to optimize the design, manufacturing, business, and supportability processes. At the core of IPPD implementation are Integrated Product Teams (IPTs).

4.1.3. Program Stability. Once DoD initiates an acquisition program to meet an operational need, managers at all levels shall make program stability a top priority. To maximize stability, the Components shall develop realistic long-range investment plans and affordability assessments. The Department's leadership shall strive to ensure stable program funding throughout the program's life-cycle.

4.1.4. Risk Assessment and Management. PMs and other acquisition managers shall continually assess program risks. Risks must be well understood, and risk management approaches developed, before decision authorities can authorize a program to proceed into the next phase of the acquisition process. To assess and manage risk, PMs and other acquisition managers shall use a variety of techniques, including technology demonstrations, prototyping, and test and evaluation. Risk management encompasses identification, mitigation, and continuous tracking, and control procedures that feed back through the program assessment process to decision authorities. To ensure an equitable and sensible allocation of risk between government and industry, PMs and other acquisition managers shall develop a contracting approach appropriate to the type of system being acquired.

4.1.5. Total System Approach. Acquisition programs shall be managed to optimize total system performance and minimize the cost of ownership. The total system includes not just the prime mission equipment, but the people who operate and maintain the system; how systems security procedures and practices are implemented; how the system operates in its intended operational environment and how the system will be able to respond to any effects unique to that environment (such as Nuclear, Biological and Chemical (NBC) or information warfare); how the system will be deployed to this environment; the system's compatibility, interoperability, and integration with other systems; the operational and support infrastructure (including Command, Control, Communications, Computers and Intelligence (C4I)); training and training devices; any data required by the system in order for it to operate; and the system's potential impact on the environment and environmental compliance.

4.1.6. Cost as an Independent Variable (CAIV). Fiscal constraint is a reality that all participants in the defense acquisition process must recognize. Cost must be viewed as an independent variable. Accordingly, acquisition managers shall establish aggressive but realistic objectives for all programs and follow through by trading off performance and schedule,

beginning early in the program (when the majority of costs are determined), to achieve a balanced set of goals, based on guidance from the MDA.

4.1.7. Program Objectives and Thresholds. Beginning at the inception of a new acquisition program, the PM, together with the user, shall propose for MDA approval objectives and thresholds for cost, schedule, and performance, that will result in systems that are affordable, timely, operationally effective, operationally suitable, and survivable. The PM shall refine these objectives and thresholds as the program matures, consistent with operational requirements.

4.1.8. Nontraditional Acquisition. The Department must be prepared to plan and execute a diverse variety of missions. To meet the user's needs in a timely manner, the acquisition system must be able to rapidly insert advanced technology directly into the warfighter's arsenal. Doing so means being able to demonstrate new and improved military capabilities on a scale adequate to establish operational utility and affordable cost. Demonstrations based on mature technologies may lead to more rapid fielding. Where appropriate, managers in the acquisition community shall make use of non-traditional acquisition techniques, such as Advanced Concept Technology Demonstrations (ACTDs), rapid prototyping, evolutionary and incremental acquisition, and flexible technology insertion.

4.1.9. Performance Specification. In solicitations and contracts, standard management approaches or manufacturing processes shall not be required. Performance specifications shall be used when purchasing new systems, major modifications, and commercial and nondevelopmental items. Performance specifications include DoD performance specifications, commercial item descriptions, and performance-based nongovernment standards. If it is not practicable to use a performance specification, a nongovernment standard shall be used. There may be cases when military specifications are needed to define an exact design solution because there is no acceptable nongovernment standard or because the use of a performance specification or nongovernment standard is not cost-effective, not practical, or does not meet the user's needs. In these cases, the use of military specifications and standards is authorized as a last resort, with an appropriate waiver or exception from the MDA.

4.2. Acquiring Quality Products

4.2.1. Event-Oriented Management. The Department shall use a rigorous, event-oriented management process that emphasizes effective acquisition planning, improved and continuous communications with users, and prudent risk management by both the Government and industry. Event-oriented means that the management process shall be based on significant events in the acquisition life-cycle and not arbitrary calendar dates.

4.2.2. Hierarchy of Materiel Alternatives. In response to operational requirements, priority consideration shall always be given to the most cost-effective solution over the system's life-cycle. Generally, use or modification of systems or equipment that the Department already owns is more cost-effective than acquiring new materiel. If existing U.S. military systems or other on-hand materiel cannot be economically used or modified to meet the operational requirement, an acquisition program may be justified and acquisition decision-makers shall observe the following hierarchy of alternatives: (1) the procurement (including modification) of commercially available systems or equipment, the additional production (including modification) of already-developed U.S. military systems or equipment, or Allied systems or equipment; (2) cooperative development program with one or more Allied nations; (3) new joint Service development program; and (4) a new Service-unique development program. Important in this evaluation process for new or modified systems are considerations for compatibility, interoperability, and integration with existing and future components or systems.

4.2.3. Communications with Users. The defense acquisition community shall maintain continuous and effective communications with the operational user. The objective is to gain a sound understanding of user needs and to work with the user to achieve a proper balance among cost, schedule, and performance considerations.

4.2.4. Competition. Competition provides major incentives to industry to enhance the application of advanced technology and life-cycle cost advantages to defense programs, as well as a mechanism to obtain an advantageous price. DoD Components shall acquire systems, subsystems, equipment, supplies and services in accordance with the statutory requirements for competition (10 USC Sec. 2304, reference (i)).

4.2.5. Test and Evaluation. Test and evaluation programs shall be structured to provide essential information to

decision-makers, assess attainment of technical performance parameters, and determine whether systems are operationally, effective, suitable, and survivable for intended use. Each Military Department shall establish an independent operational test and evaluation activity, reporting directly to the Service Chief, to plan and conduct operational tests, report results, and provide evaluations of effectiveness and suitability.

4.2.6. Modeling and Simulation. Models and simulations shall be used to reduce the time, resources, and risks of the acquisition process and to increase the quality of the systems being acquired. Representations of proposed systems (virtual prototypes) shall be embedded in realistic, synthetic environments to support the various phases of the acquisition process, from requirements determination and initial concept exploration to the manufacturing and testing of new systems, and related training.

4.2.7. Independent Assessments. Assessments, independent of the developer and the user, are extremely important to ensure an impartial evaluation of program status. Consistent with statutory requirements and good management practice, DoD shall use independent assessments of program status. Senior acquisition officials shall consider these assessments when making decisions. Staff offices that provide independent assessments shall support the orderly progression of programs through the acquisition process. Independent assessments shall be shared with the Integrated Product Team so that there is a full and open discussion of issues with no secrets.

4.2.8. Innovative Practices. The Department encourages PMs to continually search for innovative practices that reduce cycle time, reduce cost, and encourage teamwork.

4.2.9. Continuous Improvement. The Department shall continuously focus on implementing major improvements necessary to streamline the acquisition process, reduce infrastructure, and enhance customer service through process reengineering and technological breakthrough. Through a commitment to reengineering, the Department shall increase its ability to fund warfighting requirements and continued research and development.

4.2.10. Legality of Weapons Under International Law. DoD acquisition and procurement of weapons shall be consistent with all applicable treaties, customary international law, and the law of armed conflict (also known as the laws and customs of war). The Head of each DoD Component shall ensure that all Component

activities that could reasonably generate questions concerning compliance with obligations under arms control agreements to which the United States is a party shall have clearance from the USD(A&T), in coordination with the OSD General Counsel and the Under Secretary of Defense (Policy), before such activity is undertaken. The Head of each DoD Component shall ensure that the Component's General Counsel or Judge Advocate General, as appropriate, conducts a legal review of the intended acquisition of a potential weapon to determine that it is consistent with U.S. obligations. The review shall be conducted before the award of the engineering and manufacturing development contract and before the award of the initial production contract. Files shall be kept permanently. Additionally, legal reviews of new, advanced, or emerging technologies which may lead to development of weapons or weapons systems are encouraged.

4.2.11. Software-Intensive Systems. Software is a key element in DoD systems. It is critical that software developers have a successful past performance record, experience in the software domain or product line, a mature software development process, and evidence of use and adequate training in software methodologies, tools, and environments.

4.2.12. Environmental Management. It is DoD policy to prevent, mitigate, or remediate environmental damage caused by-acquisition programs. Prudent investments in pollution prevention can reduce life-cycle environmental costs and liability while improving environmental quality and program performance. In designing, manufacturing, testing, operating and disposing of systems, all forms of pollution shall be prevented or reduced at the source whenever feasible.

4.3. Organizing for Efficiency and Effectiveness

4.3.1. Streamlined Organizations. DoD shall use a streamlined acquisition management structure characterized by short, clearly defined lines of responsibility, authority, and accountability. In general, the chain of command shall include the PM, the Program Executive Officer (PEO), the Component Acquisition Executive (CAE), reporting through the Head of the Component, and the USD(A&T) or ASD(C31). In all cases, no more than two levels of review shall exist between a PM and the MDA.

4.3.2. Acquisition Corps. The DoD acquisition workforce shall be fully proficient in the acquisition process. To ensure proficiency, and in accordance with the statutory requirements contained in 10 USC Sec. 1701 (reference (j)), the USD(A&T) shall

establish education, training, and experience standards for each acquisition position based on the level of complexity of duties carried out in that position. These standards are contained in DoDD 5000.52 (reference (k)).

4.3.3. Teamwork. Defense acquisition works best when all of the Department's Components work together. Cooperation and empowerment are essential. The Department's acquisition community shall implement the concepts of Integrated Product and Process Development (IPPD) and Integrated Product Teams (IPTs) as extensively as possible.

4.3.4. Limited Reporting Requirements. Complete and up-to-date program information is an essential ingredient of the defense acquisition process. At the same time, it is important to keep reporting requirements to a minimum. Consistent with statutory requirements, PMs and other participants in the defense acquisition process shall be required to present only the minimum information necessary for decision authorities to understand program status and make informed decisions. The exchange of program information shall be facilitated by the use of IPTs.

4.3.5. Tailoring. Certain core issues must be addressed at the appropriate milestone for every acquisition program. These issues are described in detail in the major sections of DoD 5000-R (reference (c)) and include program definition, program structure, program design, program assessments, and periodic reporting. How these issues are addressed shall be tailored by the appropriate MDA to minimize the time it takes to satisfy an identified need consistent with common sense, sound business management practice, applicable laws and regulations, and the time sensitive nature of the requirement itself. Tailoring may be applied to various aspects of the acquisition process, including program documentation, acquisition phases, the timing and scope of decision reviews, and decision levels. MDAs shall promote flexible, tailored approaches to oversight and review based on mutual trust and a program's size, risk, and complexity.

4.3.6. Automated Acquisition Information (AAI). The Department shall maintain an automated acquisition information (AAI) infrastructure to provide current and comprehensive information to decision-makers and interested parties, and to give PMs access to management tools that facilitate efficient and effective acquisition. The Defense Acquisition Deskbook satisfies the requirement for an AAI infrastructure. The Defense Acquisition Deskbook is an automated repository of information that consists of an electronic Desk Reference Set, a Tool

Catalog, and a Forum for the exchange of information. The Reference Set organizes information into two main categories: mandatory guidance and discretionary information.

4.3.7. Management Control. Rigorous internal management control systems are integral to effective and accountable program management. The objective is to perform acquisition functions efficiently and effectively while maximizing the utilization and protection of resources through internal management controls. Managers throughout the acquisition community should implement appropriate management controls in accordance with this Directive and DoD 5000.2-R (reference (c)) (both of which satisfy the requirements of DoDD 5010.38 (reference (l))). Control objectives for acquisition program cost, schedule, and performance parameters are embodied in Acquisition Program Baselines (APBs). Material weaknesses are identified through deviations from approved APB parameters and exit criteria, as reflected in the DAES. In implementing internal management control systems, managers shall focus on results, not process.

5. RESPONSIBILITIES. This section describes the responsibilities of key acquisition officials and key forums. A key official is a DoD official who is: a member of the streamlined acquisition chain of command or a member of the Defense Acquisition Board. This section is descriptive only. Official responsibilities and authorities are set forth in individual DoD Directives and Component documents for each official and some forums.

5.1. Key Officials

5.1.1. The Deputy Secretary of Defense approves funding for new acquisition programs and provides general affordability planning guidance for use in structuring these programs, and leads the Defense Resources Board (DRB) (10 USC Sec. 132 (reference (m))).

5.1.2. The Under Secretary of Defense for Acquisition and Technology (USD(A&T)) is the Department's Acquisition Executive for MDAPs. As such, the USD(A&T) establishes acquisition policies and procedures, and chairs the Defense Acquisition Board (DAB) (10 USC Sec. 133 (reference (n))), DoDD 5134.1 (reference (o))).

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5.1.3. The Under Secretary of Defense (Policy) (USD(P)) leads the Department's planning effort (10 USC Sec. 134 (reference (p))), DoDD 5111.1 (reference (q)).

5.1.4. The Under Secretary of Defense (Comptroller) (USD(C)) leads the Department's budgeting effort (10 USC Sec. 135 (reference (r))), DoDD 5118.3 (reference (s)).

5.1.5. The Secretary of each Military Department, and the Heads of other DoD Components having acquisition management responsibilities, ensure that policies and procedures governing the operation of the Department's acquisition, requirements, and budgeting systems are effectively implemented. Each Secretary and Component Head also designates a single, full-time Acquisition Executive at the Assistant Secretary (or equivalent) level known as the Component Acquisition Executive (CAE), selects PEOs, establishes a centralized system for selecting PMs, and charters a Component-level system of acquisition oversight and review.

5.1.6. The Vice Chairman of the Joint Chiefs of Staff (VCJCS) chairs the Joint Requirements Oversight Council (JROC), vice-chairs the DAB, and represents the Commanders-in-Chiefs of the Unified Combatant Commands on acquisition and requirements matters (10 USC Sec. 154 (reference (t))).

5.1.7. The Director, Operational Test and Evaluation (DOT&E) establishes Department policies and procedures for operational test and evaluation and live-fire test and evaluation (10 USC Sec. 139 (reference (u))), DoDD 5141.2 (reference (v)).

5.1.8. The Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)) is the Department's Chief Information Officer (CIO) (formerly the Senior IM Official). As such, the ASD(C3I) is the Department's Acquisition Executive for AISs; establishes acquisition policies and procedures unique to AISs, and chairs the MAISRC (10 USC Sec. 138 (reference (w))); DoDD 5137.1 (reference (x))).

5.1.9. The Director, Program Analysis and Evaluation (DPA&E) leads the Department's programming effort (DoDD 5141.1 (reference (y))), provides guidance for and reviews the results of analysis of alternatives studies prepared for acquisition programs, and for AIS systems determines that the cost and benefit analyses are accurate and complete.

5.1.10. The Component Acquisition Executives (CAE) supervise the operation of the acquisition system within their respective Component and are responsible for enforcing policies established by the USD(A&T). CAE's also serve as decision authorities for assigned programs.

5.1.11. Program Executive Officers (PEO) review and assess changes reported in assigned programs, the significance of the problems reported by the PM, the PM's proposed action plans, and the level of risk associated with such plans. PEO's also serve as decision authorities for assigned programs.

5.1.12. System Command (SYSCOM)/Designated Acquisition/Materiel Command Commanders provide support to PEO's and PMs and are decision authorities for assigned programs.

5.1.13. Program Managers (PMs) manage assigned programs in a manner consistent with the policies and principles articulated in this Directive and the PM Bill of Rights. In addition, PMs provide assessments of program status and risk to higher authorities and to the user or user's representative; actively manage, to the best of their abilities within approved resources, program cost, performance, and schedule; and provide assessments of contractor performance.

5.1.14. OIPT Leaders provide strategic guidance to the program office, resolve issues, and provide an independent assessment to the USD(A&T) and the DAB at major decision points, using information gathered through the Integrated Product Team (IPT) process.

5.2. Key Forums

5.2.1. The Defense Resources Board (DRB) is the senior DoD resource allocation board chaired by the Deputy Secretary of Defense. The DRB advises the Deputy Secretary on major resource allocation decisions.

5.2.2. The Defense Acquisition Board (DAB) is the senior DoD acquisition review board chaired by the USD(A&T). The DAB advises the USD(A&T) on major decisions on individual acquisition programs, specifically, and acquisition policies and procedures, generally.

5.2.3. The Major Automated Information System Review Council (MAISRC) is the senior DoD automated information systems acquisition review board chaired by the ASD(C3I). The MAISRC

advises the ASD(C3I) on major decisions on individual major automated information system acquisition programs, specifically, and AIS acquisition policies and procedures, generally.

5.2.4. The Joint Requirements Oversight Council (JROC), chaired by the VCJCS, conducts requirements analyses, validates mission needs and key performance parameters, and develops recommended joint priorities for those needs. The JRO validates the C4I certification of mission need and operational requirements documents for conformance with joint C4 policy and doctrine, architectural integrity, and interoperability standards. The JROC advises the Chairman of the Joint Chiefs of Staff (CJCS) on requirements (MCM 14-95 (reference (z))).

5.2.5. Cost Analysis Improvement Group (CAIG), chaired by the Deputy Director, Resource Analysis, PA&E, conducts reviews of DoD Component cost estimates and prepares the independent cost estimate (DoDD 5000.4 (reference (aa))).

5.2.6. The Integrated Product Team (IPT) is composed of representatives from all appropriate functional disciplines working together with a Team Leader to build successful and balanced programs, identify and resolve issues, and make sound and timely recommendations to facilitate decision-making. There are three types of IPTs: Overarching IPTs focus on strategic guidance, program assessment, and issue resolution. Working Level IPTs identify and resolve program issues, determine program status, and seek opportunities for acquisition reform. Program IPTs focus on program execution, and may include representatives from both Government, and after contract award, industry.

6. EFFECTIVE DATE. This Directive is effective immediately.

Enclosures - 2

1. References
2. List of Cancellations Authorized by update of DoD Directive 5000.1

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E1. ENCLOSURE 1

REFERENCES

- (e) DoD Directive 8000.1, "Defense Information Management (IM) Program," October 27, 1992
- (f) Title 10, United States Code, Section 2430, Major defense acquisition program defined (these amounts have been increased pursuant to the statutory notice provided to Congress)
- (g) Chairman Joint Chiefs of Staff (CJCS) MOP 77, Requirements Generation System Policies and Procedures
- (h) DoD Directive 7045.14, "Planning, Programming, Budgeting System (PPBS)," Change 1, May 22, 1984
- (i) Title 10, United States Code, Section 2304, Contracts: competition requirements
- (j) Title 10, United States Code, Section 1701, Management policies
- (k) DoD Directive 5000.52, "Defense Acquisition Education, Training and Career Development Program," October 25, 1991
- (l) DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987
- (m) Title 10, United States Code, Section 132, Deputy Secretary of Defense
- (n) Title 10, United States Code, Section 133, Under Secretary of Defense for Acquisition and Technology
- (o) DoD Directive 5134.1, "Under Secretary of Defense for Acquisition and Technology (USD(A&T))," June 8, 1994
- (p) Title 10, United States Code, Section 134, Under Secretary of Defense for Policy
- (q) DoD Directive 5111.1, "Under Secretary of Defense for Policy (USD(P))," March 22, 1995
- (r) Title 10, United States Code, Section 135, Under Secretary of Defense (Comptroller)
- (s) DoD Directive 5118.3, "Comptroller of the Department of Defense (C, DoD)," June 24, 1991
- (t) Title 10, United States Code, Section 154, Vice Chairman of the Joint Chiefs of Staff
- (u) Title 10, United States Code, Section 139, Director of Operational Test and Evaluation
- (v) DoD Directive 5141.2, "Director of Operational Test and Evaluation," Change 1, April 2, 1984
- (w) Title 10, United States Code, Section 138, Assistant Secretaries of Defense

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- (x) DoD Directive 5137.1, "Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I))," February 12, 1992
- (y) DoD Directive 5141.1, "Assistant Secretary of Defense (Program Analysis and Evaluation)," February 1, 1989
- (z) MCM 14-95, Charter of the Joint Requirements Oversight Council
- (aa) DoD Directive 5000.4, "OSD Cost Analysis Improvement Group (CAIG),
" Change 1, November 24, 1992

E2. ENCLOSURE 2

List of Cancellations Authorized by update of DoD Directive
5000.1

E2.1.1. DoD Directives, Instructions, and Manuals

- (bb) DoD Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 23, 1991
- (cc) DoD Directive 5000.49, "Defense Acquisition Board," September 11, 1989
- (dd) DoD 7920.2-M, "Automated Information System Life-Cycle Management Manual," March 1990
- (ee) DoD Instruction 7920.4, "Baselining of Automated Information Systems," March 21, 1988
- (ff) DoD Instruction 8120.2, "Automated Information System Life-Cycle Management Process, Review, and Milestone Approval Procedures," January 14, 1993
- (gg) DoD 5000.2-M, "Defense Acquisition Management Documentation and Reports," February 23, 1991

E2.1.2. Policy Memoranda

- (hh) Office of the Secretary of Defense Memorandum, "Implementation Guidelines for Relating Cost and Operational Effectiveness Analysis (COEA) Measures of Effectiveness (MOEs) to Test and Evaluation," March 9, 1992
- (ii) Under Secretary of Defense for Acquisition and Technology Memorandum, "Foreign Military Sales of Major Defense Systems Which Have Not Completed Operational Test and Evaluation Satisfactorily," May 15, 1992
- (jj) Under Secretary of Defense for Acquisition and Technology Memorandum, "F-22 Exit Criteria" (last paragraph), May 20, 1993
- (kk) Under Secretary of Defense for Acquisition and Technology Memorandum, "Long Leadtime Item Procurement," September 13, 1993
- (ll) Under Secretary of Defense for Acquisition and Technology Memorandum, "Work Breakdown Structures," October 8, 1993
- (mm) Under Secretary of Defense for Acquisition and Technology Memorandum, "Reporting of Program Modifications and Upgrades," October 14, 1993
- (nn) Under Secretary of Defense for Acquisition and Technology Memorandum, "ACAT I Notification," January 6, 1994

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- (oo) Under Secretary of Defense for Acquisition and Technology Memorandum, "Live Fire Test and Evaluation Guidelines," January 27, 1994
- (pp) Under Secretary of Defense for Acquisition and Technology Memorandum, "Use of Commercial Quality System Standards in the Department of Defense," February 14, 1994
- (qq) Under Secretary of Defense for Acquisition and Technology Memorandum, "DoD Policy for Automatic Test Systems," April 29, 1994
- (rr) Under Secretary of Defense for Acquisition and Technology Memorandum, "Request for Waiver to DoD Instruction 5000.2 (Part 2), Paragraph C2(f), " August 18, 1994
- (s) Under Secretary of Defense for Acquisition and Technology Memorandum, "Request for Waiver Cases #436 and #437," August 18, 1994
- (tt) Under Secretary of Defense for Acquisition and Technology Memorandum, "Release to Contractors of Numerical Weights Used in Source Selections," August 22, 1994
- (uu) Under Secretary of Defense for Acquisition and Technology Memorandum, "Tailoring of Acquisition Procedures and Documentation for Acquisition Category (ACAT) II, III, and IV Programs," August 23, 1994
- (vv) Office of the Secretary of Defense Memorandum, "Use of Ada," August 26, 1994
- (ww) Under Secretary of Defense for Acquisition and Technology Memorandum, "Integrated Program Management," September 30, 1994
- (xx) Under Secretary of Defense for Acquisition and Technology Memorandum, "Streamlined Acquisition Decision Memorandum Process," December 15, 1994
- (yy) Under Secretary of Defense for Acquisition and Technology Memorandum, "Defense Acquisition Environmental Policies and Procedures, DoDI 5000.2, Part 6, Section I," December 30, 1994
- (zz) Under Secretary of Defense for Acquisition and Technology Memorandum, "Operating and Support Costs in Acquisition Program Reviews," March 15, 1995
- (aaa) Under Secretary of Defense for Acquisition and Technology Memorandum, "Quantities to be Procured for Low Rate Initial Production," April 14, 1995
- (bbb) Secretary of Defense Memorandum, "Use of Integrated Product and Process Development and Integrated Product Teams in DoD Acquisition," May 10, 1995
- (ccc) Under Secretary of Defense for Acquisition and Technology Memorandum, "Competition in Acquisition of Defense Systems," May 4, 1995

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- (ddd) Director Operational Test and Evaluation Memorandum, "Live Fire Test and Evaluation Authority and Responsibility," June 3, 1995
- (eee) Under Secretary of Defense for Acquisition and Technology Memorandum, "Policy on Cost-Performance Trade-Offs," July 19, 1995
- (fff) Under Secretary of Defense for Acquisition and Technology Memorandum, "Technical Representatives at Contractor Facilities," August 9, 1995
- (ggg) Under Secretary of Defense for Acquisition and Technology Memorandum, "Acquisition Program Baselines and Performance Based Management of Defense Programs," September 27, 1995

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APPENDIX P

EXCERPT FROM DEPARTMENT OF DEFENSE INSTRUCTION 6050.5
DOD HAZARD COMMUNICATION PROGRAM

NUMBER 6050.5

October 29, 1990

Administrative Reissuance

Incorporating Change 1,
May 6, 1996

USD(A&T)

SUBJECT: DoD Hazard Communication Program

References: (a) DoD Instruction 6050.5, "Hazardous Materials Information System," January 25, 1978 (hereby canceled)
(b) Title 29, Code of Federal Regulations, Section 1910.1200, "Hazard Communication," August 24, 1987, Section 1910.120, "Hazardous Waste Operations and Emergency Response," May 4, 1987 and Section 1910.1450, "Occupational Exposure to Hazardous Chemicals in Laboratories," January 31, 1990.
(c) DoD Safety and Occupational Health Program Policy Memorandum 88-1, "Hazard Communication," February 9, 1988 (hereby canceled)
(d) Federal Standard 313, "Material Safety Data Sheets, Transportation Data, and Disposal Data for Hazardous Materials furnished to Government Activities," latest revision
(e) through (q), see enclosure 1

1. REISSUANCE AND PURPOSE. This Instruction reissues reference (a); fulfills the requirements of reference (b); updates DoD policy responsibilities and procedures for a Comprehensive Hazard Communication Program that:

1.1. Prescribes training for DoD personnel to ensure that they are:

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1.1.1. Aware of the potential health hazards associated with their occupation.

1.1.2. Informed of safe work practices and proper use of engineering controls.

1.1.3. Trained in the selection, use, and availability of appropriate personal protective equipment to prevent chemically related injuries and illnesses.

1.2. Requires the DoD Components to comply with the Occupational Safety and Health Administration (OSHA) under 29 C.F.R. 1910.120, 1910.1200, and 1900.1450 hazard communication standards (HCS) reference (b).

1.3. Updates policy on hazard communication, DoD Policy Memorandum 88-1 (reference (c)), and policy on the DoD Hazardous Materials Information System (HMIS) data system under this Instruction. The HMIS is used to acquire, review, store, and disseminate selected information on hazardous materials as they are defined in Federal Standard 313 and FARS subparagraph 22.3 and DFARS 252.223-7004 (references (d) and (e)). The HMIS provides reference information required at all levels of DoD management to:

1.3.1. Develop procedures to prevent injuries and occupational illness in the handling, storage, use, transportation, and disposal of hazardous materials and wastes.

1.3.2. Apprise DoD and contractor personnel of the potential hazards of materials encountered in DoD workplaces.

1.3.3. Devise environmentally acceptable disposal procedures.

1.3.4. Assist in hazardous materials and hazardous waste minimization programs under DoD Directive 4210.15 (reference (f)).

1.3.5. Comply with Federal safety and health regulations (reference (b)).

1.4. Authorizes the continued publication of the following documents, consistent with DoD 5025.1-M (reference (h)).

1.4.1. DoD 6050.5-M (reference (i)).

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- 1.4.2. DoD 6050.5-G, (reference (j)).
- 1.4.3. DoD 6050.5-G-1, (reference (k)).
- 1.4.4. DoD 6050.5-H, (reference (l)).
- 1.4.5. DoD 6050.5-W, (reference (m)).

2. APPLICABILITY AND SCOPE

2.1. This Instruction applies to:

2.1.1. The Office of the Secretary of Defense (OSD); the Military Departments; the Chairman, Joint Chiefs of Staff and the Joint Staff; the Unified and Specified Commands; the Inspector General, Department of Defense (IG, DoD); the Uniformed Services University of the Health Sciences (USUHS); the Defense Agencies; and the DoD Field Activities (hereafter referred to collectively as "DoD Components"). The term "Military Services," as used herein, refers to the Army, Navy, Air Force, and Marine Corps.

2.1.2. All DoD personnel who use, handle, or may be potentially exposed to hazardous materials and waste, including those working in contractor facilities. Where feasible, such DoD personnel may be included in the contractor's hazard communication program. In those cases, DoD Components retain ultimate responsibility for program oversight, adequacy, and DoD worker participation.

2.1.3. All DoD Components in the acquisition and processing of material safety data sheets (MSDS), in their roles as:

2.1.4.1. Employers of personnel potentially exposed to hazardous materials in the workplace.

2.1.4.2. Distributors of hazardous materials to downstream DoD personnel and/or customers, as defined in accordance with (IAW) the requirements of Section 1900.1200 of reference (b).

2.2. This Instruction applies to all hazardous materials used within the Department of Defense, whether centrally or locally managed and procured.

2.3. Contractor employees who are employed at a DoD-owned or -operated facilities may be included in the DoD Components' Hazard Communication Program on a space-available and

reimbursable basis, as determined by the contracting officer. In those cases, contractors must assume ultimate responsibility that their employees have received appropriate training and ensure that all required records for their employees are maintained. Nothing in this Instruction alleviates Government contractors from full compliance with reference (b) and comparable state and local requirements.

2.4. The training and labeling requirements of 29 CFR 1910.1200, DoD 6050.5-H (references (b) and (1)) and the requirements of this Instruction apply to all DoD Components. Those requirements should not be duplicated for DoD personnel regulated by other Federal Agencies exercising statutory authority under Section 1910.1200, Section (b) (6), of reference (b); e.g., pest control and nuclear facility workers.

2.5. This Instruction applies only to the occupational uses and exposures to hazardous chemicals.

3. POLICY. It is DoD policy to:

3.1. Protect DoD personnel from adverse effects of workplace hazardous materials and waste in order to reduce chemically related injuries and illnesses.

3.2. Have a standardized HMIS established, maintained, and used by all the DoD Components.

4. RESPONSIBILITIES

4.1. The Deputy Under Secretary of Defense (Environmental Security (DUSD(ES)) shall provide policy guidance, coordination, and oversight of the DoD Hazard Communication Program.

4.2. The Head of DoD Components shall:

4.2.1. Establish and maintain hazard communication programs that conform to the requirements of this Instruction.

4.2.2. Designate an office or agency as office of primary responsibility (OPR) to issue policy and guidance for that Component's role in the HMIS. If appropriate, designate a separate office or agency to serve as that DoD Component's focal point for obtaining reviewing, entering, and providing

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information to the HMIS data bank in accordance with the DoD Component's guidance.

4.2.3. Inform Headquarters, Defense Logistics Agency (DLA) (Attn: DLA-CAAE), of changes in focal points.

4.2.4. Ensure that purchase requests for applicable supply items include a requirement for contracting activities to obtain from offerors/suppliers MSDS and OSHA HCS compliant hazard warning label, IAW MIL-STD-129K, Federal Standard 313 and DFARS 252.223-7004, (references (n), (d), and (e)). The MSDS must be available for worker training and reference prior to the material being released for use in the workplace.

4.2.5. Establish health education programs IAW this Instruction and DoD Instructions 6055.1 and 6055.5 (references (o) and (p)) to ensure that all personnel who work with hazardous materials or wastes are notified of the following:

4.2.5.1. Hazards to which they are potentially exposed.

4.2.5.2. Exposure symptoms and emergency first aid treatment.

4.2.5.3. Precautions for safe use.

4.2.5.4. Personal protective equipment and control devices.

4.2.5.5. Waste disposal instructions.

4.2.5.6. Develop procedures to ensure that any proprietary formulary and/or trade secret information in an MSDS is protected and used only as a management tool for exposure and accident prevention and health hazard education. Trade secret information shall be treated IAW the requirements and restrictions of 29 C.F.R. 1910.1200 (reference (b)). Disclosure of any information outside the Department of Defense shall be IAW DoD Directive 5400.7 (reference (q)).

4.2.5.7. Provide guidance to its contracting officers to include in contracts for the purchase of hazardous materials; a notice that the MSDS and manufacturer's labels are to be forwarded to the designated office of the contracting activity, who shall be responsible for forwarding the MSDS and manufacturers label to the DoD Components' HMIS focal point.

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4.2.5.8. Ensure that MSDS and label information in any of the Component's local level reference systems is forwarded to their designated focal point for review and submission to the DoD HMIS, as appropriate.

4.2.5.9. If requested, provide the Director, DLA, with information for the semiannual management report on status of HMIS implementation.

4.3. The Director, Defense Logistics Agency (DLA) is hereby designated Executive Agent for the HMIS and publication of DoD Manual 6050.5-M, "DoD Hazardous Materials Information System Procedures" and shall administer the HMIS IAW the policies established by the Assistant Deputy Under Secretary of Defense (Safety and Occupational Health Policy) (ADUSD(SH)), under the direction of the DUSD(ES), and specifically shall:

4.3.1. Establish and operate the DoD HMIS data bank for the storage and retrieval of data IAW the following minimum provisions:

4.3.1.1. Material Safety Data Sheet (MSDS), transportation, disposal, and label information shall be accessible by National Item Identification Number (NIIN), focal point assigned stock number (in the absence of NIIN), trade name and/or part number, hazard characteristic code, hazardous ingredients, and manufacturer/distributor commercial and government entity (CAGE) code.

4.3.1.2. The data bank shall be open ended to allow for expansion, as required by future safety, health, environmental, or transportation legislation or regulation.

4.3.1.3. MSDS records shall be retained for at least 40 years. Data may be centrally archived as the system grows.

4.3.2. Receive and process hazardous materials information from DoD Component's focal points, the General Services Administration (GSA), and other Federal Agencies as specified in the DoD 6050.5-M (reference (i)).

4.3.3. Publish and distribute the HMIS in both restricted and nonrestricted versions and the data in media (microfiche and/or electronic data interchange technologies) appropriate to the needs and/or technology availabilities of the DoD customer on a quarterly basis IAW standard practices for the media involved.

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4.3.4. Issue guidance to all DoD Components, as required to establish, operate, and improve the DoD HMIS data bank.

4.3.5. Provide a semiannual management report to the DUSD(ES) on the status of the implementation of the HMIS for all of the Department of Defense. Include the operational content and use statistics of the database. This report is due May 15 and November 15 of each year. DoD Component input must be requested through the Component OPR.

4.3.6. Negotiate agreements with Federal Agencies establishing OPRs and focal points and for interaction with HMIS.

4.3.7. Negotiate agreements with industry to exchange hazardous material data.

5. PROCEDURES

5.1. Training

5.1.1. Personnel occupationally exposed to hazardous materials shall be trained IAW the HCS requirements (reference (b)) prior to being assigned to work with hazardous materials or wastes.

5.1.2. The DoD and Federal Agency Hazard Communication Training Program DoD 6050.5-G-1, (reference (k)) should be used as the minimum training for all DoD personnel who handle or use hazardous materials. The DoD Components are not to develop or purchase other basic hazard communication training programs.

5.1.3. In-depth training on specific chemicals or operations is required and may be accomplished using commercial or DoD Component-developed programs. Research activities may tailor the program in Section 1910.1450 of reference (b) to meet the special needs of their workers. Copies of DoD Component-developed programs (base level, major command, or Component-wide) should be submitted to the ODUSD(ES) for the purpose of sharing those programs among the DoD Components.

5.2. Material Safety Data Sheets (MSDS)

5.2.1. Hazard warning information, MSDS and label, shall be readily accessible to DoD personnel for all hazardous materials they handle, use, or may be potentially exposed.

5.2.2. DoD or contractor occupational health and/or safety personnel shall be available, on request, to provide explanations or interpretations of MSDS to supervisors and affected workers and assistance in HCS training.

5.2.3. DoD policy is to use the HCS (Section 1910.1200 of reference (b)) as a basis for hazard communication programs in foreign countries. Officials responsible for installations in foreign countries shall determine requirements for items to be acquired by contract and shall specify the need for the contractor to furnish safety and health hazard data. That requirement shall be stated in each procurement request for each hazardous chemical to be acquired either as an end item or as a component of the material being procured. A copy of the hazardous material information shall be provided to the DoD Component's focal point, for transmittal to the DoD HMIS, if the hazardous chemical is expected to be procured more than once or will ultimately be turned in to the Defense Reutilization and Marketing Office.

5.2.4. The activity controlling the formulation of hazardous chemicals produced by DoD Components shall develop the MSDS and the DoD label (DD Forms 2521 and 2522). The controlling DoD Component shall supply the MSDS and the DoD label to subsequent users and to the DoD Component focal point for entry into the HMIS data bank. Classified MSDSs and DoD labels shall be maintained and used by the DoD Components but will not be sent to the DoD HMIS. Unclassified versions of this MSDS, adequate for transportation, spill response, and emergency medical treatment, along with emergency telephone number, should be provided to the DoD HMIS.

5.2.5. For nationally stock-listed and locally purchased nonstandard stock hazardous chemicals, MSDS and HCS-compliant labels shall be contractually required and obtained by the responsible contracting officer and forwarded to the DoD Component's focal point for processing to the HMIS data bank. For locally purchased chemicals, the contracting officer shall ensure that the installation MSDS points of contact (POC) review the MSDS and label for adequacy before contract award. The installation POC shall then forward the MSDS and label to the DoD Component's focal point for processing (DoD 6050.5-M reference (i)).

5.3. DoD Labeling

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5.3.1. All hazardous chemicals used by DoD Components will be labeled IAW with HCS (reference (b)).

5.3.2. Commercial suppliers shall be required to label all hazardous materials with HCS-compliant labels (Section 1910.120 of reference (b)) IAW MIL-STD-129 (reference (n)).

5.3.3. DoD activities are not required to relabel, with the DoD label, hazardous chemicals received from commercial suppliers when those materials are labeled IAW the HCS (29 C.F.R. 1910.1200, reference (b)).

5.3.4. The DoD hazardous chemical warning labeling system (DoD 6050.5-H, reference (1)) is a method of communicating standardized hazard warning information to DoD personnel when manufacturers' labels cannot be used. DoD labeling shall be based on the information provided on the manufacturers' MSDS and label, and be IAW the methodology described in reference (1). The DoD label and data descriptors are to be used to meet the OSHA labeling requirements within the DoD for:

5.3.4.1. Hazardous chemicals manufactured by the DoD. If required, specific ingredients, composition, or properties may be protected for national security reasons. Labels for items with protected information should contain unclassified information adequate to identify hazards and protect personnel, including name and address of DoD activity responsible for developing the MSDS and the DoD label. Copies of unclassified label information should be provided to the appropriate HMI focal point.

5.3.4.2. Repackaged containers or breakdown quantities of hazardous chemicals.

5.3.4.3. Marking tanks, piping, vats, or similar vessels of hazardous chemicals when other means, such as placards, are not available.

5.3.4.4. Unlabeled hazardous materials already available in the DoD inventory. Chemicals in depot storage will be labeled when shipped or removed for use.

5.3.5. The DoD label can be applied with variations. Color DoD labels may be used. The size of the DoD label may be locally varied to fit the size and shape of the container being labeled. Local reproduction is authorized.

5.3.6. For efficient and consistent use of DD Forms 2521 and 2522, "Hazardous Chemical Warning Label," the DLA shall develop the system capability to allow the Military Departments, DLA, GSA, and other organizations the capability to develop a data base of HCS-compliant labeling information for all hazardous chemicals in the HMIS. New fields shall be added to the HMIS, as required to contain DoD labeling information. The DLA shall provide the DoD Components a labeling file that prints the DoD Hazardous Chemical Warning label (DD Forms 2521 and 2522) from the HMIS compact disk-read only memory (CD-ROM) disk within 90 days of publication of this Instruction.

5.3.7. DoD Components shall not develop or use other workplace hazardous materials warning labels, except for Navy ships which may use alternate HCS compliant labeling for repackaged or breakdown containers or unlabeled containers aboard ship.

5.4. Hazard Communication and Chemical Hygiene Plans

5.4.1. All DoD Component installations using hazardous materials shall develop a written hazard communication plan IAW 29 C.F.R. 1910.1200 (reference (b)). Additionally, DoD installations with laboratories shall develop a chemical hygiene plan, IAW Section 1900.1450 of reference (b).

5.4.2. The installation plans should be readily available to all affected personnel and include any installation unique procedures about the local purchase of hazardous materials.

5.4.3. The hazard communication plan must ensure that contractors bringing hazardous materials onto DoD installations shall:

5.4.3.1. Provide advance notification (normally 30 days) to installation officials of hazardous materials that will be used in the performance of the work.

5.4.3.2. Provide copies of MSDS and labels of the hazardous chemicals and materials to the contracting officer, who shall forward these documents to installation health and safety officials 5 working days before the materials are brought onto the installation.

5.5. HMIS. The DoD Component's focal points shall input information to the HMIS data bank as described in the DoD 6050.5-M (reference (i)) and in the following procedures:

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5.5.1. Receive all MSDS obtained by the DoD Component's procuring activities.

5.5.2. Review MSDS and labels as received to ensure that data are complete, reasonable, legible, and in conformance with the requirements of the HCS (29 C.F.R. 1900.1200, reference (b)). (Laboratory verification of technical elements is not required.) Add missing data elements and check obvious or suspected errors with the originator. Return incomplete or inadequate MSDS and labels to the supplier for correction.

5.5.3. Submit data to the DoD system through the media (hard copy or electronic data interchange technologies) appropriate to the technological capabilities and/or availabilities of the DoD Component system users IAW the procedures of DoD 6050.5-M (reference (i)).

5.5.4. Act as the primary POC between the DoD hazardous material data bank and the Component activities.

6. INFORMATION REQUIREMENTS. The information requirements prescribed herein, including the establishment and operation of the DLA database, are assigned Report Control Symbol DD-(FM&P) (A,Q&AR) 1486.

7. EFFECTIVE DATE. This Instruction is effective immediately.

Christopher Jebn
Assistant Secretary of Defense
(Force Management and Personnel)

Enclosures - 1

1. References

E1. ENCLOSURE 1

REFERENCES

- (e) Federal Acquisition Regulation (FAR), Subpart 23.3, and 52.223-3, "Material Safety Data Sheets: Hazard Materials Identification and Material Safety Data"
- (f) Defense FAR Supplement (DFARS), Subpart 223.72 and clause 252.223-7004, "Material Safety Data Sheets: Hazard Materials Identification and Material Safety Data"
- (g) DoD Directive 4210.15, "Hazardous Materials Pollution Prevention," July 27, 1989
- (h) DoD 5025.1-M, "Department of Defense Directive System Procedures," April 1981, authorized by DoD Directive 5025.1, December 23, 1988
- (i) DoD 6050.5-M, "DoD Hazardous Materials Information System Procedures," July 1981, authorized by this Instruction
- (j) DoD 6050.5-G, "The Hazardous Materials Information System Users Guide," January 1987, authorized by this Instruction
- (k) DoD 6050.5-G-1, "Department of Defense Federal Hazard Communication, Training Program - Trainer's Guide," April 1988, authorized by this Instruction
- (l) DoD 6050.5-H, "Department of Defense Hazardous Chemical Warning Labeling System," June 1989, authorized by this Instruction
- (m) DoD 6050.5-W, "Department of Defense Federal Hazard Communication, Training Program - Student's Workbook," April 1988, authorized by this Instruction
- (n) MIL-STD-129k "Marketing for Shipment and Storage," September 15, 1989
- (o) DoD Instruction 6055.1, "DoD Occupational Safety and Health Program," October 26, 1984
- (p) DoD Instruction 6055.5, "Industrial Hygiene and Occupational Health," January 10, 1989
- (q) DoD Directive 5400.7, "DoD Freedom of Information Act Program," May 13, 1988

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APPENDIX Q

EXCERPT FROM DEPARTMENT OF DEFENSE DIRECTIVE 6050.7
ENVIRONMENTAL EFFECTS ABROAD OF MAJOR DEPARTMENT OF DEFENSE
ACTIONS

NUMBER 6050.7
March 31, 1979

ASD (MRA&L)

SUBJECT: Environmental Effects Abroad of Major Department of Defense Actions

Reference: (a) Executive Order 12114, "Environmental Effects Abroad of
Major Federal Actions," dated January 4, 1979

1. PURPOSE. Executive Order 12114 provides the exclusive and complete requirement for taking account of considerations with respect to actions that do significant harm to the environment of places outside the United States. This directive provides policy and procedures to enable Department of Defense (DoD) officials to be informed and take account of environmental considerations when authorizing or approving certain major federal actions that do significant harm to the environment of places outside the United States. Its sole objective is to establish internal procedures to achieve this purpose, and nothing in it shall be construed to create a cause of action. Guidance for taking account of considerations with respect to the environment of places within the United States is set out in DoD Directive 6050.1. That guidance is grounded on legal and policy requirements different from those applicable to this directive.

2. APPLICABILITY. The provisions of this directive apply to the Office of the Secretary of Defense, the Military Departments, the Organization of the Joint Chiefs of Staff, the Unified and Specified Commands, and the Defense Agencies (hereafter referred to as "DoD components").

3. DEFINITIONS

3.1. Environment means the natural and physical environment, and it excludes social, economic, and other environments. Social and economic effects do not give rise to any requirements under this directive.

3.2. Federal Action means an action that is implemented or funded directly by the United States Government. It does not include actions in which the United States participates in an advisory, information-gathering, representational, or diplomatic capacity but does not implement or fund the action; actions taken by a foreign government or in a foreign country in which the United States is a beneficiary of the action, but does not implement or fund the action; or actions in which foreign governments use funds derived indirectly from United States funding.

3.3. Foreign Nation means any geographic area (land, water, and airspace) that is under the jurisdiction of one or more foreign governments; any area under military occupation by the United States alone or jointly with any other foreign government; and any area that is the responsibility of an international organization of governments. "Foreign nation" includes contiguous zones and fisheries zones of foreign nations. "Foreign government" in this context includes governments regardless of whether recognized by the United States, political factions, and organizations that exercise governmental power outside the United States.

3.4. Global Commons are geographical areas that are outside the jurisdiction of any nation, and include the oceans outside territorial limits and Antarctica. Global commons do not include contiguous zones and fisheries zones of foreign nations.

3.5. Major Action means an action of considerable importance involving substantial expenditures of time, money, and resources, that affects the environment on a large geographic scale or has substantial environmental effects on a more limited geographical area, and that is substantially different or a significant departure from other actions, previously analyzed with respect to environmental considerations and approved, with which the action under consideration may be associated. Deployment of ships, aircraft, or other mobile military equipment is not a major action for purposes of this directive.

3.6. United States means all States, territories, and possessions of the United States; and all waters and airspace subject to the territorial jurisdiction of the United States. The territories and possessions of the United States include the Virgin Islands, American Samoa, Wake Island, Midway Island, Guam, Palmyra Island, Johnston Atoll, Navassa Island, and Kingman Reef.

4. POLICY

4.1. Executive Order 12114 is based on the authority vested in the President by the Constitution and the laws of the United States. The objective of the Order is to further foreign policy and national security interests while at the same time taking into consideration important environmental concerns.

4.2. The Department of Defense acts with care in the global commons because the stewardship of these areas is shared by all the nations of the world. The Department of Defense will take account of environmental considerations when it acts in the global commons in accordance with procedures set out in enclosure 1 and its attachment.

4.3. The Department of Defense also acts with care within the jurisdiction of a foreign nation. Treaty obligations and the sovereignty of other nations must be respected, and restraint must be exercised in applying United States laws within foreign nations unless Congress has expressly provided otherwise. The Department of Defense will take account of environmental considerations in accordance with enclosure 2 and its attachments when it acts in a foreign nation.

4.4. Foreign policy considerations require coordination with the Department of State on communications with foreign governments concerning environmental agreements and other formal arrangements with foreign governments concerning environmental matters under this directive. Informal working-level communications and arrangements are not included in this coordination requirement. Consultation with the Department of State also is required in connection with the utilization of additional exemptions from this directive as specified in paragraph E2.3.3.2. of enclosure 2. Coordination and consultation with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

4.5. Executive Order 12114, implemented by this directive, prescribes the exclusive and complete procedural measures and

other actions to be taken by the Department of Defense to further the purpose of the National Environmental Policy Act with respect to the environment outside the United States.

5. RESPONSIBILITIES

5.1. The Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) shall:

5.1.1. Serve as the responsible Department of Defense official for policy matters under Executive Order 12114 and this directive;

5.1.2. Modify or supplement any of the enclosures to this directive in a manner consistent with the policies set forth in this directive;

5.1.3. Maintain liaison with the Council on Environmental Quality with respect to environmental documents;

5.1.4. Participate in determining whether a recommendation should be made to the President that a natural or ecological resource of global importance be designated for protection; and

5.1.5. Consult with the Assistant Secretary of Defense (International Security Affairs) on significant or sensitive actions or decisions affecting relations with another nation.

5.2. The Assistant Secretary of Defense (International Security Affairs) shall:

5.2.1. Maintain liaison and conduct consultations with the Department of State as required under this directive; and

5.2.2. Serve as the responsible official, in consultation with the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), for monitoring the continuing cooperation and the exchange of information with other nations concerning the environment.

5.3. The General Counsel, DoD, shall provide advice and assistance concerning the requirements of Executive Order 12114 and this directive.

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5.4. The Secretaries of the Military Departments, Directors of the Defense Agencies, and Commanders of the Unified and Specified Commands, for operations under their jurisdiction, shall:

5.4.1. Prepare and consider environmental documents when required by this directive for proposed actions within their respective DoD component (this reporting requirement has been assigned Report Control Symbol DD-M(AR) 1327 (section 6.));

5.4.2. Insure that regulations and other major policy issuances are reviewed for consistency with Executive Order 12114 and this directive;

5.4.3. Designate a single point-of-contact for matters pertaining to this directive; and

5.4.4. Consult with the Assistant Secretary of Defense (International Security Affairs) on significant or sensitive actions or decisions affecting relations with another nation.

6. INFORMATION REQUIREMENTS

The documents to be prepared under subsection 5.4. and enclosures 1 and 2 are assigned Report Control Symbol DD-M(AR) 1327 (formerly DD-H&E(AR) 1327).

7. EFFECTIVE DATE AND IMPLEMENTATION

This directive is effective immediately. Forward two copies of implementing documents to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) within 90 days.

Enclosures - 3

1. Requirements for Environmental Considerations Global- Commons
2. Requirements for Environmental Considerations-Foreign Nations and Protected Global Resources
3. References

ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

E1. ENCLOSURE 1

REQUIREMENTS FOR ENVIRONMENTAL CONSIDERATIONS-
GLOBAL COMMONS

E1.1. GENERAL

This enclosure implements the requirements of Executive Order 12114 with respect to major Department of Defense actions that do significant harm to the environment of the global commons. The focus is not the place of the action, but the location of the environment with respect to which there is significant harm. The actions prescribed by this enclosure are the exclusive and complete requirement for taking account of environmental considerations with respect to Department of Defense activities that affect the global commons.

E1.2. ACTIONS INCLUDED

The requirements of this enclosure apply only to major federal actions that do significant harm to the environment of the global commons.

E1.3. ENVIRONMENTAL DOCUMENT REQUIREMENTS

E1.3.1. General. When an action is determined to be a major federal action that significantly harms the environment of the global commons, an environmental impact statement, as described below, will be prepared to enable the responsible decision-making official to be informed of pertinent environmental considerations. The statement may be a specific statement for the particular action, a generic statement covering the entire class of similar actions, or a program statement.

E1.3.2. Limitations on Actions. Until the requirements of this enclosure have been met with respect to actions involving the global commons, no action concerning the proposal may be taken that does significant harm to the environment or limits the choice of reasonable alternatives.

E1.3.3. Emergencies. Where emergency circumstances make it necessary to take an action that does significant harm to the environment without meeting the requirements of this enclosure, the DoD component concerned shall consult with the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics). This includes actions that must be taken to promote the national

defense or security and that cannot be delayed, and actions necessary for the protection of life or property.

E1.3.4. Combining Documents. Environmental documents may be combined with other agency documents to reduce duplication. If an environmental impact statement for a particular action already exists, regardless of what federal agency prepared it, no new statement is required by this directive.

E1.3.5. Collective Statements. Consideration should be given to the use of generic and program statements. Generic statements may include actions with relevant similarities such as common timing, environmental effects, alternatives, methods of implementation, or subject matter.

E1.3.6. Tiering. Consideration should be given to tiering of environmental impact statements to eliminate repetitive discussions of the same issue and to focus the issues. Tiering refers to the coverage of general matters in broader environmental impact statements, with succeeding narrower statements or environmental analyses that incorporate by reference the general discussion and concentrate only on the issues specific to the statement subsequently prepared.

E1.3.7. Lead Agency. When one or more other federal agencies are involved with the Department of Defense in an action or program, a lead agency may be designated to supervise the preparation of the environmental impact statement. In appropriate cases, more than one agency may act as joint lead agencies. The following factors should be considered in making the lead agency designation:

E1.3.7.1. The magnitude of agency involvement;

E1.3.7.2. Which agency or agencies have project approval and disapproval authority;

E1.3.7.3. The expert capabilities concerning the environmental effects of the action;

E1.3.7.4. The duration of agency involvement; and

E1.3.7.5. The sequence of agency involvement.

E1.3.8. Categorical Exclusions. The Department of Defense may provide categorical exclusions for actions that normally do not, individually or cumulatively, do significant harm to the

environment. If an action is covered by a categorical exclusion no environmental assessment or environmental impact statement is required. Categorical exclusions will be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) and will be identified in Attachment 1 to this enclosure. DoD components identifying recurring actions that have been determined, after analysis, not to do significant harm to the environment should submit recommendations for categorical exclusions and accompanying justification to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E1.3.9. Environmental Assessments. The purpose of an environmental assessment is to assist DoD components in determining whether an environmental impact statement is required for a particular action. The assessment should be brief and concise but should include sufficient information on which a determination can be made whether the proposed action is major and federal, and whether it significantly harms the environment of the global commons. As a minimum, the assessment should include consideration of the need for the proposed action and the environmental effect of the proposed action. The environmental assessment will be made available to the public in the United States upon request, but there is no requirement that it be distributed for public comment.

E1.4. ENVIRONMENTAL IMPACT STATEMENTS

E1.4.1. General. Environmental impact statements will be concise and no longer than necessary to permit an informed consideration of the environmental effects of the proposed action on the global commons and the reasonable alternatives. If an action requiring an environmental impact statement also has effects on the environment of a foreign nation or on a resource designated as one of global importance, the statement need not consider or be prepared with respect to these effects. The procedures for considering these effects are set out in enclosure 2.

E1.4.2. Draft Statement. Environmental impact statements will be prepared in two stages and may be supplemented. The first, or draft statement, should be sufficiently complete to permit meaningful analysis and comment. The draft statement will be made available to the public, in the United States, for comment. The Department of State, the council on Environmental Quality, and other interested federal agencies will be informed of the availability of the draft statement and will be afforded an opportunity to comment. Contacts with foreign governments are

discussed in subsection 4.4. of the directive and subsection E1.4.11. of this enclosure.

E1.4.3. Final Statement. Final statements will consider, either individually or collectively, substantive comments received on the draft statement. The final statement will be made available to the public in the United States.

E1.4.4. Supplemental Statement. Supplements to the draft or final statement should be used when substantial changes to the proposed action are made relative to the environment of the global commons or when significant new information or circumstances, relevant to environmental concerns bear on the proposed action or its environmental effects on the global commons. Supplemental statements will be circulated for comment as in subsection E1.4.2. above unless alternative procedures are approved by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E1.4.5. Statement Content. The statement will include: a section on consideration of the purpose of and need for the proposed action; a section on the environmental consequences of the proposed action and reasonable alternatives; a section that provides a succinct description of the environment of the global commons affected by the proposed action and reasonable alternatives; and a section that analyzes, in comparative form, the environmental effects on the global commons of the proposed action and reasonable alternatives.

E1.4.6. Incomplete Information. The statement should indicate when relevant information is missing due to unavailability or scientific uncertainty.

E1.4.7. Hearings. Public hearings are not required. Consideration should be given in appropriate cases to holding or sponsoring public hearings. Factors in this consideration 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 factors listed in this section be considered when one or more factors indicate that public hearings would not produce a substantial net benefit to those responsible for authorizing or approving the proposed action.

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E1.4.8. Decision. Relevant environmental documents developed in accordance with this enclosure will accompany the proposal for action through the review process to enable officials responsible for authorizing or approving the proposed action to be informed and to take account of environmental considerations. One means of making an appropriate record with respect to this requirement is for the decision-maker to sign and date a copy of the environmental impact statement, indicating that it has been considered in the decision-making process. Other means of making an appropriate record are also acceptable.

E1.4.9. Timing. No decision on the proposed action may be made until the later of 90 days after the draft statement has been made available and notice thereof published in the Federal Register, or 30 days after the final statement has been made available and notice thereof published in the Federal Register. The 90-day period and the 30-day period may run concurrently. Not less than 45 days may be allowed for public comment. The Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) may, upon a showing of probable important adverse effect on national security or foreign policy, reduce the 30-day, 45-day, and 90-day periods.

E1.4.10. Classified Information. Environmental assessments and impact statements that address classified proposals will be safeguarded and classified information will be restricted from public dissemination in accordance with Department of Defense procedures (DoD Directive 5200.1) established for such information under Executive Order 12065. The requirements of that Executive Order take precedence over any requirement of disclosure in this directive. Only unclassified portions of environmental documents may be disseminated to the public.

E1.4.11. Foreign Governments. Consideration will be given to whether any foreign government should be informed of the availability of environmental documents. Communications with foreign governments concerning environmental agreements and other formal arrangements with foreign governments concerning environmental matters under this directive will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

Attachments - 1

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1. Report Control Symbol DD-M(AR) 1327, Categorical Exclusions
- Global Commons

E1.A1. ENCLOSURE 1 ATTACHMENT 1

REPORT CONTROL SYMBOL DD-M(AR) 1327

CATEGORICAL EXCLUSIONS--GLOBAL COMMONS

Q-11

E2. ENCLOSURE 2

REQUIREMENTS FOR ENVIRONMENTAL CONSIDERATIONS-
FOREIGN NATIONS AND PROTECTED GLOBAL RESOURCES

E2.1. GENERAL

This enclosure implements the requirements of Executive Order 12114 to provide for procedural and other actions to be taken to enable officials to be informed of pertinent environmental considerations when authorizing or approving certain major Department of Defense actions that do significant harm to the environment of a foreign nation or to a protected global resource.

E2.2. ACTIONS INCLUDED

E2.2.1. The requirements of this enclosure apply only to the following actions:

E2.2.1.1. Major federal actions that significantly harm the environment of a foreign nation that is not involved in the action. The involvement of the foreign nation may be directly by participation with the United States in the action, or it may be in conjunction with another participating nation. The focus of this category is on the geographical location of the environmental harm and not on the location of the action.

E2.2.1.2. Major federal actions that are determined to do significant harm to the environment of a foreign nation because they provide to that nation: (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; 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. Included in the category of "prohibited or strictly regulated" are the following: asbestos, vinyl chloride, acrylonitrile, isocyanates, polychlorinated biphenyls, mercury, beryllium, arsenic, cadmium, and benzene.

E2.2.1.3. Major federal actions outside the United States that significantly harm natural or ecological resources of global importance designated for protection by the President or, in the case of such a resource protected by international agreement binding on the United States, designated for protection by the

Secretary of State. Such determinations by the President or the Secretary of State are listed in Attachment 1 to this enclosure.

E2.2.2. The actions prescribed by this enclosure are the exclusive and complete requirement for taking account of environmental considerations with respect to federal actions that do significant harm to the environment of foreign nations and protected global resources as described in subsection E2.2.1. above. No action is required under this enclosure with respect to federal actions that affect only the environment of a participating or otherwise involved foreign nation and that do not involve providing products or physical projects producing principal products, emissions, or effluents that are prohibited or strictly regulated by federal law in the United States, or resources of global importance that have been designated for protection.

E2.3. ENVIRONMENTAL DOCUMENT REQUIREMENTS

E2.3.1. General

E2.3.1.1. There are two types of environmental documents that officials shall use in taking account of environmental considerations for actions covered by this enclosure:

E2.3.1.1.1. Environmental studies--bilateral or multilateral environmental studies, relevant or related to the proposed action, by the United States and one or more foreign nations or by an international body or organization in which the United States is a member or participant; and

E2.3.1.1.2. Environmental reviews--concise reviews of the environmental issues involved that are prepared unilaterally by the United States.

E2.3.1.2. This section identifies the procedures for the preparation of environmental studies or reviews when required by this enclosure and the exceptions from the requirement to prepare environmental studies or reviews. If an environmental document already exists for a particular action, regardless of what federal agency prepared it, no new document is required by this enclosure.

E2.3.2. Lead Agency. When one or more other federal agencies are involved with the Department of Defense in an action or program, a lead agency may be designated to supervise the preparation of environmental documentation. In appropriate cases, more than one agency may act as joint lead agencies.

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The following factors should be considered in making the lead agency designation:

E2.3.2.1. The magnitude of agency involvement;

E2.3.2.2. Which agency or agencies have project approval and disapproval authority;

E2.3.2.3. The expert capabilities concerning the environmental effects of the action;

E2.3.2.4. The duration of agency involvement; and

E2.3.2.5. The sequence of agency involvement.

E2.3.3. Exemptions. There are general exemptions from the requirements of this enclosure provided by Executive Order 12114, and the Secretary of Defense has the authority to approve additional exemptions.

E2.3.3.1. General Exemptions. The following actions are exempt from the procedural and other requirements of this enclosure under general exemptions established for all agencies by Executive Order 12114:

E2.3.3.1.1. Actions that the DoD component concerned determines do not do significant harm to the environment outside the United States or to a designated resource of global importance.

E2.3.3.1.2. Actions taken by the President. These include: signing bills into law; signing treaties and other international agreements; the promulgation of Executive Orders; Presidential proclamations; and the issuance of Presidential decisions, instructions, and memoranda. This includes actions taken within the Department of Defense to prepare or assist in preparing recommendations, advice, or information for the President in connection with one of these actions by the President. It does not include actions taken within the Department of Defense to implement or carry out these instruments and issuances after they are promulgated by the President.

E2.3.3.1.3. Actions taken by or pursuant to the direction of the President or a cabinet officer in the course of armed conflict. The term "armed conflict" refers to: hostilities for which Congress has declared war or enacted a specific authorization for the use of armed forces; hostilities or

situations for which a report is prescribed by section 4(a) (1) of the War Powers Resolution, 50 U.S.C.A. _ 1543(a) (1) (Supp. 1978); and other actions by the armed forces that involve defensive use or introduction of weapons in situations where hostilities occur or are expected. This exemption applies as long as the armed conflict continues.

E2.3.3.1.4. Actions taken by or pursuant to the direction of the President or a cabinet officer when the national security or national interest is involved. The determination that the national security or national interest is involved in actions by the Department of Defense must be made in writing by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E2.3.3.1.5. The activities of the intelligence components utilized by the Secretary of Defense under Executive Order 12036, 43 Fed. Reg. 3674 (1978). These components include the Defense Intelligence Agency, the National Security Agency, the offices for the collection of specialized intelligence through reconnaissance programs, the Army Office of the Assistant Chief of Staff for Intelligence, the Office of Naval Intelligence, and the Air Force Office of the Assistant Chief of Staff for Intelligence.

E2.3.3.1.6. The decisions and actions of the Office of the Assistant Secretary of Defense (International Security Affairs), the Defense Security Assistance Agency, and the other responsible offices within DoD component with respect to arms transfers to foreign nations. The term "arms transfers" includes the grant, loan, lease, exchange, or sale of defense articles or defense services to foreign governments or international organizations, and the extension or guarantee of credit in connection with these transactions.

E2.3.3.1.7. Votes and other actions in international conferences and organizations. This includes all decisions and actions of the United States with respect to representation of its interests at international organizations, and at multilateral conferences, negotiations, and meetings.

E2.3.3.1.8. Disaster and emergency relief actions.

E2.3.3.1.9. Actions involving export licenses, export permits, or export approvals, other than those relating to nuclear activities. This includes: advice provided by DoD components to the Department of State with respect to the issuance of munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. 2778 (1976); advice provided by DoD components to the

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Department of Commerce with respect to the granting of export licenses under the Export Administration Act of 1969, 50 U.S.C. App. ___ 2401-2413 (1970 & Supp. V 1975); and direct exports by the Department of Defense of defense articles and services to foreign governments and international organizations that are exempt from munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. _ 2778 (1976). The term "export approvals" does not mean or include direct loans to finance exports.

E2.3.3.1.10. Actions relating to nuclear activities and nuclear material, except actions providing to a foreign nation a nuclear production or utilization facility, as defined in the Atomic Energy Act of 1954, as amended, or a nuclear waste management facility.

E2.3.3.2. Additional Exemptions. The Department of Defense is authorized under Executive Order 12114 to establish additional exemptions that apply only to the Department's operations. There are two types of additional exemptions: case-by-case and class.

E2.3.3.2.1. Case by-Case Exemptions. Exemptions other than those specified above may be required because emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances preclude or are inconsistent with the preparation of environmental documentation and the taking of other actions prescribed by this enclosure. The following procedures apply for approving these exemptions:

E2.3.3.2.1.1. Emergencies. This category includes actions that must be taken to promote the national defense or security and that cannot be delayed, and actions necessary for the protection of life or property. The heads of the DoD components are authorized to approve emergency exemptions on a case-by-case basis. The Department of Defense is required to consult as soon as feasible with the Department of State and the Council on Environmental Quality with respect to emergency exemptions. The requirement to consult as soon as feasible is not a requirement of prior consultation. A report of the emergency action will be made by the DoD component head to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), who, with the Assistant Secretary of Defense (International Security Affairs), shall undertake the necessary consultations.

E2.3.3.2.1.2. Other Circumstances. National security considerations, exceptional foreign policy requirements, and other special circumstances not identified in paragraph E2.3.3.1. above,

may preclude or be inconsistent with the preparation of environmental documentation. In these circumstances, the head of the DoD component concerned is authorized to exempt a particular action from the environmental documentation requirements of this enclosure after obtaining the prior approval of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), who, with the Assistant Secretary of Defense (International Security Affairs), shall consult, before approving the exemption, with the Department of State and the Council on Environmental Quality. The requirement for prior consultation is not a requirement for prior approval.

E2.3.3.2.2. Class Exemptions. Circumstances may exist where a class exemption for a group of related actions is more appropriate than a specific exemption. Class exemptions may be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) who, with the Assistant Secretary of Defense (International Security Affairs), shall consult, before approving the exemption, with the Department of State and the Council on Environmental Quality. The requirement for prior consultation is not a requirement for prior approval. Requests for class exemptions will be submitted by the head of the DoD component concerned to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) after coordination with other interested DoD components. Notice of the establishment of a class exemption will be issued as Attachment 2 to this enclosure.

E2.3.4. Categorical Exclusions. The Department of Defense is authorized by Executive Order 12114 to provide for categorical exclusions. A categorical exclusion is a category of actions that normally do not, individually or cumulatively, do significant harm to the environment. If an action is covered by a categorical exclusion, no environmental document is required. Categorical exclusions will be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), and will be identified in Attachment 3 to this enclosure. DoD components identifying recurring actions that have been determined, after analysis, not to do significant harm to the environment should submit requests for categorical exclusions and accompanying justification to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E2.4. ENVIRONMENTAL STUDIES

E2.4.1. General. Environmental studies are one of two alternative types of documents to be used for actions described by paragraph E2.2. of this enclosure.

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E2.4.1.1. An environmental study is an analysis of the likely environmental consequences of the action that is to be considered by DoD components in the decision-making process. It includes a review of the affected environment, significant actions taken to avoid environmental harm or otherwise to better the environment, and significant environmental considerations and actions by the other participating nations, bodies, or organizations.

E2.4.1.2. An environmental study is a cooperative action and not a unilateral action undertaken by the United States. It may be bilateral or multilateral, and it is prepared by the United States in conjunction with one or more foreign nations, or by an international body or organization in which the United States is a member or participant. The environmental study, because it is prepared as a cooperative undertaking, may be best suited for use with respect to actions that provide strictly regulated or prohibited products or projects to a foreign nation (E2.2.1.2.) and actions that affect a protected global resource (E2.2.1.3.).

E2.4.2. Department of State Coordination. Communications with foreign governments concerning environmental studies and other formal arrangements with foreign governments concerning environmental matters under this directive will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

E2.4.3. Whether to Prepare an Environmental Study. The judgment whether the action is one that would do significant harm to one of the environments covered by this enclosure normally will be made in consultation with concerned foreign governments or organizations. If a negative decision is made, the file will be documented with a record of that decision and the decision-makers who participated. If a decision is made to prepare a study then, except as provided by this enclosure, no action concerning the proposal may be taken that would do significant harm to the environment until the study has been completed and the results considered.

E2.4.4. Content of the Study. The document is a study of the environmental aspects of the proposed action to be considered in the decision-making process. The precise content of each study must be flexible because of such considerations as the sensitivity of obtaining information from foreign governments, the

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availability of useful and understandable information, and other factors identified under "Limitations" (subsection E2.4.6. below). The study should, however, include consideration of the following:

E2.4.4.1. A general review of the affected environment;

E2.4.4.2. The predicted effect of the action on the environment;

E2.4.4.3. Significant known actions taken by governmental entities with respect to the proposed action to protect or improve the environment; and

E2.4.4.4. If no actions are being taken to protect or enhance the environment, whether the decision not to do so was made by the affected foreign government or international organization.

E2.4.5. Distribution of the Study. Except as provided under "Limitations" (subsection E2.4.6., below), and except where classified information is involved, environmental studies will be made available to the Department of State, the Council on Environmental Quality, other interested federal agencies, and, on request, to the public in the United States. Interested foreign governments also may be informed of the studies, subject to the "Limitations" (subsection E2.4.6., below) and controls on classified information, and furnished copies of the documents. No distribution is required prior to the preparation of the final version of the study or prior to taking the action that caused the study to be prepared.

E2.4.6. Limitations. The requirements with respect to the preparation, content, and distribution of environmental studies in the international context must remain flexible. The specific procedures must be determined on a case-by-case basis and may be modified where necessary to:

E2.4.6.1. Enable the component to act promptly. Considerations such as national security and foreign government involvement may require prompt action that must take precedence in the environmental review process;

E2.4.6.2. Avoid adverse impacts on relations between the United States and foreign governments and international organizations;

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E2.4.6.3. Avoid infringement or the appearance of infringement on the sovereign responsibilities of another government. The collection of information and the preparation and distribution of environmental documentation for actions in which another nation is involved, or with respect to the environment and resources of another nation, unless done with proper regard to the sovereign authority of that nation, may be viewed by that nation as an interference in its internal affairs and its responsibility to evaluate requirements with respect to the environment;

E2.4.6.4. Ensure consideration of:

E2.4.6.4.1. Requirements of governmental confidentiality.

This refers to the need to protect sensitive foreign affairs information and information received from another government with the understanding that it will be protected from disclosure regardless of its classification;

E2.4.6.4.2. National security requirements. This refers to the protection of classified information and other national security interests;

E2.4.6.4.3. Availability of meaningful information. Information on the environment of foreign nations may be unavailable, incomplete, or not susceptible to meaningful evaluation, particularly where the affected foreign nation is not a participant in the analysis. This may reduce or change substantially the normal content of the environmental study;

E2.4.6.4.4. The extent of the participation of the DoD component concerned and its ability to affect the decision made. The utility of the environmental analysis and the need for an in-depth review diminishes as DoD's role and control over the decision lessens; and

E2.4.6.4.5. International commercial, commercial confidentiality, competitive, and export promotion factors. This refers to the requirement to protect domestic and foreign trade secrets and confidential business information from disclosure. Export promotion factors includes the concept of not unnecessarily hindering United States exports.

E2.4.7. Classified Information. Classified information will be safeguarded from disclosure in accordance with the Department of Defense procedures (DoD Directive 5200.1) established for such information under Executive Order 12065. The requirements of that

Executive Order take precedence over any requirement of disclosure in this directive.

E2.5. ENVIRONMENTAL REVIEWS

E2.5.1. General. Environmental reviews are the second of the two alternative types of documents to be used for actions covered by paragraph B of this enclosure.

E2.5.1.1. An environmental review is a survey of the important environmental issues involved. It includes identification of these issues and a review of what if any consideration has been or can be given to the environmental aspects by the United States and by any foreign government involved in taking the action.

E2.5.1.2. An environmental review is prepared by the DoD component concerned either unilaterally or in conjunction with another federal agency. While an environmental review may be used for any of the actions identified by section E2.2. it may be uniquely suitable, because it is prepared unilaterally by the United States, to actions that affect the environment of a nation not involved in the undertaking (E2.2.1.1.).

E2.5.2. Department of State Coordination. Communications with foreign governments concerning environmental agreements and other formal arrangements with foreign governments concerning environmental matters under this enclosure will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

E2.5.3. Whether to Prepare an Environmental Review. Sufficient information will be gathered, to the extent it is reasonably available, to permit an informed judgment as to whether the proposed action would do significant harm to the environments covered by this enclosure. If a negative decision is made, a record will be made of that decision and its basis. If a decision is made to prepare a review, then, except as provided by this enclosure, no action concerning the proposal may be taken that would do significant environmental harm until the review has been completed.

E2.5.4. Content of the Review. An environmental review is a survey of the important environmental issues associated with the

proposed action that is to be considered by the DoD component concerned in the decision-making process. It does not include all possible environmental issues and it does not include the detailed evaluation required in an environmental impact statement under enclosure 1 of this directive. There is no foreign government or international organization participation in its preparation, and the content therefore may be circumscribed because of the availability of information and because of foreign relations sensitivities. Other factors affecting the content are identified under "Limitations" (subsection E2.5.6. below). To the extent reasonably practical the review should include consideration of the following:

E2.5.4.1. A statement of the action to be taken including its timetable, physical features, general operating plan, and other similar broad-gauge descriptive factors;

E2.5.4.2. Identification of the important environmental issues involved;

E2.5.4.3. The aspects of the actions taken or to be taken by the DoD component that ameliorate or minimize the impact on the environment; and

E2.5.4.4. 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.

E2.5.5. Distribution. Except as provided under "Limitations," (subsection E2.5.6. below), and except where classified information is involved, environmental reviews will be made available to the Department of State, the Council on Environmental Quality, other interested federal agencies, and, on request, the public in the United States. Interested foreign governments also may be informed of the reviews and, subject to the "Limitations" (subsection E2.5.6. below) and controls on classified information, will be furnished copies of the documents on request. This provision for document distribution is not a requirement that distribution be made prior to taking the action that is the subject of the review.

E2.5.6. Limitations. The requirements with respect to the preparation, content, and distribution of environmental reviews in the international context must remain flexible. The specific procedures must be determined on a case-by-case basis and may be modified where necessary to:

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E2.5.6.1. Enable the component to act promptly. Considerations such as national security and foreign government involvement may require prompt action that must take precedence in the environmental review process;

E2.5.6.2. Avoid adverse impacts on relations between the United States and foreign governments and international organizations;

E2.5.6.3. Avoid infringement or the appearance of infringement on the sovereign responsibilities of another government. The collection of information and the preparation and distribution of environmental documentation for actions in which another nation is involved or with respect to the environment and resources of another nation, unless done with proper regard to the sovereign authority of that nation, may be viewed by that nation as an interference in its internal affairs and its prerogative to evaluate requirements with respect to the environment; and

E2.5.6.4. Ensure consideration of:

E2.5.6.4.1. Requirements of governmental confidentiality. This refers to the need to protect sensitive foreign affairs information and information received from another government with the understanding that it will be protected from disclosure regardless of its classification;

E2.5.6.4.2. National security requirements. This refers to the protection of classified information;

E2.5.6.4.3. Availability of meaningful information. Information on the environment of foreign nations may be unavailable, incomplete, or not susceptible to meaningful evaluation, and this may reduce or change substantially the normal content of the environmental review;

E2.5.6.4.4. The extent of the participation of the DoD component concerned and its ability to affect the decision made. The utility of the environmental analysis and the need for an in-depth review diminishes as the role of the Department of Defense and control over the decision lessens; and

E2.5.6.4.5. International commercial, commercial confidentiality, competitive, and export promotion factors. This refers to the requirement to protect domestic and foreign trade secrets and confidential business information from disclosure.

Export promotion factors include the concept of not unnecessarily hindering United States exports.

E2.5.7. Classified Information. Classified information will be safeguarded from disclosure in accordance with the DoD procedures (DoD Directive 5200.1) established for such information under Executive Order 12065. The requirements of that Executive Order take precedence over any requirement of disclosure in this directive.

APPENDIX R

REQUEST FOR ENVIRONMENTAL IMPACT REVIEW (REIR)

National Environmental Policy Act requirements apply to proposed Federal actions that have potential to impact the human environment (i.e., those which may result in a change to the physical environment; social and economic impacts alone are not sufficient to trigger actions per reference (a)). To ensure installation environmental planning staff coordinate on actions with the potential to impact the human environment, Action Proponents shall submit a completed REIR form, NAVMC 11601 (10-07) (EF) available electronically at <http://192.156.19.102/ar/mcefs.nsf/welcome?opennavigator>) to the installation's environmental planning staff, for all proposed actions that have potential to impact the human environment. The REIR shall be a form prescribed by the Commanding General/Commanding Officer exercising a Finding of No Significant Impact (FONSI) signature authority, and should contain enough information to support the use of a categorical exclusion (CATEX) (in case a CATEX applies). The commander exercising FONSI signature authority may delegate REIR signature authority to qualified environmental planning staff.

22 JAN 2008

REQUEST FOR ENVIRONMENTAL IMPACT REVIEW			Report Control Symbol RCS: Exempt				
INSTRUCTIONS: Section 1 to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).							
SECTION I - PROPONENT INFORMATION							
1. TO (Environmental Planning Function)		2. FROM (Proponent organization and functional address symbol)			2a. TELEPHONE NO.		
3. TITLE OF PROPOSED ACTION							
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)							
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)							
6. PROPONENT APPROVAL (Name and Grade)		6a. SIGNATURE			6b. DATE		
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; O = no effect; - = adverse effect; U = unknown effect)				+	O	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)							
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)							
9. WATER RESOURCES (Quality, quantity, source, etc.)							
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)							
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)							
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)							
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)							
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)							
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)							
16. OTHER (Potential impacts not addressed above.)							
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION							
17.	<input type="checkbox"/>	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) -- Decision Memorandum (DM) # _____; OR					
	<input type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.					
18. REMARKS							
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)		19a. SIGNATURE			19b. DATE		
20. PROPONENT APPROVAL (Name and Grade) OF SECTION III		20a. SIGNATURE			20b. DATE		

REQUEST FOR ENVIRONMENTAL REVIEW IMPACT CONTINUATION SHEET

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NAVMC 11561 (10-07)

REFERENCES

(a) 42 U.S.C. 4321-4347

APPENDIX S

PROCEDURE TO IMPLEMENT WAIVER
FOR THE USE OF DEFENSE REUTILIZATION AND MARKETING SERVICES
(DRMS)

A. PURPOSE. This procedure identifies steps that should be followed at Marine Corps installations that generate and dispose of hazardous waste, and that make the decision to not use Defense Logistics Agency (DLA)/DRMS for hazardous waste (HW) disposal.

B. APPLICABILITY. This procedure applies to all Marine Corps installations.

C. REQUIREMENTS. In accordance with reference (a), installation Commanding Officers (COs) are responsible for meeting their stated mission and have the authority to determine how to best accomplish that mission. In accordance with references (b) and (c), DLA/DRMS are designated as the responsible agency for worldwide disposal of HW.

D. ACTIONS. Marine Corps installations shall use DLA/DRMS for HW contract disposal services as much as economically and operationally feasible.

1. Cases in which DLA/DRMS are not used by the installation to dispose of waste are due to special circumstances (e.g., cost effectiveness, type of waste, responsive time, quantity of waste and simplified control over the waste stream). In these circumstances, COs are permitted to contract directly for HW disposal services outside of DLA/DRMS. In accordance with reference (c), "the DRMS should be first afforded the opportunity to redress any operational difficulties in providing services."

2. It is the responsibility of the installation CO to coordinate with CMC (LFL-6) to ensure that installation contracts and disposal criteria are "at least as stringent as the criteria used by DRMS."

3. Hazardous Waste Disposal Contract Standards - Attachment 2 per reference (c).

a. Provide 100 percent manifest tracking to maintain a "cradle to grave" audit trail of documentation for HW disposal (i.e., from original turn-in to final disposal).

b. Monitor contractor performance at time of pickup by Department of Defense (DOD) personnel serving as Contracting Officer's Representative.

c. Conduct extensive past performance and technical evaluation of prime contractor and subcontractors prior to contract award, and monitor during contract performance.

d. Conduct onsite post award inspections of selected subcontractors (e.g. treatment, storage, and/or disposal facility and transporters) to ensure compliance with regulatory requirements.

e. Evaluate contractor performance and document current and past performance in a database. Ensure contract provisions comply with the Federal Acquisition Regulation and applicable Federal, State, and local safety, environmental, and transportation regulations. Monitor contract costs to ensure competitive pricing as well as high quality contractor service.

f. Reduce start-up, administrative, and re-procurement costs by preparing and awarding long-term contracts, if in the best interest of the DOD.

E. LIABILITY Reference (c) indicates that DRMS may request information from Marine Corps installations, including a list of facilities using their own HW disposal contracting, that identifies the type of commodities handled and the prices paid. Additionally, overall liability and responsibilities are the same for those installations using DLA/DRMS or outside HW contracting services.

F. TRANSMITTAL PRECEDENCE. Send oil discharge and hazardous substance (HS) release report messages by routine precedence if prior voice reports have been made to the U.S. Coast Guard National Response Center and the reporting command's Chain of Command, and in case of a HS release, the HS is not classified as an "Extremely Hazardous Substance (EHS)." Use priority precedence if prior voice report has not been made, the release is very large, threatens human health, requires evacuation of the local populace, is expected to result in significant

environmental harm, or is expected to generate adverse publicity. Always use priority precedence for EHS release report messages.

G. CLASSIFICATION OR SPECIAL HANDLING MARKING. Do not include classified or sensitive unclassified information in the report, unless necessary for operational reasons. Report symbol DD-5090-10 applies.

H. OUTSIDE THE CONTINENTAL UNITED STATES REPORTS. For releases occurring outside the United States, its territories, and its possessions, delete the Coast Guard District and the Environmental Protection Agency (EPA) region organizations from the addressee and information blocks in the message. Instead, add the appropriate higher headquarters to the list of addressees.

I. CORRECTING DISCHARGE/RELEASE REPORT MESSAGES. Oil discharge and 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, type of material, source, or lessons learned.

J. MESSAGE DATA ELEMENTS. The essential data elements for reporting oil spills and HS releases are provided on the following pages.

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)
COMNAVFAENGCOM ALEXANDRIA VA
COGNIZANT ENGINEERING FIELD DIVISION
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LFL

SUBJ: OIL SPILL REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH SPILL OCCURRED
2. ACTIVITY ORIGINATING SPILL (INSTALLATION; UIC)
3. SOURCE (FUEL TANK, BARGE, PIPELINE, RAIL CAR, VEHICLE, AIRCRAFT, ETC.)
4. LOCATION (AREA, BUILDING DESIGNATION, PIER, ETC.)
5. AMOUNT (BARRELS, GALLONS, LITERS) IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
6. TYPE (JP-5, GASOLINE, DIESEL, LUBE OIL, ETC.)
7. CONTAINER AND OPERATION FROM WHICH RELEASE OCCURRED (DRUM, STORAGE TANK, FUELING, ETC.)
8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
10. RELEASE SCENE DESCRIPTION (OIL SLICK, CONTAMINATED AREA, ETC.)
11. ACTION TAKEN/PLANNED:
A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
C. AMOUNT OF OIL RECOVERED (BARRELS/GALLONS/LITERS OF DECANTED PURE PRODUCT)
D. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
14. POTENTIAL DANGERS (FIRE, EXPLOSION, OILED WILDLIFE, ETC.)
15. ESTIMATED COST OF RECOVERY, IF KNOWN
16. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
17. LESSONS LEARNED
18. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
19. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
20. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
21. ASSISTANCE REQUIRED/COMMENTS

//BT

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)
COMNAVFAENGCOM ALEXANDRIA VA
COGNIZANT ENGINEERING FIELD DIVISION
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LFL

SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH RELEASE OCCURRED
2. ACTIVITY ORIGINATING RELEASE (INSTALLATION; UIC)
3. SOURCE (STORAGE AREA, SHOP, VEHICLE, ETC.)
4. LOCATION (BUILDING DESIGNATION, PIER, HIGHWAY, RANGE, ETC.)
5. AMOUNT (GALLONS/LITERS, POUNDS/KILOGRAMS) IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
6. TYPE (PESTICIDES, CORROSIVE LIQUIDS, TOXIC SUBSTANCES, EXPLOSIVES, ETC.)
7. CONTAINER AND OPERATION INVOLVED (DRUM, BAG, STORAGE TANK, RAIL CAR, PLATING TANK, PAINTING SHOP, ETC.)
8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
10. RELEASE SCENE DESCRIPTION (CONTAMINATED AREA, PATH OF RELEASE, ETC.)
11. ACTION TAKEN/PLANNED:
A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
C. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
D. AMOUNT OF HS RECOVERED (BARRELS/GALLONS/LITERS OR POUNDS/KILOGRAMS OF PURE PRODUCT)
E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
14. POTENTIAL DANGERS (FIRE, EXPLOSION, TOXIC VAPOR, ETC.)
15. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
16. LESSONS LEARNED
17. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
18. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
19. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
20. ASSISTANCE REQUIRED/COMMENTS

//BT

REFERENCES

- (a) DOD Directive 4001.1, "Installation Management", September 4, 1986 (Certified current as of November 24, 2003)
- (b) DOD Instruction 4715.6, "Environmental Compliance", April 24, 1996
- (c) Chapter 10 of DOD Regulation 4160.21-M "Defense Material Disposition Manual", August 18, 1997

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