

U.S. Department of
Homeland Security

United States
Coast Guard



The Vessel

Environmental Manual



COMDTINST M16455.1A
January 2015



COMDTINST M16455.1A
JANUARY 21, 2015

COMMANDANT INSTRUCTION M16455.1A

Subj: VESSEL ENVIRONMENTAL MANUAL

1. PURPOSE. This Manual is published to promulgate Coast Guard environmental policies and procedures applicable to all waterborne assets. It is intended to meet the requirement of 33 U.S.C. 1902(h) Noncommercial shipping standards, which states “The heads of Federal departments and agencies shall prescribe standards applicable to ships excluded from this chapter by subsection (b)(1) of this section and for which they are responsible. Standards prescribed under this subsection shall ensure, so far as is reasonable and practicable without impairing the operations or operational capabilities of such ships, that such ships act in a manner consistent with the MARPOL Protocol.”
2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staffs shall comply with the provisions of this Manual. Internet release is authorized.
3. DIRECTIVES AFFECTED. The Vessel Environmental Manual, COMDTINST M16455.1, is cancelled.
4. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.
5. MAJOR CHANGES. This Manual incorporates all changes to the previous edition of the Vessel Environmental Manual and the following significant changes:
 - a. Chapter 1: Updated Points of Contact (POCs) and modernized unit names.
 - b. Chapter 2:
 - (1) Re-arranged chapter for better readability.

DISTRIBUTION – SDL No. 165

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A	x	x	x	x	x	x	x		x	x			x	x	x	x	x		x		x					
B		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	
C	x	x		x	x	x	x		x		x					x	x	x	x		x	x	x	x	x	
D	x	x	x	x				x					x					x		x						x
E				x				x						x	x											
F																										
G			x																							
H																										

NON-STANDARD DISTRIBUTION

COMDTINST M16455.1A

- (2) Updated Commandant's environmental policy title. Clarified access to Coast Guard vessels by non-Coast Guard personnel. Reworded "Guardians" reference.
 - (3) Added statement that Commandants (CG-094) and (CG-45) will, for environmentally significant spills, report the probable outcome for a private vessel under identical circumstances and explain any differences in outcome.
 - (4) Added that a periodic environmental compliance reviews by a third party is under development.
 - (5) Updated Commandant's Sustainability, Environmental, and Energy Policy Statement. Announced availability of Environmental Awareness training video.
- c. Chapter 3: Clarified pollution control table. Removed redundant text.
- d. Chapter 4: Consolidated incinerator information in Chapter 7.
- e. Chapter 5:
- (1) Clarified oily waste policy.
 - (2) Changed policy for operating Oily Water Separator In port.
 - (3) Provided more detailed oil placard and label requirement.
 - (4) Added requirement for facilities transferring oil products to have an operations manual that has been examined by the Captain of the Port.
- f. Chapter 6: Standardized reference format.
- g. Chapter 7:
- (1) Updated garbage discharge policy to align account for MARPOL ANNEX V changes and updated CG-specific legislation.
 - (2) Inserted hyperlinks to support documentation.
 - (3) Consolidated incinerator information from Chapter 4. Clarified incinerator test burn requirements. Incorporated latest APPS/MARPOL changes.
 - (4) Removed restriction from operating incinerator within 12 NM from land.
- h. Chapter 8: Standardized reference format.
- i. Chapter 9:
- (1) Standardized reference format.
 - (2) Changed title.
 - (3) Updated directorates to modernized nomenclature.

- j. Chapter 10:
 - (1) Standardized reference format.
 - (2) Updated ballast water policy.
 - (3) Updated ballast water tank flushing requirement.
 - k. Chapter 11:
 - (1) Added references and aligned policy to references.
 - (2) Added requirement to maintain Whale Wheel Field Guides for vessels operating in known whale areas.
 - l. Chapter 12: Reformatted.
 - m. Chapter 13: Clarified policy regarding the cleaning of painted and unpainted hulls.
 - n. Appendix A: Moved all terms and definitions to this glossary and cited sources.
 - o. Appendix B: Updated Commandant's policy. Previously Appendix A.
 - p. Appendix C: Updated Afloat Environmental Compliance checklist. Previously Appendix B. Deleted list of EPA regional offices.
 - q. Appendix D: Added Summary of Inspections, Records, and Reports.
 - r. Appendix E: Updated Recommended Spill Response Inventory. Previously Appendix D.
 - s. Appendix F: Added Response Plan Template.
 - t. Appendix G: Added Garbage Discharge Requirements Flow Chart.
 - u. Appendix H: Added Garbage Discharge Report Message Template
 - v. Appendix I: Added Seasonal Management Areas – North Atlantic Right Whale.
 - w. Appendix J: Added List of Acronyms.
6. REQUESTS FOR CHANGES. To ensure this Manual remains up-to-date, coincides with current practices, and continues to meet program needs, future change proposals shall be forwarded as specified in the following paragraphs.
- a. Change proposals may be originated at any organizational level. Proposals shall be submitted by letter to the Office of Naval Engineering, Commandant (CG-45) via the Surface Forces Logistics Center (SFLC) Engineering Support Division (ESD) Environmental Specialist or the Shore Infrastructure Logistics Center (SILC). Proposals from Headquarters units may be submitted directly to Commandant (CG-45).

COMDTINST M16455.1A

- b. The SFLC ESD Environmental Specialist shall review, endorse, and forward approved proposals to Commandant (CG-45). Disapproved requests shall be returned to the originator with an explanation for disapproval.
 - c. Upon receipt, Commandant (CG-452) will conduct a thorough investigation of each proposal to justify the need, identify possible conflicts with other directives and publications, and assess the effects of implementation.
 - d. Commandant (CG-4) is the final approving authority and has overall responsibility for the Vessel Environmental Manual, COMDTINST M16455.1 (series).
 - e. All approved changes will be promulgated by future change notices to this Manual.
 - f. Changes that require immediate action shall be submitted directly to Commandant (CG-45) via message, information copy to the SFLC.
7. RECORDS MANAGEMENT CONSIDERATION. This manual has been thoroughly reviewed during the directives clearance process, and it has been determined there are further records scheduling requirements, in accordance with the Federal Records Act, 44 U.S.C. 3101 et seq., NARA requirements, and the Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy creates significant or substantial change to existing records management requirements.
8. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. The development of this Manual and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE #33 from further environmental analysis, in accordance with Section 2.B.2 and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDINST M16475.1 (series). Because this Manual implements, without substantive change, other federal agency regulations, procedures, manuals, and other guidance documents, Coast Guard categorical exclusion #33 is appropriate.
9. FORMS/REPORTS. The forms referenced in this Manual are available in USCG Electronic Forms on the Standard Workstation or on the Internet: <http://www.uscg.mil/forms/>; CGPortal at <https://cgportal.uscg.mil/delivery/Satellite/uscg/References>; and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>.

M. J. Haycock /s/
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Engineering and Logistics

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

A	Applicability	1-1
B	Exemptions	1-1
C	Distribution	1-1
D	Points of Contact	1-1

CHAPTER 2: GENERAL INFORMATION AND POLICY

A	Coast Guard Policy	2-1
B	Training	2-7

CHAPTER 3: SEWAGE AND GRAYWATER

A	Legislation and Regulations	3-1
B	Coast Guard Policy	3-1

CHAPTER 4: AIR EMISSIONS

A	Legislation and Regulations	4-1
B	Coast Guard Policy	4-1

CHAPTER 5: BILGES, OIL AND OILY WASTE

A	Legislation and Regulations	5-1
B	Coast Guard Policy	5-1
C	Training	5-9

CHAPTER 6: HAZARDOUS MATERIALS AND HAZARDOUS WASTE
MANAGEMENT

A	Legislation and Regulations	6-1
B	Coast Guard Policy	6-1

CHAPTER 7: SOLID WASTE

A	Legislation and Regulations	7-1
B	Coast Guard Policy	7-2

CHAPTER 8: MEDICAL WASTE

A	Legislation and Regulations	8-1
B	Coast Guard Policy	8-1

CHAPTER 9: SPILL / DISCHARGE / RELEASE

A	Legislation and Regulations	9-1
B	Coast Guard Policy	9-2

CHAPTER 10: SHIP BALLAST WATER AND ANCHOR SYSTEM SEDIMENT CONTROL

A	Legislation and Regulations	10-1
B	Coast Guard Policy	10-1

CHAPTER 11: MARINE WILDLIFE PROTECTION

A	Legislation and Regulations	11-1
B	Coast Guard Policy	11-1

CHAPTER 12: NOISE

A	Legislation and Regulations	12-1
B	Coast Guard Policy	12-1

CHAPTER 13: SHIP AND BOAT WASHES

A	Legislation and Regulations	13-1
B	Coast Guard Policy	13-1

TABLES

3-1	SUMMARY OF POLLUTION CONTROL DISCHARGE RESTRICTIONS (<i>Sewage and Graywater</i>)	3-2
3-2	STANDARD DIMENSIONS OF FLANGES FOR SEWAGE DISCHARGE CONNECTIONS	3-3
5-1	SUMMARY OF POLLUTION CONTROL DISCHARGE RESTRICTIONS (<i>Bilges and Oily Waste</i>)	5-3
5-2	STANDARD DIMENSIONS OF FLANGES FOR OIL DISCHARGE CONNECTIONS	5-5
7-1	SUMMARY OF POLLUTION CONTROL DISCHARGE RESTRICTIONS (<i>Garbage (plastics and non-plastics)</i>)	7-8

FIGURES

5-1	STANDARD INTERNATIONAL MARITIME ORGANIZATION (IMO) OIL DISCHARGE FLANGE	5-5
-----	--	-----

APPENDICES

Appendix A:	GLOSSARY	A-1
Appendix B:	COMMANDANT'S SUSTAINABILITY, ENVIRONMENTAL, AND ENERGY POLICY STATEMENT	B-1
Appendix C:	AFLOAT ENVIRONMENTAL COMPLIANCE CHECKLIST	C-1
Appendix D:	SUMMARY OF INSPECTIONS, RECORDS AND REPORTS	D-1
Appendix E:	RECOMMENDED SPILL RESPONSE INVENTORY	E-1
Appendix F:	OIL POLLUTION RESPONSE PLAN TEMPLATE	F-1
Appendix G:	GARBAGE DISCHARGE REQUIREMENTS FLOW CHARTS	G-1
Appendix H:	GARBAGE DISCHARGE REPORT MESSAGE TEMPLATE	H-1
Appendix I:	SEASONAL MANAGEMENT AREAS – NORTH ATLANTIC RIGHT WHALE	I-1
Appendix J:	ACRONYMS	J-1

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 1. INTRODUCTION

- A. **APPLICABILITY**. This Manual applies to U.S. Coast Guard vessels worldwide. It applies to cutters and to the boats and other craft carried by those cutters, as well as Coast Guard boats deployed from shore units. All Coast Guard personnel as well as embarked scientists and civilians shall abide by this policy. If differences in policy exist between this Manual and any other Coast Guard guidance available to the fleet, this Manual takes precedence.

NOTE

None of this Manual is to supersede the Commanding Officer's or Officer in Charge's obligation to protect the ship and crew.

- B. **EXEMPTIONS**. All units shall comply with the requirements of this Manual unless otherwise authorized by the Office of the Judge Advocate General (CG-094) or the Office of Naval Engineering, Commandant (CG-45). Commandant (CG-094) or Commandant (CG-45) may authorize temporary waivers from this Manual only when required to meet operational requirements.
- C. **DISTRIBUTION**. Commandant (CG-45) shall determine distribution of this Manual. Requests for changes to the distribution should be submitted on Request for Allowance Change, Form CG-5323, addressed to Commandant (CG-612), via your chain of command.
- D. **POINTS OF CONTACT**.
1. USCG HQ Office of Naval Engineering, Vessel Environmental Division Program Manager (CG-452), (202) 475-5732.
 2. USCG HQ Office Office of Maritime and International Law, Environmental Law Division (CG-0941E), (202) 372-3749.
 3. SFLC-ESD Environmental Specialist, (410) 762-6902.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 2. GENERAL INFORMATION AND POLICY

A. COAST GUARD POLICY.

1. Environmentally Sound Vessels. The U.S. Coast Guard is recognized as America's Maritime Guardian. As Environmental Stewards, we commit to the American public and to future generations that we will protect air, water, and land quality. We will also protect the marine environment in our own operations. All Coast Guard vessels will strive to meet the letter and intent of applicable environmental laws and regulations including those of the port State and local government. To accomplish this goal, the Coast Guard officially adopts the following environmental AWARENESS goals:
 - a. *Always* comply with all applicable international, Federal, State, and local requirements.
 - b. *Welcome* integration of environmental protection principles into daily decision-making processes and long range planning.
 - c. *Achieve* and promote technological innovation to obtain better and more cost-effective environmental performance.
 - d. *Respond* to environmental incidents.
 - e. *Educate* and train our Men and Women to ensure they have the tools necessary to achieve environmental excellence.
 - f. *Nurture* the development of partnerships with private and public entities to achieve our mutual environmental goals.
 - g. *Embrace* and Invest in pollution prevention to reduce the cost of compliance and to eliminate the need for cleanup.
 - h. *Statistically* measure environmental goal achievement as part of the Coast Guard's organizational mission effectiveness.
 - i. *Serve* as stewards to the environment by planning, developing, and executing forward-looking strategies to address environmental challenges.

NOTE:

The Coast Guard's responsibility as America's Maritime Guardian and its frequent visibility to the public require high standards of environmental compliance that are complex and difficult to meet in full during real-world operations. Coast Guard operators and policymakers will cooperate to build and maintain a record of high compliance using proven techniques such as individual accountability, formal training, communication, integrated teams and work groups, continuous process improvement, rapid response and resolution, the lessons-learned database, and award/recognition policies.

2. Terms and Definitions. Technical terms used throughout this Manual are defined in the glossary in Appendix A.
3. Stewardship. A copy of the Commandant's Sustainability, Environmental, and Energy Policy Statement, shown in Appendix B, shall be displayed on the bridge and in the engine room of all cutters, icebreakers, tenders, patrol boats and tugs, and on the control panels of all boats.
4. Shoreside Support to Vessels. Commanding Officers of the Coast Guard Yard, Bases, and other shore commands with dedicated engineering facilities shall promulgate appropriate policies for cutters and boats that moor, or are serviced at their facility to ensure compliance with this Manual.
5. Operation with Other Agencies and Local Authorities. Periodic planning and information sharing with other U.S. government agencies and local authorities is highly encouraged. The Coast Guard Incident Command System Implementation Plan, COMDTINST M3120.15 (series) shall be the framework to discuss implementing and training the National Interagency Incident Management System (NIIMS) for response operations and management of major events.
6. Operation Within Foreign Nation Waters. Coast Guard vessels have sovereign immunity status and are not legally subject to enforcement of environmental requirements by coastal or port nations. When operating in foreign territorial waters, or when visiting foreign ports, Coast Guard vessels shall operate, to the extent reasonable and practical, consistent with local laws and abide by environmental provisions contained in port visit clearances and/or in Status of Force Agreements (SOFAs). Such conditions will normally be communicated to visiting vessels in the logistics request (LOGREQ) reply. A Coast Guard vessel does not relinquish U.S. sovereignty inappropriately by complying with such requirements. When port visit clearances and SOFAs either do not exist, or do not provide sufficient guidance, Coast Guard vessels should attempt to abide by the corresponding requirement for U.S. navigable waters or ports, as delineated in this Manual. In some cases, compliance with the corresponding U.S. requirement will not be feasible overseas due to lack of offload facilities, environmental services, or some other cause. In those cases, Coast Guard vessels shall emulate the environmental practices of host nation warships.
7. Environmental Inspection of Coast Guard Vessels. Within the United States, Coast Guard vessels shall be available for inspection by environmental officials, provided the inspector demonstrates a legitimate basis for requesting access, and subject to the requirements protecting national security related information. The information below addresses access to Coast Guard vessels and release of information regarding Coast Guard spills. Section 8 addresses access to Coast Guard vessels for all other environmental purposes.

- a. Environmental Inspector Access Procedures Within the U.S. If a state or local inspector requests access to inspect a Coast Guard vessel, the parties involved shall follow the procedures below:
- (1) The Commanding Officer or Officer in Charge shall confirm the inspector's credentials.
 - (2) The Commanding Officer or Officer in Charge shall have the inspector identify spaces or work sites to which they request access.
 - (3) The Commanding Officer or Officer in Charge shall have the inspector identify the nature of the activity to be examined and its relationship to regulations. The Commanding Officer or Officer in Charge should review the appropriate section of this COMDTINST to confirm that the cited regulations (which may or may not apply, depending on whether the vessel has some special status [which the inspector may not be familiar with] under the law cited), and consult legal counsel if there is any question regarding the applicability of the law or regulation to vessels.
 - (4) If the issue is a result of contractor actions aboard ship, a representative of the contractor shall accompany the inspector and vessel representative.
 - (5) If practical, the Commanding Officer or Officer in Charge shall suggest off-ship alternatives that involve similar operations or training demonstrations conducted ashore.
 - (6) If off-ship alternatives are not practical, Commanding Officers or Officers in Charge should approve inspections that do not involve access by inspectors to classified or restricted information, equipment, technology, or operations.
- b. Environmental Inspections of Coast Guard Vessels Outside the U.S. Coast Guard vessels have sovereign immunity status within the territory of foreign countries. As such, they are not legally subject to inspection, search, detention, fine, or arrest, and, in the event of a violation of local environmental or other law, the port or coastal State or local authorities may only require the vessel to leave. However, the United States may be held legally responsible for any loss or damage caused by a vessel not complying with the environmental laws and regulations when operating within foreign territorial sea. Additionally, Coast Guard vessels must comply with any environmental regulations established in port visit clearances and the local SOFAs.
- (1) Environmental officials representing the foreign country or local authority do not have the authority to board, inspect, or search U.S. Coast Guard vessels to determine compliance with that country's laws. If a Coast Guard vessel is approached by representatives of a foreign country while in foreign waters with a request to board, inspect, or search the vessel regarding a possible environmental violation, the Commanding Officer or Officer in Charge shall refuse to permit the inspection and shall notify the U.S. embassy, their operational chain of command,

- (2) Commandant (CG-45) and Commandant (CG-0941E) of the request, the alleged violation, and any amplifying information.
 - (3) If a Coast Guard vessel has violated or is perceived to be in violation of the foreign country's environmental laws or regulations, the country may request the vessel to leave port or the ocean area under its jurisdiction. In this event, the Commanding Officer shall comply with the request without delay and notify their chain of command, the U.S. embassy, Commandant (CG-45) and Commandant (CG-0941E) of this action.
8. Access to Coast Guard Vessels and Release of Information Regarding Coast Guard Spills. When a spill occurs from a Coast Guard vessel, non-Coast Guard individuals may request access to the vessel and/or unit-specific spill planning and response information. Commanding Officers and Officers in Charge shall consider several factors in responding to these requests. First, they shall quickly provide officials and agencies responsible under law and regulation responding to an actual spill with the necessary access and/or information to minimize environmental damage and Coast Guard liability. Second, they shall ensure all access granted and information disseminated is consistent with Coast Guard information security requirements. Third, they shall ensure that initial information released about spills is as accurate as possible and that it is characterized as preliminary and subject to later verification.
- a. Access to Vessels:
 - (1) During spill response emergencies, the Federal On-Scene Coordinator (FOSC) is the cognizant Coast Guard Sector Commander. Commanding Officers should allow the FOSC representatives access to their vessels if requested, consistent with information security requirements.
 - (2) During non-emergency situations, Coast Guard vessels are not subject to inspection by other Federal, State, or local officials in connection with spill planning. Commanding Officers and Officers in Charge shall cooperate however, with the local and civilian authorities regarding spill planning and prevention consistent with information security requirements without impeding mission accomplishment. Commanding Officers and Officers in Charge, at their discretion, may invite Federal, State, and local officials aboard their vessels for assist visits or other discussions. They shall coordinate requests for such access with their operational commander (OPCON).
 - b. Information Dissemination:
 - (1) In addition to the requirements of Chapter 9 of this Manual, vessel Commanding Officers and Officers in Charge shall promptly and accurately respond to Federal, State, and local government requests for information necessary to coordinate spill response and cleanup efforts or to prevent or reduce environmental damage. Commanding Officers or Officers in Charge providing initial information should indicate that the information provided is preliminary and is subject to verification

or change during subsequent investigation. Within eight hours of a request, the following preliminary information about Coast Guard spills shall be provided:

- (a) The type of substance spilled.
 - (b) When the spill occurred.
 - (c) Where the spill occurred.
 - (d) Suspected source of the spill.
 - (e) How much was spilled.
 - (f) Whether the source is secured.
 - (g) Initial actions taken to respond to and mitigate the impact of the spill (e.g., secured source, deployed containment boom, etc.).
 - (h) The initial indication as to the general nature of the cause of the incident (e.g., whether due to equipment failure, operator error, or undetermined origin).
 - (i) Whether a report has been submitted to the National Response Center.
- (2) Commands receiving requests for investigation reports shall inform requestors that they will forward any requests for Coast Guard investigation reports to The Judge Advocate General of the USCG (TJAG). TJAG will control the release of investigation reports.
 - (3) When claims against the Coast Guard have been filed or are reasonably anticipated, requests for information pertaining to spills shall be referred to the Coast Guard attorney representing the cognizant Operational Commander.
 - (4) The Commanding Officer or Officer in Charge will refer any media requests for information to the public affairs officer on the cognizant Operational Commander staff.
 - (5) The Office of the Judge Advocate General, Commandant (CG-094), and the Office of Prevention Policy (CG-5P), shall provide a report to the Vice Commandant on environmentally significant spills by Coast Guard units, advising of the probable outcome for a private vessel under identical circumstances, and explain any differences in the outcomes.
9. Environmental Inspector Security Clearances. If the inspector requests access to sensitive areas such as spaces containing cryptographic equipment or requiring a Secret security clearance or higher and the Commanding Officer or Officer in Charge concludes that a legitimate requirement exists for such access, he/she shall inform the state or local inspector that the security implications of their request require consideration at Coast Guard Headquarters. A message shall be sent to the Operational Commander with

information copy to the Office of Naval Engineering, Commandant (CG-45) requesting access. The message shall identify:

- a. The space to which the inspector is requesting access.
 - b. The nature of the activity that the inspector wants to examine.
 - c. The classified or restricted information, equipment, or operation to which the inspector would have access during the proposed inspection.
 - d. The proposed alternatives that do not involve such access.
 - e. Reasons why the inspector finds the proposed alternatives unsatisfactory.
 - f. Security clearance information, including name of inspecting official(s), date of visit, name of agency which the official(s) represent, and level, basis, and date of security clearance.
10. Environmental Inspection Dispute Resolution. If the Commanding Officer or Officer in Charge determines that the inspector does not have a requirement for access to the spaces or information cited above, but the inspector does not agree with that determination, the request shall be promptly referred up the operational chain of command for resolution.
11. Notices of Violations. If a vessel receives any warning, Notice of Violation, written report of inspection or other expression of environmental regulatory concern from any source, the Commanding Officer or Officer in Charge shall immediately notify the operational commander as well as the Environmental Law Division (CG-0941E) and Office of Naval Engineering Commandant (CG-45). All offices shall be provided a copy of the warning or notice.
12. Afloat Environmental Compliance Inspections and Assessments. The afloat environmental compliance inspection process shall consist of annual self-inspections. These inspections shall be conducted for all floating assets using Appendix C. The results of the inspection shall accompany submission of the Cutter Engineering Report (CER) to the cognizant Product Line Manager via the Port Engineer. Copies of the results shall be kept on file aboard the vessel for three years.
13. Inspections, Records and Reports. To aid in completing requirements, Appendix D is a summary of environmental-related inspections, records and reports.
14. Exclusion of Vessel Discharges from National Pollutant Discharge Elimination System (NPDES) Permitting and Vessel General Permits (VGP).
- a. Discharges of sewage from vessels and discharges other than sewage, incidental to the normal operation of a vessel of the Armed Forces do not require an NPDES permit and are outside the scope of the VGP. Discharges incidental to the normal operation of a vessel of the Armed Forces are subject to Uniform National Discharge

- Standards (UNDS) promulgated under CWA § 312(n) and discharges of sewage from both public and private vessels are regulated under other portions of CWA § 312.
- b. Commanding Officers / Officers in Charge shall not enter into agreements with environmental agencies regarding vessel discharges without Commandant (CG-094) and Commandant (CG-45) approval.
 - c. To promote uniformity in treatment of vessel discharges nationwide, Commandant (CG-45) and Commandant (CG-0941E) closely monitor local attempts to impose requirements on ships beyond those specifically provided for by U.S. law or U.S. EPA regulation. Commanding Officers or Officers in Charge shall report any interest expressed by environmental regulators regarding discharges from Coast Guard vessels by message to Commandant (CG-45) with information copies to the chain of command.
15. Prohibited Discharge Zones for U.S. Coast Guard Vessel Wastes. Tables 3-1, 5-1, and 7-1 summarize pollution control discharge restrictions for vessels.
 16. Afloat Environmental Officer. Commanding Officers and Officers in Charge of cutters shall designate the Executive Officer or Executive Petty Officer as the unit's Environmental Officer. The Environmental Officer shall be the CO/OinC's advisor and shall be knowledgeable regarding the requirements and responsibilities of this Manual, as well as applicable State and local environmental requirements. An Afloat Environmental Protection Coordinator (AEPC) may be appointed by the Environmental Officer to help carry out day-to-day functions. Because this Manual is not all inclusive, contacts listed in Chapter 1 of this Manual are available for assistance.
 17. Environmental Planning. While carrying out assigned missions, Operational Commanders and Commanding Officers have an obligation to avoid unnecessary damage to air and water quality. Commanders must closely observe laws, regulations, and policy in all operations. Failure to consider environmental requirements or effects early in the planning process could result in operational delays. Early actions or mitigating measures to protect air and water quality should result in minimal or no limitations or impacts on mission objectives. Environmental planning must be meticulous to achieve compliance, avoid unnecessary environmental degradation, and maintain public image and support for the continued use of operating areas. Environmental planning may lead to selecting more favorable operating areas or to establishing environmental "rules of engagement". That will result in operational success while achieving environmental protection. For assistance in planning, see the contacts section of Chapter 1.
 18. Awards and Recognition. Those individuals or units who distinguish themselves as good environmental stewards; whether by innovation, waste reduction, or in other areas of excellence are strongly encouraged to nominate themselves or others for the annual awards outlined in the Environmental Awards Program COMDTINST 5090.5 (series).

B. TRAINING.

1. The Environmental Officer is responsible for ensuring environmental training is provided to all personnel upon reporting aboard an afloat unit, and annually thereafter. Training resources can be found on the “Vessel Environmental” page within CG Portal. Training shall include:
 - a. A review of the Commandant’s Sustainability, Environmental, and Energy Policy Statement.
 - b. Watching the environmental awareness video available on the CG Portal from the Vessel Environmental homepage > Shared Documents > Training Tools > Environmental Training Videos.
 - c. Take the recommended online Collateral Duty Environmental Coordinator course, which can be found at http://epss.uscg.mil/evc_epss/index.htm.
 - d. The unit’s environmental program. This training should be part of the unit’s indoctrination program for all personnel and shall include pollution prevention, solid waste handling and minimization, plastics management, recycling, air pollution, and oil and hazardous substance spill response.
 - e. The member’s responsibility with regard to this program. Training may be accomplished using videos for general subject matter and with subject matter experts onboard for unit-specific topics.
2. Watch station personnel responsible for authorizing the overboard disposal of shipboard wastes shall receive training on the prohibitions applicable to, and special requirements governing the discharge of shipboard wastes as a part of the qualification process for the watch.
3. Training requirements will be incorporated into future revisions of the Cutter Training and Qualification Manual, COMDTINST M3502.4 (series) and Personnel Qualification Standards/Job Qualifications Requirements (JQR).

CHAPTER 3. SEWAGE AND GRAYWATER

A. LEGISLATION AND REGULATIONS.

1. The U.S. is not a party to Annex IV of the International Convention for the Prevention of Pollution From Ships, 1973, as modified by the Protocol of 1978, commonly known as MARPOL Annex IV (Prevention of Pollution by sewage from Ships. Under U.S. law, the discharge of sewage is governed by CWA § 312 and its implementing regulations (primarily 33 CFR part 159, which governs Marine Sanitation Devices [MSDs], and 40 CFR part 140). Note that, under CWA § 312(f), EPA (at the request of the individual states) can prohibit the discharge of sewage altogether in “no discharge zones”.

B. COAST GUARD POLICY.

1. Compliance with Regulations. To ensure compliance with Federal regulations regarding sewage and graywater:
 - a. Vessels shall be equipped with MSDs designed to prevent the discharge of untreated or inadequately treated sewage, or any waste derived from sewage, within the territorial seas (as defined in the glossary) of the United States. Table 3-1 provides a comparison of Federal discharge restrictions.
 - b. MSD installations shall include the capability for pumping collected sewage and graywater to appropriate shoreside reception facilities. Vessels shall be fitted with cam-lock sewage discharge connections in 4-inch, 2-1/2-inch, or 1-1/2-inch sizes, depending on the size of the vessel. Such fittings shall allow quick connect/disconnect with shoreside offloading hoses. Boats that have portable or removable MSDs are exempted from this requirement.
 - c. Although the US is not a party to MARPOL Annex IV, as a matter of policy, vessels visiting foreign ports shall be equipped with adapters to accommodate hoses having international-standard flanges specified by the International Maritime Organization in Annex IV, Regulation 11 of the International Convention on the Prevention of Pollution from Ships (MARPOL). Table 3-2 provides specifications for such adapters.
 - d. Vessels of all sizes shall comply with sewage placard and label direction found in Naval Ships Technical Manual (NSTM) 593, “Pollution Control”. Boats with portable or removable MSDs may use the manufacturer’s provided placards and instructions in lieu of those required by NSTM 593.
 - e. Industrial wastewater shall not be disposed through the vessels’ sewage or graywater collection and transfer systems. Following use, industrial wastewater shall be delivered to a shore activity for processing to determine if it has further use and, if not, disposal as waste.

TABLE 3-1
SUMMARY OF POLLUTION CONTROL DISCHARGE RESTRICTIONS¹
(Sewage and Graywater)

Area	Sewage	Graywater
Great Lakes	No discharge of raw sewage (from CHT). Discharge of MSD-treated effluent allowed except in EPA-designated “no-discharge” zones. ²	Refer to detailed guidance in Section 3 of this chapter.
U.S. Ports, 0 - 3 nm from land, and U.S. Internal waters	No discharge of raw sewage (from CHT). Discharge of Type I or II MSD-treated effluent allowed except in EPA-designated “no-discharge” zones. ²	Refer to detailed guidance in Section 3 of this chapter.
>3 nm from land	Direct discharge permitted.	Direct discharge permitted.
EPA designated “no-discharge” zones ²	No discharge.	Direct discharge permitted.
Foreign Countries (0-12 nm)	See Visit Clearance or SOFA (as delineated in the Port Guide or LOGREQ reply). If sufficient guidance not available, no discharges within 3 nm when sewage reception facilities available. If not feasible, follow standards observed by host nation warships.	See Visit Clearance or SOFA (as delineated in the Port Guide or LOGREQ reply). If sufficient guidance not available, follow standards observed by host nation warships.
Comments	Direct discharge allowed within 3 nm under emergency conditions.	Comply with state and local regulations regarding discharge of graywater.

1. Federal standards. State and local standards may differ. See cutter-specific Unit Environmental Guide (UEG) for additional information.

2. See Appendix A for definitions and Appendix J for acronyms.

**TABLE 3-2
STANDARD DIMENSIONS OF FLANGES FOR INTERNATIONAL SEWAGE
DISCHARGE CONNECTIONS**

Description	Dimension
Outside Diameter	210mm (8 ¼ in)
Inner Diameter*	Sized to fit mating hose or piping
Bolt Circle Diameter	170 mm (6 11/16 in)
Slots in Flange	4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. Slot width to be 18mm.
Flange Thickness	16 mm (5/8 in)
Bolts and Nuts	4, each of 16 mm diameter and of suitable length.
Operating Pressure	6 kg/cm ² (85 psi)

* For vessels having a molded depth of 5 m (16 ft) or less, the inner diameter of the discharge connection may be 38 mm (1.5 in).

2. General Procedures. Marine Sanitation Devices shall be operated in accordance with the following procedures:
 - a. Except while in the Great Lakes, U.S. territorial seas or a MARPOL Annex IV special area, while operating beyond 3 nm from shore vessels may discharge all sewage and graywater directly overboard. Vessels equipped with a USCG-approved Type I or II MSD shall treat all sewage prior to discharge.
 - b. Personnel shall not dispose of new or used oil of any kind, oily wastes, oily mixtures, solvents, petroleum products, or other industrial wastes to MSDs or graywater collection systems or dump them down sinks or deck drains. Industrial wastes and used solvents shall be containerized and labeled appropriately in accordance with existing regulations for disposal ashore.
 - c. If configured to do so, while in port vessels shall collect graywater in installed MSDs or graywater collection systems and discharge to a shore facility.
3. Procedures when operating on the Great Lakes, internal waters, or within U.S. territorial seas. When on the Great Lakes, internal waters, or territorial seas (as defined in the

glossary), untreated sewage whether commingled with graywater or not shall not be discharged except in an emergency. If untreated sewage must be discharged, the release must be the absolute minimum required and reports shall be made to the same contacts as for a spill identified in Chapter 9. Detailed sewage and graywater guidance is as follows:

- a. Vessels with Type I or Type II MSDs: Vessels equipped with Type I or Type II MSD (includes select WLB buoy tenders and ANB Aids-To-Navigation Boats) may discharge treated commingled effluent except when in an EPA approved State no-discharge zone. EPA approved State no-discharge zones apply only to untreated and treated sewage and commingled sewage/graywater discharges; they do not apply to graywater-only discharges. A list of the state no-discharge zones can be found at <http://water.epa.gov/polwaste/vwd/vsdnozone.cfm>.
 - b. Vessels with Type III MSDs and segregated graywater tanks: Type III MSDs do not treat sewage or graywater. A Type III MSD simply allows vessels to collect, hold, and transfer untreated waste. Most vessels are configured with a Type III MSD. Vessels equipped with a Type III MSD and segregated graywater tanks shall segregate graywater and only discharge it when operationally unavoidable.
 - c. Vessels with Type III MSDs but no segregated graywater tanks: Vessels with a Type III MSD that are configured only with a sewage tank (i.e. graywater is either discharged directly overboard or commingled with sewage in the single tank) shall retain graywater only if there is enough tank holding capacity for the expected operational period. If there is not enough capacity in the single tank for the expected operational period, graywater shall be isolated from sewage if configured to do so and discharged overboard. In this situation, graywater production shall be minimized.
 - d. Vessels configured to only discharge untreated graywater directly overboard shall minimize the production and discharge of graywater in port.
4. Procedures when operating south of 60° South Latitude (Antarctica special area).
- a. Discharge of sewage overboard is permitted beyond 12 nm from shore or ice shelves.
 - b. Discharge of graywater overboard is permitted beyond 12 nm from shore or ice shelves.

CHAPTER 4. AIR EMISSIONS

A. LEGISLATION AND REGULATIONS.

1. International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL). Annex VI (Prevention of Air Pollution from Ships).
2. The Clean Air Act (CAA). Under the (Federal) Clean Air Act (CAA), which generally requires Federal agencies to comply with Federal, State, local, and interstate air pollution control requirements, states are generally allowed to regulate “stationary sources”. Restrictions on air emissions from painting operations on vessels at shipyards are typical of such “stationary source” requirements. Vessel engines, however, are generally regulated not as “stationary sources”, but rather as “mobile sources”, which consists of “motor vehicles” and “nonroad vehicles”. Emissions from vessel engines fall within the latter (nonroad) category. CAA § 209(e) generally prohibits states from establishing emissions standards for engines for nonroad vehicles. Instead, EPA establishes standards for nonroad vehicles under CAA § 213 and specific EPA standards are usually applied to a particular engine at the time the vessel is manufactured or remanufactured. There are very limited exceptions to this general rule. If a state attempts to impose restrictions on a vessel’s main propulsion engine or on an auxiliary engine, check with the Legal Office to determine if the state has authority to do so. Federal law requires Federal agencies to comply with Federal, State, interstate and local air pollution requirements. Although most air pollution regulations address shore-side sources, Coast Guard vessels operating within U.S. and State waters may also be subject to certain regulations.
3. Protection of Stratospheric Ozone, 40 C.F.R. part 82.
4. National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 C.F.R. § 61.

B. COAST GUARD POLICY.

1. Compliance with Regulations. Coast Guard vessels shall comply to the extent practicable with applicable Federal, state and local regulations governing air pollution emissions. For assistance determining regulations, consult Unit Environmental Guides, your Product Line Asset Manager, the SFLC (ESD) Environmental Specialist or Commandant (CG-452). Many of the Coast Guard’s legacy vessels have engines designed and built decades ago when emission standards were less stringent than they are today. However, the Coast Guard will take all practicable measures to comply with today’s standards.
2. Procedures.
 - a. All engines shall be properly maintained and prudent start up and warm up procedures shall be observed. Since opacity is generally a concern when starting a cold engine and when going from a no- or low-load condition to a load condition, Coast Guard vessels shall adhere to maintenance schedules and plan events such as departures to include proper warm up procedures. If unsure about a particular application, consult your SFLC Port Engineer or Base Naval Engineering Department

- representative. This guidance does not preclude urgent departures for necessary operations.
- b. In port, Coast Guard vessels shall minimize operation of boilers and diesel engines by using shore-provided hotel services whenever operational requirements permit. Blowing of boiler tubes shall be limited in port to the minimum necessary to conform to the provisions of NSTM, Chapter 221.
 - c. Incinerators may be used per paragraph 7.B.5 of this Manual.
 - d. Personnel shall use only authorized solvents, paints, fuels, lubricants and chemicals. The Coatings and Color Manual, M10360.3 (series) and Naval Engineering Manual, M9000.6 (series) provide guidance on authorized and unauthorized materials on vessels. The Navy standard for chemical cleaning products and dispensing systems authorized for use aboard surface (non-submarine) vessels (NAVSEA S6480-A4-CAT-010) has been adopted for use on Coast Guard vessels. A copy of this NAVSEA document can be found on the CGPortal at the following URL:
<https://cgportal2.uscg.mil/communities/vessel-environmental/SitePages/Home.aspx>
3. Asbestos. The Coast Guard's asbestos policy is contained in the Asbestos Control Exposure Manual, COMDTINST M6260.16 (series). This reference outlines policy and procedures, including training and personal protective equipment requirements, which apply when working with asbestos, including the removal of asbestos-containing deck tiles, replacement of asbestos-containing gasket/packing material and preventive maintenance on asbestos-containing brake assemblies.
 4. Ozone Depleting Substance (ODS). The Coast Guard's ozone depleting substance policy is contained in Management Guide for Refrigerants, Coolants, and Fire Suppressants, COMDTPUB P6280.3 (series). A copy of this publication can be found at this URL:
https://cgportal2.uscg.mil/library/COMDTPUB/CP_6280_3.pdf
 5. Vessel Marine Coatings. The Coast Guard's marine coating policy, including volatile organic compound limitations, is contained in the Coatings and Color Manual, COMDTINST M10360.3 (series).

CHAPTER 5. BILGES, OIL AND OILY WASTE

A. LEGISLATION AND REGULATIONS.

1. International Convention for the Prevention of Pollution from Ships, 1973/78, as amended (MARPOL). Annex I of MARPOL addresses oil pollution from vessels at sea. MARPOL prohibits the discharge into the sea of any oil or oily mixtures from a ship except under certain circumstances.
2. The Act to Prevent Pollution from Ships (APPS), 33 U.S.C. § 1901, et. seq. APPS implements the stringent discharge requirements of MARPOL Annexes I (Oil), II (Noxious Liquid Substances), V (Garbage), and VI (Air Quality).
3. The Clean Water Act (CWA) (generally codified among other amendments at 33 U.S.C. §§ 1251-1387). The CWA prohibits the discharge of oil in a harmful quantity into waters within 12 nm of the U.S. coast, or in a quantity that may affect the natural resources of the U.S. in the EEZ. U.S. EPA regulation 40 CFR 110.3 defines discharge of oil that may be harmful as those that: (a) violate applicable water quality standards; or (b) cause a film or sheen upon or discoloration of the surface of the water or upon adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.
4. International Maritime Organization Annex 13 MEPC 107(49). Adopts the guidelines and specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships and supersedes MEPC.60 (33). The revised guidelines and specifications apply to all equipment installed on board on or after 1 January 2005. All Oily Water Separators shall be examined and tested in accordance with requirements of the specifications contained in this resolution.

B. COAST GUARD POLICY.

1. Defining Oil. When seeking to comply with international and US oil discharge regulations, Commanding Officers and Officers in Charge should be aware that the definition of oil might not be consistent worldwide. For example, a discharge of vegetable oil that causes a sheen, while not a violation of MARPOL Annex I, is a violation of the U.S. Clean Water Act.
2. Clean Water Act Compliance. Per the Clean Water Act, no discharge that produces a sheen is permitted within the territorial sea and contiguous zone of the U.S., and no discharge of oil that may affect the natural resources is permitted in the EEZ.
3. APPS Compliance. Vessels operating in MARPOL Annex I Special Areas shall refrain from discharging any oil or oily waste to the extent practicable without endangering the vessel. Oil and oily waste discharges that are necessary in Annex I special areas or elsewhere on the high seas shall comply with the requirements listed below.

- a. On vessels equipped with oily water separators (OWSs) and oil content monitors (OCMs), OWS discharges shall be limited to those that meet the conditions in Table 5-1. No effluent standard, including oil content, shall be achieved through dilution.
 - b. Equipment casualties that either threaten or result in a discharge of oily water shall be reported through the SFLC Product Line prescribed casualty reporting system. The initial report shall note the potential for discharge. All subsequent reports shall report the frequency and approximate amount of actual discharges. Chapter 9 outlines all spill-reporting requirements.
 - c. On vessels without an operating OWS but with an oily waste holding tank (OWHT), all oily water shall, to the maximum extent possible, without endangering the vessel, be directed to the OWHT for shore disposal. Equipment casualties that either threaten or result in a discharge of oily water shall be reported through the SFLC Product Line prescribed casualty reporting system. The initial report shall note the potential for discharge. All subsequent reports shall report the frequency and approximate amount of actual discharges. Chapter 9 outlines all spill-reporting requirements.
 - d. On vessels with neither an operating OWS nor OWHT, all oily water shall be retained for shore disposal to the maximum extent possible without endangering the vessel. Unpowered vessels and vessels using only outboard engines often have open-hull design and have no machinery space bilges. As such, those vessels may discharge bilgewater / deck runoff so long as no visible sheen is present. Except in an emergency, if a sheen exists, the bilgewater /deck runoff shall be retained for proper shore side disposal. Equipment casualties that either threaten or result in a discharge of oily water shall be reported through the product line prescribed casualty reporting system. The initial report shall note the potential for discharge. All subsequent status reports shall report the frequency and approximate amount of actual discharges. Chapter 9 outlines all spill-reporting requirements.
4. Operation of OWS In Port. Operation of the OWS inport is prohibited. Vessels shall maximize segregation of oily waste derived from used oils, OWS separated oils and contaminated fuel oil unless in an emergency circumstance or if the vessel is fitted with an incinerator or boiler capable of burning waste oil. Shoreside disposal of oily waste derived from used oils, OWS separated oils and contaminated fuel oil is the only disposal method for oily waste/used oil. Operation of the OWS shall only be conducted while underway and greater than 12 nm from shore and outside of special areas. Discharged effluent may not exceed 15 ppm (parts per million) in accordance with MARPOL Annex I, Regulation 15 on control of discharge of oil. Any effluent exceeding 15 ppm must be retained onboard. Operation of the OWS is strictly prohibited in MARPOL Annex I “Special Areas”.

TABLE 5-1
SUMMARY OF POLLUTION CONTROL DISCHARGE RESTRICTIONS¹
(Bilges and Oily Waste)

Area	Bilges / Oily Waste
Great Lakes	No discharge. OWS use is not permitted.
0 - 3 nm, including pier side U.S. Internal Waters and Territorial Seas.	No discharge. OWS use is not permitted.
> 12 nm	Discharge must be through the OWS that has a calibrated OCM and avoid discharging oil mixtures with an oil content above 15 ppm of the mixture.
Those MARPOL Annex I "Special Areas" ⁽²⁾	Refrain from discharging any oil or oily waste to the extent practicable without endangering ship or impairing operations.
Foreign Countries (0-12 nm)	Follow LOGREQ, Port Visit Clearance and SOFA. If not available, follow guidance above. If not feasible, follow standards observed by host nation warships.
Comments	<ol style="list-style-type: none"> 1 State/local rules may vary; check with port authorities. 2 Exemption allowed to ensure safety of ship or those aboard. 3 Discharges of oily wastes, whether to shore facility or via OWS must be logged in the Machinery Log.

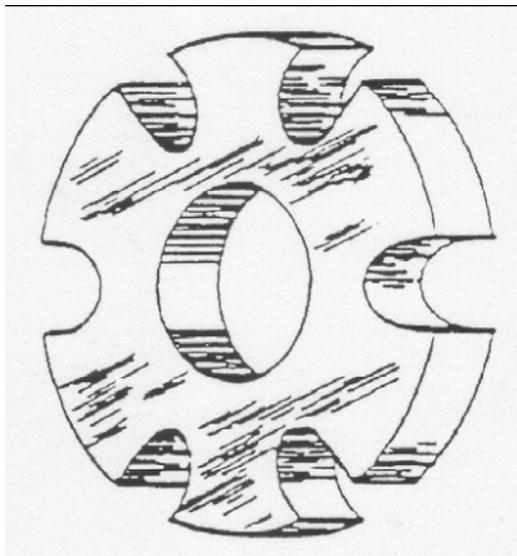
1. Federal Standards.
2. See Appendix A for definitions and Appendix J for acronyms.

5. Vessel Equipment. During acquisition and sustainment, cutters and boats must be properly configured to adequately address waste streams. The following equipment/systems shall be installed on cutters to allow proper segregation and collection of used oil.
 - a. OWSs, OCMs, OWHTs, and dirty oil tanks to allow adequate processing of oily waste prior to its discharge overboard and to allow proper segregation and collection of used oil. All new construction with a keel lay date of 1 Jan 2005 or later equipped with an OWS and OCM, shall have an International Maritime Organization (IMO) Marine Environment Protection Committee (MEPC) 107(49)-compliant, certified OWS. All retrofits or renewals of existing OWSs shall be with MEPC 107(49)-compliant and certified OWSs and OCMs, if possible.
 - b. Bilge pumps (oily waste transfer pumps), piping risers, and weather-deck connections to allow safe and convenient ship-to-shore transfer of oily waste.
 - c. Cam-lock discharge connections for oily waste/used oil discharge to allow quick connect/disconnect with shoreside offloading hoses.
 - d. Oily waste/used oil adapters to accommodate hoses with standard International Maritime Organization (IMO) flanges for use when visiting foreign or non-Coast Guard ports.
 - e. Mechanical seals on appropriate pumps to minimize the quantity of oily wastewater collected in ship bilges.
 - f. Tank level indicators to reduce the potential for overboard spills during fueling, oil, and oily waste handling and transfer operations.
 - g. Oil placards and labels shall, at a minimum, be placed on the OWS, near the oily water transfer pump, in the vicinity of all overboard discharge valves, deck riser, and any pump capable of discharging oily waste. The placard should be conspicuous, measure 5 by 8 inches, and made of a durable material. Paper placards are insufficient. The placard shall state the following:

DISCHARGE OF OIL PROHIBITED

The Federal Water Pollution Control Act/Clean Water Act (CWA) prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States, or the waters of the contiguous zone, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States, if such discharge causes a film or discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to substantial civil penalties and/or criminal sanctions including fines and imprisonment.

DISCHARGE SHALL NOT EXCEED 15 PPM OF OIL

STANDARD IMO OIL DISCHARGE FLANGE**FIGURE 5-1****TABLE 5-2****STANDARD DIMENSIONS OF FLANGES FOR OIL DISCHARGE CONNECTIONS**

Description	Dimension
Outside Diameter	215 mm (8 15/32 in)
Inner Diameter	Sized to fit mating hose or piping
Bolt Circle Diameter	170 mm (6 11/16 in)
Slots in Flange	6 holes 22 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. Slot width to be 22 mm.
Flange Thickness	22 mm (7/8 in)
Bolts and Nuts	6, each of 20 mm diameter and of suitable length.
Operating pressure	6 kg/cm ² (85psi)

6. Operational and Management Requirements. NSTM 593 provides detailed procedural instructions implementing these requirements.
 - a. Bilge Water and Oily Waste:
 - (1) Bilge water and oil contamination of bilge water shall be minimized. Proper segregation of oily and non-oily wastewater will greatly reduce the generation of oily waste.
 - (2) When fuel tanks are ballasted (not in segregated ballast tanks), the ballast water taken aboard is considered an “oily mixture”. See Chapter 10 in this Manual for de-ballasting procedures.
 - (3) Bilge cleaners or chemical agents that promote chemical emulsion (i.e., detergents and surfactants) shall not be used for machinery space cleaning. Prohibition of these substances enables OWSs to perform more effectively. Short-lived detergents identified in NAVSEA S6480-A4-CAT-010 “Authorized chemical cleaning products & dispensing systems catalog” may be used for bilge cleaning.
 - (4) Bilge water or oily waste containing chemical emulsion agents or contaminants from other-than-routine sources of bilge water shall be offloaded to shore receiving facilities. If bilge water or oily waste has become contaminated from other than routine sources, such as aqueous film-forming foam (AFFF), solvents, anti-freeze, or other hazardous materials, the receiving shore facility shall be advised of such prior to offload. Since some states may consider bilge water to be contaminated, consult with the host receiving facility for collection and discharge requirements.
 - (5) In port, maximize separation, recycling, and reuse of oil. Minimize production of bilge water and oily waste. While in a Coast Guard or Department of Defense (DoD) port, bilge water and oily wastes shall be disposed of in accordance with supporting activity guidance.
 - (6) Emergency dewatering. Except in emergency situations, eductors shall not be used to dewater bilges. If an eductor must be used, every effort shall be made to discharge beyond 12 nm from land. A Machinery Log entry shall be made concerning eductor use to discharge bilge waste overboard, recording location, date, contents of bilge and estimated quantity. The vessel’s OPGON and Commandant (CG-45) shall also be notified. If at any time a sheen is created on the water, the Commanding Officer or Officer in Charge shall make reports per Chapter 9 of this Manual.

- b. Used Oil:
- (1) Maximum use shall be made of available port facilities for disposal of all waste/used oil products prior to departing and upon entering port. Facilities include pier-side collection tanks, tank trucks, and contaminated fuel barges.
 - (2) Synthetic lube oils and hydraulic oils shall be collected separately from other waste/used oils. If a vessel is configured to collect used synthetic oils, personnel shall use 5 or 55-gallon steel containers, properly labeled per the Hazardous Waste Management Manual, COMDTINST M16478.1 (series) for eventual shore recycling.
 - (3) Containers (such as drums, cans, etc.) in which oil products were originally packaged shall be reused and properly labeled per the Hazardous Waste Management Manual, COMDTINST M16478.1 (series) for storage and transfer to shore.
- c. Fueling, de-fueling, transferring fuel internally, and offloading oil in restricted waters shall be conducted during normal daylight working hours, when operating schedules permit. Before finalizing fueling or transfer arrangements within the U.S., ensure the facility (shore or mobile) has a current and valid Operations Manual for transfer operations that has been examined by the cognizant Captain of the Port in accordance with Title 33 CFR 154.325. These evolutions shall be conducted with well-trained personnel and per the bills listed in the Engineering Casualty Control Manual and Naval Engineering Manual, M9000.6 (series). All fueling or transfer personnel shall be thoroughly briefed prior to each fueling evolution. The following precautions shall be observed to minimize spills:
- (1) Maintain topside watches at all locations of possible spills, and arrange direct communication to fuel transfer pump stations.
 - (2) Establish check-off lists and procedures for personnel assignments, valve alignment, and transfer operations. Double-check alignment of all transfer system valves.
 - (3) Use only qualified and trained personnel to perform the detailed transfer procedures.
 - (4) Continuously monitor each tank level while filling with fuel. Use remote tank-level indicators when available, as the primary method of obtaining tank levels.
 - (5) Prior to actual fuel transfer, transfer personnel shall inform the responsible ship's officer (Commanding Officer, Officer in Charge, Command Duty Officer, and/or Officer of the Deck) and the fuel supplier that the ship is ready to commence fueling operations.

- (6) Ensure communications are established and maintained with fuel delivery personnel, being mindful of any language barriers. Ensure emergency procedures are understood and agreed upon before commencing operations.
- d. Fuel Tank Stripping:
- (1) Eductors shall not be used to strip fuel tanks.
 - (2) During fuel tank stripping operations, water and sediment are allowed to separate from the fuel. Water and sediment are stripped to the OWHT and usable fuel is returned to the fuel storage tanks. Do not discharge fuel tank stripping water, sediment or fuel overboard.
- e. Oil-contaminated Solid Waste:
- (1) On vessels without incinerators, personnel shall containerize oil and fuel filters and any other items soaked with oil for shore disposal.
 - (2) On vessels with incinerators, oil-soaked or fuel-soaked filters and rags may be incinerated only as directed in the incinerator manufacturer's technical publications and this Manual. Care must be taken when loading high-caloric value items such as oil filters to include a proportionate amount (as defined by the incinerator manufacturer) of low-caloric value items.
 - (3) All rags that are not incinerated or recycled aboard shall be stored in suitable closed containers designed to contain flammable or combustible materials in a space fitted with adequate ventilation and fire suppression systems.
- f. Recording oil movement:
- (1) Entries shall be made in the Machinery Log whenever any of the following machinery space operations take place: ballasting or cleaning of fuel oil tanks, discharge of dirty ballast or cleaning water from fuel oil tanks, disposal of oily residues (sludge), and discharge overboard or disposal otherwise of bilge water that has accumulated in machinery spaces. Entries shall include at a minimum, the initial location, equipment used, quantity, and destination of the movement.
 - (2) In the event of an emergency, accidental or other exceptional discharge of oil or oily mixture, a statement shall be made in the Machinery Log outlining the circumstances and the reasons for the discharge. Additionally, the Commanding Officer or Officer in Charge shall make an entry in the Unit Log that states what notifications were made and when. See Chapter 9 of this Manual regarding spills.
 - (3) Decreasing oil levels in equipment having oil-to-sea interfaces such as controllable pitch propellers (CPPs) and bow thrusters may be an indication of overboard oil discharges. Investigate any unexplained drop in equipment oil levels.

- g. Procedures when operating south of 60° South Latitude (Antarctica special area):
- (1) No unprocessed machinery space bilge water discharge is permitted in the Antarctic area. Bilge water must be retained onboard for discharge at a reception facility.
 - (2) Oily water mixtures may be discharged overboard under the following conditions:
 - (a) Vessel is underway.
 - (b) Discharge is less than 15 ppm of oil through a properly functioning OWS.
 - (c) The vessel is not in ice.
7. Exemptions. At certain times and under certain circumstances exemptions from oily waste restrictions may be necessary. Instances of specifically authorized exemptions include the following: A Coast Guard vessel may discharge oily waste to the sea in a situation in which a Commanding Officer or Officer in Charge determines that a discharge of such wastes is required to ensure ship or crew safety. Commanding Officers or Officers in Charge shall minimize such discharges and shall treat the discharge as an oil and hazardous substance spill ensuring the recording of details of the discharge (nature, quantity and geographic location) in the Machinery Log and immediately report it per the requirements of Chapter 9 of this Manual.

C. **TRAINING.**

1. FORCECOM has worked with CG Program Offices to add environmental policy instruction to CG “A” and “C” schools.
2. FORCECOM is conducting an analysis of the tasks performed by personnel operating the Oily Water Separator and investigating barriers that may influence and improve performance. The analysis will result in recommendations for performance support interventions.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 6. HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT

A. LEGISLATION AND REGULATIONS.

1. The Clean Water Act (CWA) (generally codified among other amendments at 33 U.S.C. §§ 1251-1387). The CWA prohibits the discharge of hazardous substances in a harmful quantity into all waters within 12 nm of the U.S. coast, or in a quantity which may affect the natural resources of the U.S. in the EEZ. U.S. EPA regulation provides a list of hazardous substances and their reportable quantities at 40 CFR 117.
2. The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq. (1976). RCRA regulates generation, treatment, storage and disposal of hazardous waste. RCRA provides that Hazardous Waste generated on public vessels is not subject to storage, manifest, inspection or record keeping requirements until the ship transfers such waste ashore or transfers it to another public vessel within the territorial waters of the U.S. and then only after that vessel stores it aboard for more than 90 days after the date of transfer.
3. The Toxic Substances Control Act (TSCA), 15 U.S.C. § 2601 et seq. (1976). Through TSCA, Federal restrictions govern the manufacture, use, labeling and disposal of polychlorinated biphenyls (PCBs), asbestos and asbestos-containing waste.
4. Occupational Safety and Health Act, 29 U.S.C. § 651-678. The Occupational Safety and Health Administration establishes regulations under Occupational Safety and Health Act. The regulations control the handling and use of hazardous materials, as well as information that must be provided to workers who come into contact with the materials. The Material Safety Data Sheet/Safety Data Sheets (MSDS/SDS) is the document that is used to supply information regarding use and exposure.
5. Hazardous Material Transportation Regulations (49 C.F.R. § 100-185). The Department of Transportation regulates the packaging, handling, and transportation of hazardous material under 49 C.F.R. § 100-185. This includes materials that are ordered for delivery and transported from the ship on a common carrier.

B. COAST GUARD POLICY.

1. Procedures. In addition to the direction provided in the Hazardous Waste Management Manual, COMDTINST M16478.1 (series), used/excess hazardous material shall be managed as follows:
 - a. Regulated material shall not be discharged overboard unless specifically permitted by Coast Guard policy.
 - b. Under no circumstances may used/excess hazardous material be collected from other ships or hazardous waste collected from shore facilities and transported to sea for the purpose of disposal.

2. Ship-to-Shore Transfer.

- a. Used or excess hazardous material shall be transferred to a shore activity for determination of disposition.
- b. Prior to transfer ashore, hazardous material shall be identified to the receiving shore facilities per the host facility's guidance and specific requirements in accordance with established host/tenant agreements. Failure to abide by requirements may delay or even prevent offload ashore in a timely manner. If a container's contents are unknown, host facility personnel shall work with ship personnel to determine the contents. Laboratory analysis fees may apply.
- c. When visiting non-Coast Guard ports and foreign ports, used hazardous material shall be offloaded only when necessary and feasible. The LOGREQ shall identify the type(s) and amount of used hazardous material to be offloaded. Copies of all hazardous waste manifest shall be obtained and kept by the appointed vessels Hazardous Materials Coordinator. If adequate facilities do not exist at non-Coast Guard ports, hazardous material shall be held for offload at a Coast Guard port. All hazardous material shall be properly labeled and containerized. If offload is necessary in foreign ports, Commanding Officers/Officers in Charge must ensure compliance with applicable customs laws and the SOFA.
- d. Prior to entering a shipyard for a maintenance availability:
 - (1) To the maximum extent feasible, used/excess hazardous material shall be offloaded in homeport or other Coast Guard facility.
 - (2) The ship hazardous material coordinator shall contact the Ship Superintendent or Port Engineer. The hazardous material coordinator shall provide a list of the types and amounts of hazardous waste anticipated by ship's force during the availability and be granted the authority and resources to ensure vessel compliance with hazardous material and waste management procedures and site specific management practices established by the Ship Superintendent or Port Engineer.
 - (3) Ensure the contractor is aware that any hazardous waste they generate during the availability is their responsibility to handle and dispose of properly.
- e. For work performed at Coast Guard facilities by Coast Guard personnel, the facility Commanding Officer or Officer in Charge shall promulgate instructions to ensure compliance with this Manual.

3. Ship-to-Ship Transfers. Transfers of hazardous material between Coast Guard vessels are only permitted when the receiving vessel requires the material for use. Transfer of excess Hazardous material between vessels shall be documented in the hazardous material log/inventory by both the transferring and receiving vessels. Transfer of hazardous material to other non-Coast Guard vessels is prohibited.

4. Transporting Shore-Generated Hazardous Waste Aboard Ship. Hazardous waste shall not be accepted from any shore facility at any time.
5. Unused medications. See Chapter 8 of this Manual for proper disposal of unused medications.
6. Labels and placards. Vessels of all sizes shall comply with solid waste placard and label direction found in NSTM 593, "Pollution Control". All waste receptacles shall have labels prominently displayed on them or in the immediate vicinity, describing what is and is not acceptable waste.
7. Procedures When Operating South of 60° South Latitude (Antarctica special area).
 - a. Discharge of hazardous materials overboard is prohibited unless there is a threat to crew safety. Comprehensive log entries are required for all hazardous waste disposed of at sea (include activity, date, time, location, type of waste, quantity, and reason).
 - b. Embarked scientists and civilians shall comply with all Coast Guard standards and directives.
 - c. McMurdo Station may accept hazardous waste if it cannot be retained onboard.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 7. SOLID WASTE

A. LEGISLATION AND REGULATIONS.

1. International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL). Annex V of MARPOL addresses vessel solid waste discharge at sea that is defined as garbage. The MARPOL Convention provides that Annex V requirements do not strictly apply to warships; however, the Act to Prevent Pollution from Ships (below) does require the Coast Guard to establish discharge standards that allow it to serve as environmental stewards while meeting its diverse mission profiles.

NOTE

MARPOL Annex V (garbage) special areas are not necessarily the same as those specified in MARPOL Annex I (oil)

2. The Act to Prevent Pollution from Ships (APPS), 33 U.S.C. § 1901, et. seq. APPS implements the stringent oil, garbage, and air quality discharge requirements of Annexes I, II, V, and VI of MARPOL. The U.S. requirements for the disposal of garbage at sea are summarized in table format at 33 C.F.R. Sections 151.51-151.77, Appendix A.
3. Marine Protection, Research, and Sanctuaries Act, also known as Ocean Dumping Act (33 U.S.C. 1401 et. seq.). The Act prohibits U.S. entities from transporting material from the U.S. or from any other place for the purpose of dumping it into ocean waters, unless a permit has been obtained from the U.S. EPA. In general, it does not apply to waste that is generated aboard ships while underway.
4. Incinerators, (46 C.F.R. § 63.25-9) outlines requirements for the testing, certification, prohibited substances, and overall operation of incinerators.
5. The Clean Water Act (CWA). The CWA regulates the discharge of pollutants (e.g. solid waste) in U.S. waters, including the territorial seas (i.e. to 3nm from the shoreline). Generally, the CWA prohibits discharging harmful quantities of hazardous substances in those waters, in the contiguous zone and anywhere that the discharge may affect natural resources that the U.S. manages exclusively under its own authority.
6. U.S. Department of Agriculture (USDA). USDA Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) office enforces Federal regulations that quarantine and control movement into the United States of certain shipboard waste specifically defined as ‘regulated garbage’ under two applicable Codes of Federal Regulations (C.F.R.). This usually applies to provisions taken on outside the continental U.S.:

- a. Federal Plant Pest Regulations, 7 C.F.R. § 330.400, which were established under the authority of the Plant Protection Act (PPA), became law as part of the Agricultural Risk Protection Act of 2000.
- b. Animal and Animal Products, 9 C.F.R. § 94.5, which were established under the authority of the Animal Health Protection Act (AHPA) consolidating all animal quarantine and related laws, became law as part of the Farm Security and Rural Investment Act of 2002 (better known as the “2002 Farm Bill”).

B. COAST GUARD POLICY.

1. General:

- a. All cutters 87 ft or more in length shall have a garbage management plan. This plan shall provide written procedures for collecting, storing, processing and disposing of garbage, including the use of the garbage management equipment installed on board. It shall also designate the person in charge of carrying out the plan. The garbage management plan should be incorporated as a chapter in cutter organization manual. A template for a garbage management plan is available at the Vessel Environmental page on CG Portal at <https://cglink.uscg.mil/eabf18af>. From here click on “Garbage Management Plan-template.”
- b. If the garbage management plan cannot be implemented or if after having done so, unit missions are negatively affected, document and notify area or district staffs of the mission impact as soon as operationally practicable.
- c. All cutters shall annotate all garbage discharges in its official smooth log. Each discharge operation, or completed incineration, shall be recorded. The entry for each incineration or discharge shall include date and time, position of the ship, description of the garbage and the estimated amount incinerated or discharged. In the event of an accidental or emergency discharge of garbage, an entry shall be made in the smooth log detailing the circumstances and reasons for the discharge. There shall also be an official notification of Commandant (CG-751), (CG-452), and (CG-0941E) and the cutter’s operational commander via official message traffic within 72 hours of the incident. A template for this message may be found in Appendix H.
- d. Commands are strongly encouraged to re-examine existing garbage management practices to include:
 - (1) Ensuring all installed garbage management equipment (incinerator, compactor, and/or comminuter) is operational.
 - (2) Encouraging routines to reduce the amount of garbage generated while underway. Particular focus must be given to reduce the amount of disposable materials (e.g., packaging) that are brought aboard prior to a deployment.
- e. The volume of packaging material and disposable items taken to sea that may become waste while at sea shall be minimized. Whenever possible, packaging and shipping

materials shall be removed from supply items before bringing them aboard. Personnel shall remove all unnecessary packaging from personal items brought aboard and shall avoid beginning deployments with partially full consumable items.

- f. Fluorescent light bulbs contain a small amount of mercury and shall not be broken, but shall be retained intact for shore disposal. Fluorescent bulbs may break accidentally when being changed or stored. Consider using a drop cloth when changing a fluorescent bulb in case a breakage should occur. The drop cloth will help prevent mercury contamination of nearby surfaces and can be bundled with the bulb debris for disposal. Detailed instructions for cleaning up a broken fluorescent bulb can be found at: <http://www2.epa.gov/cfl/cleaning-broken-cfl>.
 - g. Ships equipped with pulpers and garbage disposals are configured to discharge either to the graywater system or directly overboard. Placards shall be posted stating where the effluent goes and how to properly handle it as described in other sections of this Manual. The use of pulpers or disposals that discharge directly overboard is prohibited within 3 nm of any coastline.
 - h. Emergencies. Sections 2 and 3 below shall not apply when the disposal of garbage is necessary for the purpose of securing the safety of a ship and those on board or saving life at sea, or when the accidental discharge of garbage is due to damage and all reasonable precautions have been taken before and after the occurrence of damage to prevent or minimize the accidental discharge.
2. Within MARPOL Annex V Special Areas (Regulation 5):
- a. Disposal into the sea of the following is prohibited: all plastics, including but not limited to synthetic ropes, plastic garbage bags and incinerator ashes from plastic products which may contain toxic or heavy metal residues, and all other garbage, including paper products, rags, glass, metal, bottles, crockery, dunnage, lining and packing materials.
 - b. When garbage is mixed with other discharges having different disposal or discharge requirements, the more stringent requirements shall apply.
 - c. Except as provided in paragraph 1.c, food wastes, either ground or unground, shall only be discharged outside 12 nautical miles from the nearest land.
 - d. Discharges of food waste must be made while the ship is proceeding en route. En route means that vessels shall be underway and making way, on a course that spreads the discharge as much as practicable.
 - e. Incinerators may be used per Section 5 of this chapter. Incinerator ash may not be disposed of at sea while in a Special Area.

- f. Equipment casualties that either threaten or result in a discharge of plastics shall be reported through the prescribed Product Line casualty reporting system. The initial report shall note the potential for discharge and list Commandant (CG-452) as an addressee. The commencement, duration and amount of such discharges of plastics shall be reported to the appropriate operational commander.
 - g. If any type of garbage, other than food waste, must be discharged due to special operational circumstances that impact the health, safety, and sanitation of the crew and cutter, in addition to the record keeping requirements detailed in B.1.c of the chapter, an official message detailing the location, amount, type and reason for this discharge must be reported to Commandants (CG-751), (CG-452), (CG-0941E), and their operational commander within 72 hours of the discharge. The same template may be referenced in paragraph B.1.c above.
 - h. The release of military equipment containing plastic is regulated differently than plastic waste. The plastic retention requirements apply only to disposal of plastic waste. These requirements do not apply to normal use of expendable military equipment that contains plastic, such as targets, synthetic buoy line, weather balloons, sonar buoys, etc., because the plastic in these items is not considered "waste" when normal use of the items results in their release into the ocean. However, in keeping with the goal to protect the marine environment, expendable items that can be retrieved after use, particularly targets, should be retrieved if safe and practicable to do so. Once collected after use, plastic components of such items should be regarded and managed as plastic waste.
3. Outside MARPOL Annex V Special Areas:
- a. Though requirements are less stringent outside Special Areas, Commands shall strive to hold all garbage, with the exception of food waste, until able to offload to a suitable shore facility. If garbage exceeds on board storage capacity, follow the discharge requirements detailed below.
 - b. Except as noted in paragraph. 2(h), above, no plastics shall be discharged to the marine environment from Coast Guard vessels.
 - c. No garbage discharges shall occur within 3 nm of any coastline.
 - d. For vessels equipped with the necessary processing equipment, food waste, paper and cardboard shall be processed into a non-floating slurry with seawater, such that the effluent is capable of passing through a screen with openings no larger than one inch diameter. This slurry may be discharged when outside of 3 nm from land.
 - e. For vessels equipped with the necessary processing equipment, metal and glass shall be compacted/crushed and bagged to ensure negative buoyancy. This may be discharged when outside 12 nm from land.

- f. Incinerators may be used per Section 5 of this chapter. Incinerator ash may be disposed of at sea when outside 12 nm, so long as the ash does not contain any toxic chemicals, heavy metals, or incompletely burned plastics.
 - g. Vessels that do not have the necessary equipment installed to process the garbage to the standards described above, or cannot comply due to operational necessity or equipment casualties, shall follow the guidance listed below:
 - (1) For non-floating garbage such as non-ground paper, cardboard, cloth, metal, glass and food waste, discharges shall only occur outside 12 nm from land.
 - (2) For all other garbage types, discharge shall only occur outside 25 nm from land.
 - h. Coast Guard vessels are prohibited from taking on any material in port for the purpose of dumping it at sea. Transporting any material to sea for the purpose of dumping requires a permit from the U.S. EPA. In most cases, obtaining a permit is a complex undertaking and beyond the capability of afloat units.
 - i. Surplus materials that can be stored reasonably and safely on board, such as damaged equipment or office furniture, shall be retained aboard for shore disposal.
4. Foreign Food and Garbage:
- a. Personnel shall comply with USDA regulations pertaining to ship introduction of foreign-source garbage into the U.S., its territories and possessions. Foreign-source garbage shall be addressed in LOGREQ and LOGREQ replies.
 - b. If practicable, ships shall totally consume all produce (fruits and vegetables) bought in any foreign port or dispose of it beyond 25 nm from U.S. shores. If not disposed of before entering within 25 nm from shore, ships shall segregate such produce as food wastes and dry materials (packaging, etc.) for special disposal ashore by one of the following USDA-approved methods:
 - (1) Cooking by steam or other heat source in a leakproof container at 212⁰ F for 30 minutes and disposal of residues by burying (sanitary landfill methods).
 - (2) Incinerating in an incinerator approved by the US EPA and/or IMO.
 - (3) Grinding and flushing through a ship's CHT system (when installed) to a USDA-approved sewage system ashore.
 - c. The standards given above do not preclude discharge of any solid waste in an emergency when failure to do so would clearly endanger the health or safety of vessel personnel.
5. Incinerators / Thermal Destruction:
- a. Vessels equipped with incinerators shall operate them in accordance with the manufacturer's instructions and Coast Guard technical publications.

- b. Shipboard incinerators may be used to burn plastics, glass, oily rags, and oily filters only if authorized in the manufacturer's technical publication or owner's manual. Due to the relatively high caloric content, plastics, oily rags and filters shall only be loaded as part of a mixture of normal solid waste and not be loaded alone at any time.
 - c. Manufacturers generally prohibit incinerating batteries, closed containers, CO₂ cartridges or aerosol containers for safety reasons. No materials that will create a residual ash that contains hazardous materials will be incinerated.
 - d. Incinerator test burns are allowed in port with various restrictions depending on the port. Notify your Product Line Asset Manager of the proposed location, date, and duration of test burns prior to performing any test burns. They will also assist in obtaining any permits or variances necessary to conduct the test. A test burn is characterized by the following conditions:
 - (1) No solid waste is burned.
 - (2) The maximum duration is three hours.
 - (3) The fuel source is clean diesel fuel unless otherwise approved by the cognizant SFLC Product Line Manager.
 - e. When operating south of 60° South Latitude (Antarctica special area) disposal of incinerator ash overboard is prohibited. McMurdo Station may accept incinerator ash if it cannot be practically retained onboard.
6. Ordnance. For the purposes of this manual, ordnance wastes are not considered garbage, are classified as operational waste, and are subject to different requirements not covered in this manual. Operational Commanders shall be contacted for guidance concerning the firing, discharge, and disposal of ordnance and pyrotechnics.
7. Procedures when operating south of 60° South Latitude (Antarctica special area). Disposal of the following materials is prohibited:
- a. plastics (this includes synthetic line, fishing nets, and plastic garbage bags).
 - b. food waste.
 - c. paper, rags, glass, metal, bottles, crockery, and similar refuse.
 - d. floating dunnage, lining, and packing materials.
8. Labels and placards. Vessels of all sizes shall comply with solid waste placard and label direction found in NSTM 593, "Pollution Control". All waste receptacles shall have labels prominently displayed on them or in the immediate vicinity, describing what is and is not acceptable waste.

9. Decedent Affairs. Environmental Protection Agency Regulation 40 CFR 229.1 provides a general permit to transport cremated human remains from any location for burial at sea subject to certain conditions. The Coast Guard will not normally provide burial at sea for caskets with intact human remains. Flowers and wreaths that are readily decomposable in the marine environment may also be placed at the burial site. See the Military Casualties and Decedent Affairs Manual, COMDTINST M1770.9 (series) paragraph. 2. Q for further information.

TABLE 7
SUMMARY OF RESTRICTIONS
ON THE DISCHARGE OF GARBAGE¹ INTO THE SEA
UNDER APPS (33 USC §§ 1901-1912)

<p>Rules of Thumb:</p> <ol style="list-style-type: none"> 1.) All discharges of garbage are prohibited except those discharges specifically permitted. 2.) All discharges of plastics are prohibited. 3.) All discharges of garbage within 3 NM of land are prohibited. 4.) See specific rules, below, for exceptions depending on the location of the ship.
<p><i>*All Coast Guard vessels will comply with the MARPOL Annex V requirements outlined below to the extent practicable. In the event of accidental discharge or if discharge is necessary due to operational requirements affecting the health or safety of the ship, such as Alien Migrant Interdiction Operations, the Commanding Officer has discretion but must log and report the discharge via message to the operational commander, CGHQ (CG-751) and (CG-0941) within 72 hours.</i></p>

EVERYWHERE	
General Rule	<i>The discharge of garbage is prohibited.</i>
Exceptions	Deck and external surface wash water <i>containing cleaning agents</i> BUT ONLY if not harmful to the marine environment.
	Any discharge necessary to secure the health and safety of the ship and those on board or saving life at sea.*
	Any accidental loss of garbage resulting from damage to the ship or its equipment--PROVIDED that all reasonable precautions have been taken before and after the occurrence of the damage to prevent or minimize the accidental loss.*

OUTSIDE OF SPECIAL AREAS²	
General Rule	<i>The discharge of garbage is prohibited.</i>
Exceptions	Food waste may be discharged – but ONLY while en route³ , AND
	<p>When more than 3 NM from nearest land – Ground up small enough to be capable of passing through a 1 inch screen, OR</p> <p>When more than 12 NM from nearest land – Discharge of unground food waste is permitted</p>
Exceptions only if onboard storage filled to capacity	<p>More than 12 NM from nearest land:</p> <p>Metal, glass, cloth, and cardboard – BUT ONLY IF shredded, compacted, and bagged to ensure negative buoyancy; and ONLY in non-plastic bags.⁴</p>

<i>Exceptions only if onboard storage filled to capacity</i>	More than 25 NM from nearest land: Metal, glass, cloth, and cardboard and other garbage not categorized or otherwise prohibited.
<i>Exceptions only if onboard storage filled to capacity</i>	More than 12 NM from nearest land: Ash from incinerators – BUT ONLY if it contains NO toxic chemicals, heavy metals, or ash from burned plastics.
INSIDE SPECIAL AREAS²	
General Rule	<i>The discharge of garbage is prohibited.</i>
<i>Exceptions</i>	Food waste may be discharged (ground or unground) – but ONLY while en route³ , AND More than 12 NM from nearest land.
<i>*See above for necessary discharges due to operational requirements affecting the health or safety of the ship</i>	

¹Definitions:

“Garbage” is all kinds of food wastes, domestic wastes and operational wastes, all plastics, incinerator ashes, and cooking oil generated during the normal operation of the ship and liable to be disposed of continuously or periodically except substances listed in other MARPOL Annexes.

“Domestic wastes” means all types of wastes not covered by other Annexes that are generated in the accommodation spaces on board the ship, but does NOT include grey water.

“Food wastes” means any spoiled or unspoiled food substances and includes fruits, vegetables, dairy products, poultry, meat products and food scraps generated aboard ship.

“Operational wastes” means all solid wastes (including slurries) not covered by other Annexes that are collected on board during normal maintenance or operations of a ship, or used for cargo stowage and handling. Operational wastes also includes cleaning agents and additives contained in cargo hold and external wash water, but it does NOT include grey water, bilge water, or other similar discharges essential to the operation of a ship.

“Cooking Oil” means any edible oil or animal fat used or intended for use for the preparation or cooking of food, but does NOT include the food itself that is prepared using these oils.

²Special Areas:

Wider Caribbean Area, Mediterranean Sea Area, Baltic Sea Area, Black Sea Area, Red Sea Area, Gulfs Area, North Sea Area, and Antarctic Area

³“En route” means underway making more than 6 knots.

⁴When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 8. MEDICAL WASTE**A. LEGISLATION AND REGULATIONS.**

1. Dumping of Medical Waste by Public Vessels, (also known as U.S. Public Vessel Medical Waste Anti-Dumping Act of 1988), 33 U.S.C. § 2501 et seq. Generally prohibits public vessel dumping of medical waste into ocean waters during peacetime, except under emergency conditions.

B. COAST GUARD POLICY.

1. The Medical Manual, COMDTINST M6000.1 (series) governs labeling, handling and storage of potentially infectious medical waste.
2. Infectious medical waste shall be steam or chemically sterilized and/or suitably packaged and stored for ultimate disposal ashore.
3. After steam sterilizing, infectious paper and cloth-based medical waste may be incinerated.
4. Sharp instruments and needles, also called “sharps”, shall be collected in plastic autoclavable sharps containers. To avoid causing accidental puncture wounds in infectious aerosols, never recap, clip, cut, bend or otherwise mutilate needles or syringes. All sharps shall be retained on board for proper disposal ashore. Unused sharps shall be disposed of ashore in the same manner as medical waste.
5. Non-infectious waste may be disposed of as garbage, not requiring steam sterilizing or special handling. Process and dispose of this material in the same method as prescribed for similar material in Chapter 7.
6. A system of tracking storage and disposal of infectious medical waste shall be established as required by the Medical Manual, COMDTINST M6000.1 (series).
7. If retention of potentially infectious wastes would threaten the health or safety of personnel on board, create an unacceptable nuisance condition or compromise operational readiness, overboard discharge (excluding sharps) is authorized (using the methods prescribed for similar material in Chapter 7) beyond 50 nm provided such waste has been steam sterilized and packaged for negative buoyancy. Record in the Unit Log any overboard discharge of infectious medical wastes.
8. For disposal of expired or unused medications, coordinate with your servicing pharmacy for instructions.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 9. SPILL / DISCHARGE / RELEASE**A. LEGISLATION AND REGULATIONS.**

1. International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL).
2. The Act to Prevent Pollution from Ships (APPS), 33 U.S.C. § 1901, et. seq. APPS implements the stringent oil, garbage, and air quality discharge requirements of Annexes I, II, V, and VI of MARPOL.
3. The Clean Water Act (CWA) 33U.S.C. §§ 1251-1387. The CWA prohibits the discharge of hazardous substances in a harmful quantity into all waters within 12 nm of the U.S. coast, or in a quantity which may affect the natural resources of the U.S. in the Exclusive Economic Zone (EEZ).
4. The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq. (1976). RCRA regulates generation, treatment, storage and disposal of hazardous waste. RCRA provides that Hazardous Waste generated on public vessels is not subject to storage, manifest, inspection or record keeping requirements until the ship transfers such waste ashore or transfers it to another public vessel within the territorial waters of the U.S. and then only after that vessel stores it aboard for more than 90 days after the date of transfer.
5. The Toxic Substances Control Act (TSCA), 15 U.S.C. § 2601 et seq. (1976). Through TSCA, Federal restrictions govern the manufacture, use, labeling and disposal of polychlorinated biphenyls (PCBs), asbestos and asbestos-containing waste.
6. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. 9601-9675). CERCLA requires a notification to the National Response Center of the release of a reportable quantity of a hazardous substance CERCLA § 103 generally requires notice to the National Response Center of releases of reportable quantities of hazardous substances. The duty to report is independent of the duty to respond to the releases, and the failure to report a release may be a crime.
7. Occupational Safety and Health Act, 29 U.S.C. §§ 651-678. The Occupational Safety and Health Administration establishes regulations under Occupational Safety and Health Act. The regulations control the handling and use of hazardous materials, as well as information that must be provided to workers who come into contact with the materials. The Material Safety Data Sheet (MSDS) is the document that is used to supply information regarding use and exposure.
8. D.O.T Law (49 C.F.R. 100-185). The Department of Transportation regulates the packaging, handling, and transportation of hazardous material under 49 C.F.R. 100-185. This includes materials that are ordered for delivery and transported from the ship on a common carrier.

B. COAST GUARD POLICY.

1. Prevention:
 - a. Solvents and other industrial wastes shall not be dumped down sinks or deck drains, allowed to enter the MSD in any way, or be discharged overboard. Some classes of cutters and boats have sinks or other drains that discharge directly overboard. On those vessels, operational controls including prominent signage shall be used to prevent inadvertent spills.
 - b. Whenever possible, a full containment boom shall be deployed prior to transferring bulk quantities of hydrocarbon, hydrocarbon-containing water, regulated liquids, or natural oils between a vessel and a shore container or vehicle.
2. Response Capability for spills from Coast Guard vessels. For spills into the water, personnel shall initiate immediate actions to mitigate the effects of the spill. These actions shall be within the limits of regulations and within the scope of personnel safety. A recommended list of spill response items to be carried onboard is included as Appendix E. These kits shall remain on board the vessel at all times and only be used during emergencies for non-vessel related incidents while in port. Additional spill kits may be needed for ashore work that has the potential to cause a spill.
3. Response Capability for spills from non-Coast Guard vessels. For spills from non-Coast Guard vessels see District Response Groups / District Response Advisory Teams, COMDTINST 16465.41 (series).
4. Oil and Hazardous Substance (OHS) Spill Response Within the U.S. Contiguous Zone. When within the U.S. contiguous zone, comply with the following OHS spill response procedures:
 - a. Insofar as practical, take immediate actions to mitigate the effects of the spill.
 - b. As soon as safely practical, notify the following via fastest means possible:
 - (1) OPCON with information copies to Commandant (CG-45), (CG-0922), and (CG-0941E).
 - (2) National Response Center (NRC): telephone (800) 424-8802.
 - (3) If unable to notify NRC directly, notify the appropriate Sector Commander (Captain of the Port) via radio if possible, otherwise via the fastest telecommunications channel available. Request Sector personnel notify NRC of situation.
 - (4) Appropriate State or territorial response agency unless NRC or COTP will contact them.

5. OHS Spill Response in Waters of Foreign Countries. The following action shall be taken for an OHS spill in waters of foreign countries:
 - a. Insofar as practical, take immediate action to mitigate the effects of the spill.
 - b. As soon as safely practical, notify the following via fastest means possible:
 - (1) The appropriate agency or authority as designated in the LOGREQ reply or servicing Port Agent.
 - (2) OPCON with information copies to Commandants (CG-45), (CG-0941E), and (CG-0922).
6. OHS Spill Response in International Waters. The following action shall be taken for an OHS spill in international waters:
 - a. Insofar as practical, take immediate action to mitigate the effects of the spill.
 - b. As soon as safely practical, notify the following via fastest means possible:
 - (1) OPCON with information copies to Commandants (CG-45), (CG-0941E), and (CG-0922).
 - (2) National Response Center (NRC) by telephone at (800) 424-8802.
7. Environmentally Significant Spills. Critical incident reports shall be made per the Critical Incident Communications Instruction, COMDTINST 3100.8 (series) whenever an Environmentally Significant Spill (as defined in Appendix A) is caused by a Coast Guard vessel anywhere in the world.
 - a. As soon as safely practical, notify OPCON with information copies to Commandant (CG-45), (CG-0941E), and (CG-0922).
 - b. Complete a Situation Report (SITREP) within 24 hours.
8. Controllable Pitch Propellers (CPP), bow thrusters and azimuth thrusters. CPP, bow thruster, or azimuth thruster leaks causing a sheen shall be considered a reportable spill and shall be reported per section 9.B. The Operational Commander, in concert with the SFLC Product Line Manager, will determine whether the leak must be repaired immediately or if it can be managed until the next repair availability. The initial report and NRC notification shall contain an estimated leakage rate. All those initially notified, including NRC, shall be updated if the situation changes or the leakage rate increases.
9. Response Plans. A Cutter Oil Pollution Emergency Plan shall be developed and maintained aboard all cutters. A basic template is provided in Appendix F. A cutter-specific version of Appendix F satisfies the minimum requirements for a response plan, though cutters are encouraged to expand their plans to include more detail. Fueling facilities or contractors must also have an appropriately approved Facility Response Plan.

This must be determined well before taking on fuel, possibly during patrol planning or when Supply personnel contact potential vendors. If no vendor is found with a response plan, contact OPCON for guidance.

10. Funding. Spill cleanup expenses under \$2,500 are the unit's responsibility. The cognizant SFLC Product Line Manager shall be contacted if clean-up operations exceed or are expected to exceed \$2,500. Hiring a clean-up contractor constitutes a "service contract".
11. Pollution Incident Evaluation System. The Chief, Office of Naval Engineering (Commandant (CG-45)) is the program manager for vessel environmental risk management, and is responsible for convening Environmental Incident Analysis Boards (EIABs) when warranted, and managing the analysis process.
 - a. Environmental Incident Analysis Boards (EIABs) are mid-level (O-4 or O-5) boards appointed and convened at the discretion of Commandant (CG-45) to investigate and report on Environmentally Significant Spills as defined in Appendix A. In cases where a Commandant-level review of command policies, training procedures or equipment deficiencies are not anticipated, Commandant (CG-45) may delegate this responsibility. In these cases, Commandant (CG-45) will specify the scope and requirements of any unit investigations. These boards vary in composition according to the circumstances of the incident. A facilitator from Commandant (CG-INV) shall be appointed to ensure standardized investigation procedures are followed.
 - b. At a minimum EIABs shall consist of Commandant (CG-452, CG-47, CG-0941E, CG-751) and/or (CG-731) as appropriate, and Commandant (CG-INV) as facilitator. If the incident involves exposure of personnel to hazardous conditions then Commandant (CG-1133) shall be a member and if the incident involves loss of or damage to a Coast Guard vessel and/or injury to personnel, then Commandant (CG-1134) shall be a member of the board.
 - c. The Commandant's Environmental Incident Review Board (EIRB) is a senior-level (O-6) board appointed and convened at the discretion of the Chief, Office of Naval Engineering, Commandant (CG-45) to review the report of the EIAB. The EIRB shall draft an endorsement to the Vice Commandant (VCG) of the EIAB report to include:
 - (1) A synopsis of the incident.
 - (2) Cost of the incident.
 - (3) Determination of the causal factors.
 - (4) Determination of additional findings.
 - (5) Determination of recommended corrective actions.
 - (6) Other remarks as appropriate.

- (7) Information for the final update of the Coast Guard Environmental Incident Evaluation Database; and
 - (8) Development of a draft Commandant (VCG) Decision Letter and Final Action Message.
- d. Within 90 days of receipt of the EIAB report and comments, the EIRB shall forward the report and draft Final Decision Letter to Commandant (VCG) for consideration. After review, Commandant (VCG) will issue a Final Decision Letter directing the corrective actions to be taken.
 - e. Upon approval of the Final Decision Letter, Commandant (VCG) will notify the Commandant prior to releasing the investigative results. As warranted, the Commandant will be briefed in the following types of incidents:
 - (1) Significant harm to the environment.
 - (2) Alleged wrongdoing of Coast Guard members.
 - (3) Equipment or configuration deficiencies.
 - f. Attendance at this brief, which will be determined by Commandant (CG-DCMS), will vary by incident type and may include Commandant (CG-751, CG-731, CG-0941E, CG-45, and CG-47), the applicable Assistant Commandant(s) responsible for unit/program(s) involved, and the Area or District Commander.
 - g. The purpose of this brief, which normally will be given by the president of the EIRB within two weeks following approval of the Final Decision Letter, is to ensure appropriate staff elements are aware of the pending release of the findings and that required staff actions have been initiated. Likely staff actions could include preparation of a press release and draft media guidance by Commandant (CG-0922), scheduling the notification of media, development of Congressional outreach strategy by Commandant (CG-0922), and preparation of a draft Secretary Alert by Commandant (CG-0922, CG-45, and CG-0941E).
 - h. Attendees shall bring drafts of any correspondence, notifications, or press releases that are anticipated to the brief. Commandant (CG-45) will provide each attendee a copy of the approved Final Decision Letter and draft Final Action Message. After all required staff actions have been completed; Commandant (VCG) will release the Final Action Message.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 10. SHIP BALLAST WATER AND ANCHOR SYSTEM SEDIMENT CONTROL

A. LEGISLATION AND REGULATIONS.

1. National Invasive Species Act of 1996 (NISA), 16 U.S.C. § 4701 et seq. Non-indigenous Aquatic Nuisance Prevention and Control Act § 1103(b), codified at 16 USC 4713(b). This Act provides for seagoing Coast Guard vessels to implement a ballast management program to minimize the risk of introducing of non-indigenous species by releasing ballast water.
2. The Act to Prevent Pollution from Ships (APPS), 33 U.S.C. § 1901, et. seq. APPS implements the stringent oil, garbage, and air quality discharge requirements of Annexes I, II, V, and VI of MARPOL.
3. The Clean Water Act (CWA)(generally codified among other amendments at 33 U.S.C. §§ 1251-1387). The CWA prohibits discharging a harmful quantity of oil into any waters within 12 nm of the U.S. coast. Also prohibited is discharging oil in a quantity which may affect the natural resources of the U.S. EEZ. According to EPA regulation, discharged oil that violates applicable water quality standards or causes a sheen on the water constitutes a harmful quantity. The oil content within a discharge that is sufficient to cause a sheen varies with type of oil, sea state, lighting, and viewing angle. In general, in excess of 15 ppm of oil may be sufficient to cause a sheen.

B. COAST GUARD POLICY.

1. Ballasting. All vessels capable of conducting ballast operations shall do so in accordance with their Damage Control Books. Vessels that ballast their fuel tanks (not segregated ballast tanks) should treat the ballast water taken aboard as an “oily mixture”. Ballasting and de-ballasting shall be conducted in a manner to minimize the introduction of non-native species. All ballasting and de-ballasting evolutions shall be as indicated below:
 - a. Record in the Machinery Log each transfer of ballast water noting ships location, water depth, tanks involved, and amount of ballast taken aboard or discharged.
 - b. Avoid the discharge or uptake of ballast water in areas within or that may directly affect marine sanctuaries, marine preserves, marine parks, or coral reefs.
 - c. Minimize or avoid uptake of ballast water in the following areas or situations:
 - (1) Areas known to have infestations or populations of harmful organisms or pathogens (e.g., toxic algal blooms).
 - (2) Areas near sewage outfalls.
 - (3) Areas near dredging operations.

- (4) Areas where tidal flushing is known to be poor or at times when tidal flow is known to be more turbid.
 - (5) In darkness when bottom-dwelling organisms may rise up in the water column.
 - (6) Where propellers may stir up the sediment.
 - (7) Areas with pods of whales, convergence zones, and boundaries of major currents.
2. Ballast Water Management Plan. All vessels capable of conducting ballast operations shall develop and maintain a vessel-specific ballast water management plan that allows those responsible for the plan's implementation to understand and follow the vessel's ballast water management strategy.
 3. Vessels with segregated ballast tanks. If your vessel carries ballast water that was taken on in areas less than 200 nautical miles from any shore into the waters of the U.S. after operating beyond the EEZ, **one** of the following ballast water management practices must be employed while adhering to your DC Book:
 - a. Perform a complete ballast water exchange in an area no less than 200 nautical miles from any shore prior to discharging ballast water into U.S. waters. To ensure a minimum of 95% ballast water exchange, ballast tanks shall be flushed a minimum of three times.
 - b. Discharge ballast water to an approved receiving facility.
 - c. If unable to meet (a) or (b) then retain ballast water as long as safely practicable or conduct flushing as far from shore as possible.
 4. Vessels without segregated ballast tanks. Vessels that ballast fuel tanks shall meet all of the requirements listed for segregated ballast tanks. In addition, and to the maximum extent practicable, fuel tanks shall be de-ballasted using an OWS equipped with a functioning, calibrated oil content meter (OCM). If unable to use the OWS/OCM combination due to operational necessity or concerns for safety, these vessels shall, when practicable, only de-ballast during daylight hours, outside 50 nm from land while using an OCM (if installed) to monitor the discharge, and with a watchstander posted topside to detect a sheen. If the system is not automatically configured to do so, a watch shall be posted to stop the system before the oil concentration reaches 15 ppm as indicated by the OCM (if installed) or as detected by the topside watchstander. In an emergency, de-ballasting shall be accomplished using high-volume discharge piping and applying the conditions listed above as practicable. In addition to the recording requirements of 10.B.1.a, a duplicate entry shall be made in the machinery and unit logs that record the basis for the determination of operational necessity. Inside of 3 nm, de-ballasting shall only be accomplished using the OWS/OCM combination except when doing so would hazard the vessel or crew. Additional guidance regarding the treatment of oily waste can be found in Chapter 5 of this Manual.

5. When Entering the Great Lakes and Hudson River. Vessels that carry ballast water and that have operated on the waters beyond the EEZ during any part of its voyage, shall, before entering the Snell Lock at Massena, New York, or navigating north of the George Washington Bridge on the Hudson River:
 - a. Carry out an exchange of ballast water on the waters beyond the EEZ, from an area more than 200 nm from any shore, and in waters more than 2,000 meters deep, prior to entry into the Snell Lock, at Messina NY, or prior to navigating the Hudson River, north of the George Washington Bridge, such that, at the conclusion of the exchange, any tank from which ballast water will be discharged contains water with a minimum salinity level of 30 parts per thousand.
 - b. Retain the ballast water on board the vessel.
6. Ballast Water Exemption from Mandatory Requirements. Those vessels that operate exclusively within one Captain of the Port (COTP) Zone are exempt from the mandatory ballast water requirements.
7. Anchor System Sediment Control. Vessels shall routinely wash down anchors, anchor chains, and appendages with seawater when retrieving them to prevent on board collection of sediment, mud and silt. Wherever possible following anchor retrieval, surface ships shall also wash down chain lockers outside 12 nm from land to flush out sediment, mud or silt.
8. Hull Fouling. Vessel hulls shall be cleaned regularly per their class maintenance plan. All removed substances shall be disposed of per State and local regulations to prevent transfer of sediment, mud, silt, and fouling organisms from one location to another.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 11. MARINE WILDLIFE PROTECTION**A. LEGISLATION AND REGULATIONS.**

1. Marine Mammal Protection Act of 1972, as amended (16 U.S.C. § 1361 to 1421(h) et seq.).
2. Marine Mammal Protection Act Implementing Regulations, 50 C.F.R. § 10, § 18, § 216, § 228.
3. Endangered Species Act, 16 U.S.C. § 1531-1544.
4. Interagency Cooperation - Endangered Species Act, 50 C.F.R. § 402.
5. Endangered and Threatened Marine Species, 50 C.F.R. § 222-224.
6. Endangered and Threatened Wildlife, 50 C.F.R § 17.11.
7. Endangered and Threatened Plants, 50 C.F.R. § 17.12.
8. Designated Critical Habitat, 50 C.F.R. § 17.95, § 17.96.
9. Designated Critical Habitat 50 C.F.R. § 226.
10. Migratory Bird Treaty Act, (16 U.S.C. § 703 et seq.).
11. Magnuson-Stevens Fishery Conservation and Management Act (U.S.C. § 1801 et.seq.).
12. Magnuson-Stevens Act Provisions,50 C.F.R. 600 Subpart K - EFH Coordination, Consultation, and RecommendationsMarine Protection, Research, and Sanctuaries Act (U.S.C. 1431, et. Seq. and 33 U.S.C. 1401, et.seq.).
13. Marine Protection, Research, and Sanctuaries Act (U.S.C. 1431, et seq. and 33 U.S.C. 1401, et seq.).

B. COAST GUARD POLICY.

1. General. General Coast Guard policy on compliance with Natural Resource Mandates can be found in the Natural Resources Management Manual, COMDTINST M5090.3 (series). A detailed living marine resource policy can be found in the Protected Living Marine Resources Program, COMDTINST 16475.7 (series).
2. Species Listed Under the Endangered Species Act. Species under the jurisdiction of the National Marine Fisheries Service (NMFS) listed as threatened or endangered can be found at 50 C.F.R. Part 223 & 224. Species listed as threatened or endangered under the jurisdiction of the Fish and Wildlife Service (FWS) can be found at 50 C.F.R. Part 17.

When any listed species is designated as endangered, “taking” as defined in the glossary is prohibited. When species under the jurisdiction of NMFS are listed as threatened, take is only prohibited if NMFS issues a rule prohibiting take. When species under the jurisdiction of FWS are listed as threatened, they automatically receive the same protections as endangered species and take is prohibited. Coast Guardsmen’s have authority for responding to injured, stranded, entangled or dead specimens when acting in the course of his or her official duties through statutes, permits, MOA, and regulatory authority depending on species. Limitations and reporting requirements exist, so check with your District Fisheries Officer, Area Marine Protected Species Specialist, or Legal representative prior to responding.

3. Marine Mammals. Whales, dolphins, porpoises, manatees, dugong, seals, sea lions, walrus, sea otters and polar bears. All marine mammals are protected under the Marine Mammal Protection Act (MMPA) and protected under the Endangered Species Act (ESA) if listed as threatened or endangered. Coast Guard vessels shall not deliberately disturb any marine mammal. Commanding Officers and Officers in Charge shall plan and act to avoid take or harassment of marine mammals during operations and planning. For local and seasonal occurrence of marine mammals, refer to U.S. Coast Pilot publications.

- a. Whales.

- (1) Lookouts shall be especially alert to whales unexpectedly surfacing within 100 yards of the vessel.
- (2) In the event of a whale unexpectedly surfacing within 100 yards of the vessel, take action as prudent and appropriate to ensure the safety of both the crew and the whale and to minimize damage to the vessel.
- (3) In areas of known whale migration routes (e.g. southeast Alaska or Mid-Atlantic coast) or high animal density (e.g. San Juan Islands area or Cape Cod) be aware of local conditions and especially alert for activity. Units should contact their District or Area for a copy of their Protected Living Marine Resources Plan, which identifies whale habitats.
- (4) Do not approach whales head on during non-emergency maneuvering. Avoid North Atlantic or North Pacific Right Whales by 500 yards and all other whale species by 100 yards, except when assisting in an animal rescue effort or enforcing the Marine Mammal or Endangered Species Act.
- (5) Operators shall employ all possible precautions to avoid interactions or collisions with whales, including:
 - (a) Checking latest whale sighting info (if available).
 - (b) Reducing vessel speed as appropriate, yet navigationally prudent, and adjusting course.

- (c) Posting additional dedicated, trained lookouts to assist in monitoring whale locations, and
 - (d) Ensuring navigation planning takes into account waterways management efforts (e.g. areas to be avoided, traffic separation schemes, recommended routes, etc.) to reduce whale strikes.
- (6) North Atlantic Right Whale:
- (a) NMFS has determined that North Atlantic right whales are the world's most critically endangered large whale species and one of the world's most endangered mammals. In 2008, NMFS reported that the existing population could sustain no deaths or serious injuries due to human causes if its recovery is to be assured. The two principal threats from human activities to their continued existence are entanglement with fishing gear and ship strikes. The probability of a collision causing a whale's death increases rapidly as vessel speed increases, and the greatest increase in the probability of collision causing a whale's death occurs when the speed of a vessel exceeds 10 knots. As a Federal agency, the Coast Guard is exempt from 50 CFR §224.105, which restricts the speed of vessels over 65 ft in length to 10 knots or less to reflect these concerns. Federal agencies are, however, required under the Endangered Species Act § 7(a) to ensure that their actions are not likely to jeopardize the continued existence of an endangered species. It is therefore Coast Guard policy that vessels over 65 ft in length shall operate at a speed over ground of 10 knots or less within Seasonal Management Areas (SMAs), except when the Commanding Officer or Officer In Charge determines it is operationally necessary to exceed 10 knots to ensure the safe navigation of the vessel or successful execution of operational tasking. A list of SMAs is provided in Appendix I.
 - (b) Those vessels affected by this rule are encouraged to include this information in navigation briefs and to post reminders on the bridge while operating within an SMA.
- (7) In addition to SMAs, specific areas to be cognizant of whales along the West Coast or in the Pacific and Arctic oceans include:
- (a) All coastal waters: Fin whales.
 - (b) Deep water: Sperm whales.
 - (c) Arctic waters: Bowhead whale.
 - (d) Bering Sea and Bristol Bay: North Pacific Right Whale.
 - (e) Near shore Alaska and California: Gray Whale.
 - (f) Inshore Washington State and British Columbia: Orca.

- (g) Near Maui, Hawaii: Humpback whale breeding ground.
- (8) East Coast and Atlantic Ocean:
 - (a) Cape Cod Bay, Massachusetts Bay and the Great South Channel east of Massachusetts: Northern Right Whale.
 - (b) 90 miles along the Atlantic seaboard in Florida and Georgia: Northern Right Whale.
- (9) Marine Mammal Strike Reporting. Any USCG vessel, which strikes a protected marine mammal, sea turtle, coral or bird, shall be documented and reported per the Protected Living Marine Resources Program, COMDTINST 16475.7 (series).
- (10) Whale Wheel Field Guide (WWFG). To aid units in identifying the aforementioned protected whale species and complying with the MMPA and ESA, each vessel shall have a Whale Wheel Field Guide on board if operating in areas likely to encounter whales. If a unit is not equipped with a WWFG and is scheduled to deploy to an area likely to encounter whales, they shall contact the Coast Guard Institute via their Educational Services Officer to receive a WWFG. WWFGs shall be maintained in the OOD binder, Navigation Kit, and/or with a lookout for ready access. Lookouts shall be familiar with their proper use.
- (11) Units shall also incorporate approach guidance for the following marine mammals:
 - (a) Dolphins and porpoises – 50 yards.
 - (b) Seals and Sea lions – 50 yards.
 - (c) Sea turtles – 50 yards.
 - (d) Sea otters – 50 yards.
 - (e) Manatees – 50 feet.
 - (f) Polar bears – 1000 yards.
 - (g) Walruses – 1000 yards.
- 4. Birds. Extra precautions shall be taken to avoid disturbing large colonies of sea birds for their protection and to reduce the risk of disease transmission to the ship's crew. Under the Migratory Bird Treaty Act, taking or possessing any migratory bird and or removing their active nests is prohibited unless under a US Fish and Wildlife Service permit. Where ESA listed bird species may be present, do not proceed with any vessel action that may affect or "take" ESA listed birds or adversely modify critical habitat for listed birds without verification that there is authorization from FWS in the form of an incidental take statement, other appropriate permit, or completion of required ESA Section 7 consultation.

Consult with your Area or District legal representative to ascertain whether appropriate ESA authorizations, permits or Section 7 consultations exist prior to proceeding with actions that may affect listed species.

5. National Marine Sanctuaries. Policy regarding National Marine Sanctuaries can be found in the instruction titled Coast Guard Participation In The Marine Sanctuary Program, COMDTINST 16004.3 (series).
6. Reefs. Detailed policy regarding Coral Reefs can be found in the Coast Guard Coral Reef Protection Implementation Plan, COMDTINST 16000.2 (series). When in any area where reefs are present, do not:
 - a. Anchor or spud down where coral is visible.
 - b. Significantly alter the seabed in any way.
 - c. Discharge any material other than those incidental to the normal operation of the vessel.
 - d. ESA Listed Coral. Taking ESA listed coral is prohibited unless appropriate compliance with Section 7 of the ESA is completed and appropriate authorizations are in place. Where listed coral or critical habitat for listed coral may be present, avoid vessel actions (such as those listed in section 6 a-c of this chapter) that may affect ESA listed coral or may affect critical habitat for listed coral. If affects to listed coral may be unavoidable, consult with your Area or District legal representative.
7. Johnson's Seagrass. Johnson's Seagrass is a rare marine plant that is listed as threatened under the ESA. It grows only in coastal waters of southeastern Florida, from Sebastian Inlet to northern Biscayne Bay, and is one of the least abundant species in this range. Risk of destruction from man-made activities include but are not limited to: 1) dredging; 2) prop scouring and anchor mooring; and 3) altered water quality. When in any area where Johnson's Seagrass is present avoid any vessel actions such as prop scouring and those listed in section 6. a.-c of this chapter. If affects to Johnsons Seagrass may be unavoidable, consult with your Area or District legal representative.
8. Essential Fish Habitat. Under the amended Magnuson-Stevens Act, a program was created to protect "essential fish habitat" (EFH). EFH is defined as any waters of substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. The EFH provisions of the Magnuson-Stevens Act require "consultation" with NMFS when a proposed federal activity may "adversely" affect identified EFH. Adverse affect means that the proposed activity may have an impact that reduces the quality and/or quantity of EFH. Therefore, any USCG vessel should avoid any activities as described above under CH. 11.B.6. Reefs and CH.11.B.7. Johnson's Seagrass. If unable to avoid impacts, contact your AREA or District legal representative.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 12. NOISE**C. LEGISLATION AND REGULATIONS.**

1. Noise Control Act, 42 U.S.C. § 4901 et seq. (1972). The Noise Control Act provides for Federal performance standards, which the Coast Guard must incorporate into the design of new ship systems and equipment to reduce noise emission. There are currently no explicit guidelines or regulations in place in the United States or any other nation governing noise produced as a byproduct of vessel operation. Retrofit modifications are not prescribed for existing noise sources. Military aircraft, combat equipment and weapon systems are exempt from new product design standards.

D. COAST GUARD POLICY.

1. Workplace noise. Workplace noise is not environmental noise. Abatement of workplace noise is addressed in Chapter 4 of The Safety and Environmental Health Manual, COMDTINST M5100.47 (series).
2. Noise Generating Devices. The use of powered tools, machinery, outboard loudspeakers or any other devices that emit excessive noise, either directly or indirectly, shall be restricted to normal daylight working hours to the maximum possible extent.
3. Cavitations. Most (83%) of the acoustic field surrounding large vessels is the result of propeller cavitation (when air spaces created by the motion of propellers collapse). When ships cavitate, relatively little acoustic energy is transmitted into the water from on-board machinery or movement of the vessel through the water. Given that acoustic energy radiated into water by transiting ships represents wasted energy that could be used to more efficiently propel the ship, making modifications may have the dual benefit of reducing radiated noise and reducing vessel-operating costs. Further, vessels fitted for reduced radiation of underwater sound also tend to be quieter onboard, which is desirable for the crew. Optimal quieting is achieved when this goal is incorporated into the design of vessels and strictly adhered to during construction.

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK.

CHAPTER 13. SHIP AND BOAT WASHES

A. LEGISLATION AND REGULATIONS.

1. The Clean Water Act (CWA)(generally codified among other amendments at 33 U.S.C. §§ 1251-1387). The CWA prohibits the discharge of oil in a harmful quantity into all waters within 12 nm of the U.S. coast, or in a quantity which may affect the natural resources of the U.S. in the EEZ.
2. The Act to Prevent Pollution from Ships (APPS). APPS implements the stringent oil, garbage, and air quality discharge requirements of Annexes I, II, V, and VI of MARPOL.

B. COAST GUARD POLICY.

1. General. Ship and boat washes are of concern not only from the detergent or other cleaners that will end up in the water, but from the oils, greases, paint chips, paper wrappers, etc. that may end up there as well. Commanding Officers and Officers in Charge must be especially cognizant of State and local regulations for this effluent. The following management practices shall be implemented Coast Guard-wide:
 - a. Before a wash down occurs, a complete dry cleanup shall be completed utilizing tools such as brooms, dustpans, and vacuums. Waste collected shall be disposed of using the appropriate dry waste stream procedure. Specific care should be taken to remove grease, oils spots, loose paint and the like. Whenever possible, cutter wash-downs shall be completed 3 nm or further from shore. If a boat is trailerable, unit commanders are encouraged to trailer their boats to wash down facilities. Follow discharge regulations as dictated in your local area. All wash downs shall only use cleaners authorized for use aboard Coast Guard vessels, see Navy instruction NAVSEA S6480-A4-CAT-010 “Authorized chemical cleaning products & dispensing systems catalog”.
 - b. If a vessel must be washed while waterborne, follow the guidelines below:
 - (1) If cleaning a painted or coated surface, use only low pressure (<100 psi) fresh water, with no soap except as below. Do not use hot water (140°F or higher).
 - (2) If cleaning an unpainted surface, pressure washers may be used.
 - (3) Soap or a cleaner may be used ONLY with a rag or sponge and wipe any spots dry with a rag or sponge before rinsing.
 - c. If a sheen results from the wash down, follow the reporting procedures of Chapter 9 of this Manual.
 - d. Discharging paint chips into the water is prohibited. Discharging paint (in any form) constitutes a violation of the Clean Water Act.
 - e. Additional guidance regarding paint chips is available in Chapter 3 of the Coatings and Color Manual, COMDTINST M10360.3 (series).

COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A. GLOSSARY

1. Antarctica. The area south of 60 degrees South Latitude (Antarctica special area). [33 C.F.R. § 151.05]
2. Ballast Water. Any water and suspended matter taken on board a vessel to control or maintain, trim, draught, stability, or stresses of the vessel, regardless of how it is carried. [33 C.F.R. § 151.1504]
3. Bilge Waste. A mix consisting primarily of water, with some oil and other unspecified substances, resulting from the normal operation of a vessel. Bilge waste is an oily mixture and considered an oily waste if there is a potential for the water to come in contact with oil, even if no oil is visible. Under normal circumstances, bilge waste does not contain hazardous materials or other constituents that would classify it as a hazardous waste.
4. Boat. A Coast Guard vessel whose overall length is less than 65 ft including ATON boats, security boats, skiffs, punts, rigid hull inflatable boats, and paint floats.
5. Bulk. Any volume of oil carried in an integral tank of the vessel and oil transferred to or from a marine portable tank or independent tank while on board a vessel. [33 C.F.R. § 155.1020]
6. Clean Ballast. The ballast in a tank which, since oil was last carried, has been cleaned. Effluent discharged would not produce visible traces of oil on the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. If the ballast is discharged through an oil discharge monitoring and control system approved by the government of the country under whose authority the ship is operating, the oil content of the effluent does not exceed 15 parts per million (ppm) is determinative that the ballast is clean. [33 C.F.R. § 151.05]
7. Coastal Waters. Coastal waters means:
 - a. The territorial sea of the United States,
 - b. The Great Lakes and their connecting waters,

¹ Thirty-three C.F.R. § 151.51(b) provides that “Sections 151.51 through 151.77 do not apply to—(1) A warship, naval auxiliary, or other ship owned or operated by a country when engaged in noncommercial service; or (2) Any other ship specifically excluded by MARPOL.” And Article 3 of MARPOL exempts vessels owned or operated by a State and used only on government non-commercial service from the strict application of its provisions, requiring only that “such ships act in a manner consistent, so far as is reasonable and practicable,” with MARPOL. The references to inapplicable sections in 33 C.F.R. are provided because the Act to Prevent Pollution from Ships, 33 U.S.C. § 1901, et seq., the U.S. law which implements MARPOL domestically, makes MARPOL Annex V applicable to these otherwise excluded ships where compliance is technologically feasible and would not impair the vessel’s operational capability. See 33 U.S.C. § 1902(b).

APPENDIX A TO COMDTINST M16455.1A

- c. The marine and estuarine waters of the United States up to the head of tidal influence; and
 - d. The Exclusive Economic Zone as established by Presidential Proclamation Number 5030, dated March 10, 1983. The Exclusive Economic Zone extends from the baseline of the territorial sea of the United States seaward 200 miles. [33 C.F.R. § 151.1003]
8. COLREGS. Convention on the International Regulations for Preventing Collisions at Sea, 1972. Published by the International Maritime Organization (IMO).
9. Contiguous Zone. For the purposes of the Clean Water Act (33 U.S.C. 1251 *et seq.*), *contiguous zone* means the zone, 9 nautical miles wide, adjacent to and seaward of the territorial sea, as defined in § 2.22(a)(2), that was declared to exist in Department of State Public Notice 358 of June 1, 1972 and that extends from 3 nautical miles to 12 nautical miles as measured from the territorial sea baseline. For all other purposes, *contiguous zone* means all waters within the area adjacent to and seaward of the territorial sea, as defined in § 2.22(a), and extending to 24 nautical miles from the territorial sea baseline, but in no case extending within the territorial sea of another nation, as declared in Presidential Proclamation 7219 of September 2, 1999 (113 Stat. 2138). [33 C.F.R. § 2.28]
10. Cutter. A Coast Guard vessel whose length overall is 65 ft or greater.
11. Discharge. Any release, however caused, from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying. It does not include Dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972. [33 C.F.R. § 151.05]
12. Emergency Conditions. Those conditions as defined by the Person in Charge, whether in procedures or made exigently.
13. Environmentally Significant Spill. A spill or release to the environment that may result in harm of numerous species, harm of any number of special status species, adverse public reaction, or geopolitical implications.
14. Exchange. To replace the water in a ballast tank using one of the following methods: (1) *Flow through exchange* means to flush out ballast water by pumping in mid-ocean water at the bottom of the tank and continuously overflowing the tank from the top until three full volumes of water has been changed—to minimize the number of original organisms remaining in the tank. (2) *Empty/refill exchange* means to pump out the ballast water taken on in ports, estuarine, or territorial waters until the tank is empty, then refilling it with mid-ocean water; masters/operators should pump out as close to 100 percent of the ballast water as is safe to do so. [33 C.F.R. § 151.2025]
15. Exclusive Economic Zone (EEZ). The area established by Presidential Proclamation Number 5030, dated March 10, 1983, (48 FR 10605, 3 CFR, 1983 Comp., p. 22), which

extends from the base line of the territorial sea of the United States seaward 200 miles, and the equivalent zone of Canada. [33 C.F.R. § 151.1504 and 2025]

16. Facility Response Plan. A formulated method that demonstrates a facility's preparedness to respond to a worst-case oil discharge. Under the Clean Water Act, as amended by the Oil Pollution Act, certain facilities that store and use oil are required to prepare and submit these plans. [40 C.F.R. § 112.20 and § 112.21, EPA.gov, 33 C.F.R. § 154 Subpart F.]
17. On-Scene Coordinator (OSC). The federal official pre-designated by EPA or the USCG to coordinate and direct responses under subpart D, or the government official designated by the lead agency to coordinate and direct removal actions under subpart E of the NCP. [40 C.F.R. § 300.5]
18. Food Waste. Spoiled or unspoiled victual substances, such as fruits, vegetables, dairy products, meat products, food scraps and food particles.
19. Garbage. All kinds of victual, domestic, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically, except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78. The term "Operational waste" does not include discharges essential to the operation of a ship, including but not limited to graywater, bilge water, ballast water, controllable pitch propeller and thruster hydraulic fluid and other oil to sea interfaces (e.g., thruster bearings, stabilizers, rudder bearings, etc.), deck wash down and runoff and above water line hull cleaning (not harmful to the marine environment), fire main systems water, gas turbine wash water, and/or non-oily machinery wastewater. [33 C.F.R. § 151.05]
20. Graywater. Drainage from dishwasher, shower, laundry, bath, and washbasin drains and does not include drainage from toilets, urinals, hospitals, and cargo spaces. [33 C.F.R. § 151.05]
21. Great Lakes. The Great Lakes of North America and the St. Lawrence River west of a rhumb line drawn from Cap des Rosiers to West Point, Anticosti Island, and, on the north side of Anticosti Island, the meridian of longitude 63 degrees west. [33 C.F.R. § 151.05]
22. Hazardous Material. A material that has one or more of the following characteristics:
 - a. Has a flash point below 140 °F., closed cup, or is subject to spontaneous heating.
 - b. Has a threshold limit value below 500 p.p.m. in the case of a gas or vapor, below 500 mg./m³ for fumes, and below 25 m.p.p.c.f. in case of a dust.
 - c. Has a single dose oral LD50 below 500 mg./kg.
 - d. Is subject to polymerization with the release of large amounts of energy.
 - e. Is a strong oxidizing or reducing agent.

APPENDIX A TO COMDTINST M16455.1A

- f. Causes first degree burns to skin in short time exposure, or is systemically toxic by skin contact.
 - g. In the course of normal operations, may produce dusts, gases, fumes, vapors, mists, or smoke which have one or more of the above characteristics. [29 C.F.R. § 1915.4]
23. Hazardous Substance (for the purposes of release reporting under CERCLA). Any element, compound, or hazardous waste listed at 40 CFR Table 302.4, and any solid waste which exhibits one of four characteristics that would render it a hazardous waste under RCRA. These characteristics are: ignitability, corrosivity, reactivity, and toxicity, as more specifically defined at 40 CFR §§ 261.21 -261.24.
24. Hazardous Waste. A solid waste, as defined in § 261.2, is a hazardous waste if: it is not excluded from regulation as a hazardous waste under § 261.4(b); and it meets any of certain criteria identified 40 CFR § 261.3. [40 C.F.R. § 261.3] For assistance determining whether a waste is a hazardous waste, contact one of the points of contact listed in chapter 1 of this Manual.
25. Industrial Wastewater. Wastewater or semi-solid material generated in vessel processes such as manufacturing, production and maintenance (for example, metal plating, acid cleaning, photo processing, solvent cleaning and painting materials).
26. Inland Area. The area shoreward of the boundary lines defined in 46 C.F.R. part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §§ 80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes. [33 C.F.R. § 155.1020]
27. International Maritime Organization (IMO). A specialized agency of the United Nations with 168 Member States and three Associate Members, IMO is based in the United Kingdom with approximately 300 international staff.
28. Management Plan. A written program developed and implemented by someone in authority such as the Commanding Officer, Officer in Charge, Engineer Officer, etc. which sets forth all or some of the following: standards and procedures, responsibilities, equipment, performance criteria, and resources. It must be of a permanent nature, that is, Night Orders do not constitute a management plan. Standing Orders, Organizational Manuals, and PQS are examples of management plans.
29. Marine Mammal. Any mammal which is morphologically adapted to the marine environment (including sea otters and members of the orders Sirenia, Pinnipedia and Cetacea), or primarily inhabits the marine environment (such as the polar bear); and, for the purposes of 16 U.S.C. chapter 31, includes any part of any such marine mammal, including its raw, dressed, or dyed fur or skin. [16 U.S.C. § 1361.2]
30. Marine Sanitation Device (MSD). Any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage. [33 C.F.R. § 159.3] There are three classifications of MSDs:

- a. Type I: "Flow-through" and "discharge" device designed to receive and treat sewage aboard vessel and produce an overboard effluent with a fecal coliform count of not greater than 1,000 per 100 milliliters and no visible floating solids.
 - b. Type II: "Flow-through" and "discharge" device that produces an overboard effluent with a fecal coliform bacteria count of not greater than 200 per 100 milliliters and suspended solids of not greater than 150 milligrams per liter.
 - c. Type III-A: "Non-flow-through" device designed to collect shipboard sewage by means of vacuum or other reduced-flush systems and to hold the sewage. This type may include equipment for shipboard evaporation or incineration of collected sewage.
 - d. Type III-B: Collection, holding and transfer (CHT) system designed to collect both sewage and graywater while in port; to offload sewage and graywater to suitable shore receiving facilities; to hold sewage while transiting within territorial seas; and to discharge both sewage and graywater overboard while operating beyond territorial seas.
31. MARPOL 73/78. The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating to that Convention. [33 C.F.R. § 151.05]
32. MARPOL Annex I (oil) Special Area. A sea area, where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of the traffic, the adoption of special mandatory methods for the prevention of sea pollution by oil, NLSs, or garbage is required. [33 C.F.R. § 151.05] The discharge restrictions are effective in the Mediterranean Sea, Baltic Sea, Black Sea, and the Antarctic area. [33 C.F.R. § 151.13]
- a. The Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein, with the boundary between the Mediterranean and the Black Sea constituted by the 41° N parallel and bounded to the west by the Straits of Gibraltar at the meridian of 5°36' W.
 - b. The Baltic Sea means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland, and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57°44.8' N.
 - c. The Black Sea area means the Black Sea proper with the boundary between the Mediterranean Sea and the Black Sea constituted by the parallel 41° N.
 - d. The Antarctic area means the sea south of 60° South Latitude (Antarctica special area). [33 C.F.R. § 151.06]
33. MARPOL Annex V (garbage) Special Area. A sea area, where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of the traffic, the adoption of special mandatory methods for the prevention of sea pollution by oil, noxious liquid substances (NLSs), or garbage is required. [33 C.F.R.

APPENDIX A TO COMDTINST M16455.1A

§ 151.05] The discharge restrictions are effective in the Mediterranean Sea, Baltic Sea, the North Sea, the Gulfs area, and the Antarctic area. [33 C.F.R. § 151.53(c)]

- a. The Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Black Sea constituted by the 41°N parallel and bounded to the west by the Straits of Gibraltar at the meridian 57°36'W.
 - b. The Baltic Sea means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland, and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57°44.8' N.
 - c. The Gulfs area means the sea area located north-west of the rhumb line between Ras al Hadd (22°30'N, 059°48'E) and Ras al Fasteh (25°04'N, 061°25'E).
 - d. The North Sea area means the North Sea proper, including seas within the North Sea southwards of latitude 62° N and eastwards of longitude 4° W; the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57°44.8' N; and the English Channel and its approaches eastwards of longitude 5° W.
 - e. The Antarctic area means the sea south of 60° South Latitude (Antarctica special area). [33 C.F.R. § 151.06]
 - f. The Wider Caribbean region means the Gulf of Mexico and Caribbean Sea proper, including the bays and seas therein and that portion of the Atlantic Ocean within the boundary constituted by the 30° N parallel from Florida eastward to 77°30' W meridian, thence a rhumb line to the intersection of 20° N parallel and 59° W meridian, thence a rhumb line to the intersection of 7°20' N parallel and 50° W meridian, thence a rhumb line drawn southwesterly to the eastern boundary of French Guiana. [33 C.F.R. § 151.06(a)(11).]
34. Medical Waste. Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes and potentially contaminated laboratory wastes, dialysis wastes, and such additional medical items as prescribed by the Administrator of the EPA by regulation. [33 C.F.R. § 151.05] Medical waste is of two categories, potentially infectious waste and non-infectious waste:
- a. Potentially Infectious Medical Waste. A liquid or solid waste that contains pathogens in sufficient numbers and with sufficient virulence to cause infectious disease in susceptible hosts exposed to the waste. Specific examples of infectious wastes are provided in Chapter 13 of the Medical Manual, COMDTINST M6000.1 (series).
 - b. Non-infectious Medical Waste. Non-infectious medical waste includes disposable medical supplies and materials that do not fall into the category of infectious medical waste. Specific examples of non-infectious medical wastes are provided in Chapter 13 of the Medical Manual, COMDTINST M6000.1 (series).

35. Navigable Waters. The waters of the United States, including the territorial seas. The term “territorial seas” means 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. [33 U.S.C. § 1362]
36. Nearest Land. The term “from the nearest land” means from the baseline from which the territorial sea of the territory in question is established in accordance with international law. [33 C.F.R. § 151.05] For “nearest land” definition for Australia, see the CFR referenced.
37. Nearshore Area. The area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, a nearshore area is one extending seaward 12 miles from the line of demarcation (COLREG lines) as defined in §§ 80.740 through 80.850 of this chapter. [33 C.F.R. § 155.1020]
38. No Discharge Zone or Designated No Discharge Zone. A State may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into some or all of the waters within such State by making a written application to the Administrator, Environmental Protection Agency, and by receiving the Administrator’s affirmative determination pursuant to section 312(f)(3) of the Act. [33 C.F.R. § 151.05], [33 U.S.C. § 1322(f)] A list of EPA approved State no-discharge zones can be found at: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/vsdnozone.html
39. Non-petroleum oil. Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal fats and vegetable oils. [33 C.F.R. § 155.1020]
40. Oil. Petroleum whether in solid, semi-solid, emulsified, or liquid form, including but not limited to, crude oil, fuel oil, sludge, oil refuse, oil residue, and refined products, and, without limiting the generality of the foregoing, includes the substances listed in Appendix I of Annex I of MARPOL 73/78. “Oil” does not include animal and vegetable based oil or noxious liquid substances (NLS) designated under Annex II of MARPOL 73/78. [33 C.F.R. § 151.05] However, for the purposes of Clean Water Act compliance, the term “oil” refers to oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil. [40 C.F.R. § 112.2]
41. Oily Mixture. A mixture with any oil content, including bilge slops, oily wastes, oil residues (sludge), oily ballast water, and washings from cargo oil tanks. [33 C.F.R. § 151.05]
42. Oily Rags. Cleaning rags or other sorbents contaminated with oil. Does not include sorbents contaminated with vegetable oils, liquid or solid shortening, or animal fat/lard used in food preparation.

APPENDIX A TO COMDTINST M16455.1A

43. Oily Waste. Oil mixed with water or other fluids such that the mixture is no longer useful.
44. Ozone Depleting Substance (ODS). Any controlled substance defined in 40 C.F.R. § 82. Examples of Class 1 substances include CFC-11, CFC-12, and Halon 1301. Examples of Class 2 substances include HCFC-21 and HCFC-22. When used as refrigerants, the substances listed above sometimes use the prefix “R”. [40 C.F.R. § 82]
45. 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 containing any hazardous substance or pollutant or contaminant), but excludes:
 - a. Any release which 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. [40 C.F.R. § 302]
46. Reportable Quantity. That quantity, as set forth in 40 C.F.R. § 302, the release of which requires notification pursuant to this part. [40 C.F.R. § 302]
47. Segregated Ballast. The ballast water introduced into a tank that is completely separated from the cargo oil and fuel oil system and that is permanently allocated to the carriage of ballast or to the carriage of ballast or cargoes other than oil or noxious substances as variously defined in the Annexes of MARPOL 73/78. [33 C.F.R. § 151.05]
48. Sewage. Human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes. [33 C.F.R. § 159.3]
49. Sheen. A glossy or iridescent appearance on the surface of the water.
50. Special Area. A list of MARPOL-designated special areas can be found at: www.imo.org/OurWork/Environment/PollutionPrevention/SpecialAreasUnderMARPOL
51. Special Status Species. Plants and animals that are legally protected under the Endangered Species Act, State Endangered Species Acts, or other regulations.
52. Take. Means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. [50 C.F.R. § 222.102]
53. Territorial Sea. The belt of the seas measured from the line of ordinary low water along that portion of the coast that is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending a seaward distance of 3 miles. For Clean Water Act purposes, in Texas and Western Florida, it extends 9 nm from shore,

except for oil and hazardous substances, where it is 12 nm, except if it could affect Exclusive Economic Zone (EEZ) resources, in which case it is 200 nm. [33 C.F.R. § 159]

54. Uniform National Discharge Standards (UNDS). Clean Water Act standards applicable to discharges, other than sewage, incidental to the normal operation of a vessel of the Armed Forces (which includes Coast Guard vessels). These standards which are, or will be codified at 40 CFR Part 1700.
55. United States. For purposes of this Manual, the U.S. includes the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.
56. Used or Excess Hazardous Material. Hazardous material for which there is no further, immediate use on board the ship possessing the material. Such material may ultimately be used on another ship or within the shore establishment for the same purpose or a purpose other than initially manufactured or by commercial industry. Used hazardous material is material that has been used in a vessel process. Excess hazardous material is unused material in full, properly sealed containers. Useable hazardous material is defined as used hazardous material that has further usefulness.
57. Used Oil. Oil whose characteristics have changed since being originally refined but which may be suitable for future use and is economically reclaimable. Used oil excludes synthetic-based lubricating and transmission products.
58. Vessel. In the context of this Manual, an all-encompassing term meant to include all floating assets from cutters to boats, including barges. The term “ship” is sometimes used and carries the same meaning. [40 C.F.R. § 302]
59. Victual Waste. Any spoiled or unspoiled food waste. [33 C.F.R. § 151.05]
60. Volatile Organic Compounds (VOCs). Photo chemically reactive organic compounds that evaporate readily under normal temperature and pressure conditions. Because of the tendency to evaporate readily, VOCs are primary contributors to the formation of ground level ozone.

APPENDIX A TO COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B: COMMANDANT'S SUSTAINABILITY, ENVIRONMENTAL, AND ENERGY POLICY STATEMENT



THE COMMANDANT OF THE UNITED STATES COAST GUARD
Washington, DC 20593

SUSTAINABILITY, ENVIRONMENTAL and ENERGY POLICY STATEMENT

The U. S. Coast Guard provides *Service to Nation* to the public we serve, the industry we regulate and the stakeholders we support through our commitment to protect natural resources and the environment. Our *Commitment to Excellence* demands that we hold ourselves to the highest standards of environmental compliance, sustainability and energy conservation in the conduct of all Coast Guard missions. We will infuse mission criticality, environmental impact and fiscal consequences into all Coast Guard decision making processes. Our *Duty to People* requires that we take steps now to ensure the health of our workforce and the communities around us.

To achieve these goals, Coast Guard personnel shall:

- Promote environmental and energy awareness and reduce liabilities in day-to-day activities;
- Optimize energy and environmental management solutions with innovative techniques that maximize future flexibility and reduce costs;
- Comply with all applicable pollution prevention and environmental laws;
- Engender a culture of conservation and engage all Coast Guard personnel as accountable energy and environmental stewards;
- Implement sound sustainable business practices that extend mission capability and minimize energy and environmental impact;
- Execute sustainable tactics that fulfill goals outlined in the Coast Guard Operational Sustainability Performance Plan and meet pertinent Executive Orders.

I charge every Coast Guard member to incorporate sustainability into all mission areas. Our shared duty to protect our natural resources and operate resourcefully is essential to sustained mission excellence.

A handwritten signature in blue ink that reads "Paul F. Zुकunft".

PAUL F. ZUKUNFT
Admiral, U.S. Coast Guard

APPENDIX C TO COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX C. AFLOAT ENVIRONMENTAL COMPLIANCE CHECKLIST

This checklist has been developed to assist in the evaluation of environmental compliance and stewardship onboard Coast Guard vessels. Units shall use this checklist to conduct periodic self-evaluations. Indicate by an **X**, the answer to each of the questions below. Provide an explanation or description of the conditions warranting any "NO" answer in the Remarks section and if necessary, propose corrective actions.

Date of this evaluation _____ Unit name _____

Date of last evaluation _____ CO/OIC signature _____

	YES	NO	N/A
A. General			
1. Have any external inspectors been granted access to the ship for an inspection related to environmental issues since the last environmental compliance inspection? External inspectors include representatives from Customs, American Bureau of Shipping (ABS), etc. If no, skip to number 2. Reference: COMDTINST M16455.1 (series), Chapter 2.A.6			
a. Have reports or correspondence relating to the inspection/survey been retained?			
b. Did the external inspectors present appropriate credentials?			
c. If the inspectors expressed an interest in liquid discharges (other than in MSD or OWS effluent) from the ship, has the Port Engineer and SFLC environmental staff been informed of that interest?			
d. If a "Notice of Violation" or other official discrepancy was issued by the inspectors, were the Port Engineer and SFLC environmental staff notified?			
e. Has the "Notice of Violation" or other official discrepancy been corrected?			
2. Have any requests for environmental inspections by representatives of a foreign country been received? If no skip to number 3. Reference: COMDTINST M16455.1 (series), Chapter 2.A.6.c			
a. Was the request refused and proper notifications made?			
3. Has the ship completed an annual environmental program self-evaluation for compliance of procedures, practices and training? Reference: COMDTINST M16455.1 (series), Chapter 2.A.7, Appendix C			
a. Was this checklist used to assist in the performance of this evaluation?			
b. Were any discrepancies noted?			
c. Have all discrepancies been corrected?			
4. When operating in foreign territorial waters or when visiting foreign ports, have all environmental provisions contained in port visit clearances and/or in Status of Forces Agreements (SOFA) been complied with? Reference: COMDTINST M16455.1 (series), Chapter 2.A.10			
5. Is the Commandant's Sustainability, Environmental, and Energy Policy Statement prominently displayed on the bridge and in the engineering control room of cutters? Reference: COMDTINST M16455.1 (series), Chapter 2.A.3			
B. Afloat Environmental Program Coordinator (AEPC)			
1. Has the Environmental Officer (XO or XPO) appointed an AEPC (recommended)? Reference: COMDTINST M16455.1 (series), Chapter 2.A.12			
a. Does this person have the requisite knowledge to perform their assigned duties?			
b. Is the individual advising the Command on environmental issues as necessary?			
C. Pollution Prevention Training Afloat			

APPENDIX C TO COMDTINST M16455.1A

1. Have all crewmembers presently onboard, received general and command-specific environmental awareness training commensurate with the member's position in the command to ensure that they fully understand the environmental stewardship and protection responsibilities of the Coast Guard, as well as their roles in the proper execution of those responsibilities? Reference: COMDTINST M16455.1 (series), Chapter 2.B			
a. Is environmental training for the crew being held upon reporting aboard and annually thereafter?			
2. Does all hands environmental training include: Reference: COMDTINST M16455.1 (series), Chapter 2.B			
a. The Commandant's Sustainability, Environmental, and Energy Policy Statement?			
b. The CG environmental program, including pollution prevention, solid waste handling and minimization, plastics management, recycling, air pollution (including ozone depleting substances), and oil and hazardous substance spill response?			
c. The crewmember's responsibility with regard to this program?			
3. Are personnel who operate or maintain sewage and graywater disposal or transfer equipment trained on the proper procedures for sewage and graywater disposal, including hookup and transfer of sewage or graywater to shore facilities and at-sea discharge restrictions? Reference: COMDTINST M16455.1 (series), Chapter 3.B			
4. Are personnel whose watch or task duties may result in air pollution (e.g., engineering watchstanders, users of volatile solvents) trained on the proper use of material and operations to minimize the release of pollutants? Reference: COMDTINST M16455.1 (series), Chapter 4.B			
5. Have the AC&R technicians who perform maintenance on air conditioning and refrigeration equipment received proper certification on handling, recovery and recycling ozone-depleting substances (ODS)? Reference: COMDTINST M16455.1 (series), Chapter 4.B			
6. Are personnel who operate or maintain used oil and oily water holding, processing, disposal or transfer equipment trained on the proper procedures for oily waste disposal, including hookup and transfer of used oil and oily waste to shore facilities and at sea discharge restrictions? Reference: COMDTINST M16455.1 (series), Chapter 5.B			
7. Are personnel who handle, store and dispose of hazardous material trained on proper procedures? References: Hazardous Waste Management Manual, COMDTINST M16478.1 (series), Chapter 10 COMDTINST M16455.1 (series), Chapter 6.B			
8. Are personnel responsible for handling ship's garbage trained on the discharge restrictions applicable to the waste category? Reference: COMDTINST M16455.1 (series), Chapter 7.B, Table 7-1.			
D. Sewage/Graywater			
1. Is the Marine Sanitation Device (MSD) in proper working order? Reference: COMDTINST M16455.1 (series), Chapter 3.B			
2. Does the MSD space contain warning placards and operational procedures indicating: References: NSTM 593, Pollution Control; COMDTINST M16455.1 (series), Chapter 2.B.1.d			
a. Spill and leak cleanup procedures?			
b. Personnel cleanup procedures?			
c. Prohibition on smoking, drinking and eating in the space?			
d. Presence of toxic or flammable fumes in the tank? (For Type III MSD/CHT)			
3. Are instructions posted to ensure personnel properly operate MSDs to prevent the overboard discharge of untreated or inadequately treated sewage or any waste derived from sewage within 0-3 nm of the U.S. shore? Reference: COMDTINST M16455.1 (series), Chapter 3.B.1.d			
4. Does the vessel only discharge sewage overboard when greater than 3NM from shore? If no, explain in remarks section. Reference: COMDTINST M16455.1 (series), Chapter 3.B, Table 3-1			

APPENDIX C TO COMDTINST M16455.1A

a. Was the vessels transit time within 0-3 nm of shore of such duration that the sewage holding capacity was exceeded?			
b. Was the vessel conducting or participating in military operations, exercises, and training?			
c. Were periods in which the vessel has been required to discharge sewage overboard within 3 nm of shore held to an absolute minimum?			
5. Do personnel ensure that used solvents or other industrial wastes are not piped to MSDs or dumped down sinks or deck drains? (Used solvents and industrial wastes shall be packaged for disposal ashore.) Reference: COMDTINST M16455.1 (series), Chapter 3.B.1.e			
E. Air Pollution			
1. Are operations and maintenance precautions being taken to minimize the opacity of exhausts? Reference: COMDTINST M16455.1 (series), Chapter 4B.2.a			
2. Is the operation of boilers and diesel engines minimized in port by using shore services whenever operational requirements permit? Reference: COMDTINST M16455.1 (series), Chapter 4.B.2.b			
3. Are only approved solvents, paints, fuels, lubricants and chemicals used onboard? References: Coatings and Color Manual, COMDTINST M10360.3 (series), Appendix C Hazardous Waste Management Manual, COMDTINST M16478.1 (series), Chapter 2			
F. Oil and Oily Waste			
1. Is a ship record/history of oil consumption/loss etc maintained? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.f			
a. Do these oil records demonstrate that the ship is compliant with oil discharge restrictions?			
2. If a sheen or oil spill has occurred since the last inspection, has the unit reported it in accordance with Chapter 9 of this manual? Reference: COMDTINST M16455.1 (series), Chapter 9.B			
3. Is the vessel equipped with a USCG-certified oily water separator and oil content monitor?			
a. Is the equipment in proper working order and properly calibrated?			
b. Are bilge water discharges limited to 15-ppm oil?			
4. Are used lube oils collected, separately stored, and labeled for shoreside reclamation or disposal? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.b.(2)			
5. Is discharge of oily waste through the OWS and OCM less than 15 ppm of oil? Reference: COMDTINST M16455.1 (series), Chapter 5.A.1			
6. Is oil contamination of bilge water minimized? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.a.(1)			
7. Does the unit refrain from use of emulsifying bilge cleaners? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.a.(3)			
8. Are only approved cleaners being used aboard the vessel? Reference: COMDTINST M16455.1 (series), Chapter 4.B.2.c & 5.B.6.a.(3)			
9. Is lube oil discharge into the bilges, oily water holding or used oil tanks minimized? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.a.(1)			
10. Are placards posted as required? Reference: COMDTINST M16455.1 (series), Chapter 5.B.5.g			
11. Does the ship have written procedures with clearly defined responsibilities for the following oil transfer operations:			
a. Topping off tanks			
b. Communication between persons conducting transfer			
c. Emergency shut-down			
d. Spill notification			
12. Are all personnel involved in oil transfer operations familiar with the procedures in F.10 above?			

APPENDIX C TO COMDTINST M16455.1A

13. Is a Person in Charge designated in writing by the Commanding Officer for oil transfer and disposal?			
14. Are written and legible oil transfer procedures permanently posted or available where they can be easily seen by crewmembers when engaged in oil transfer operations?			
15. Do the procedures include all the pertinent information required by this Manual?			
16. Are fueling, defueling, internal fuel transfer, and oil offloading operations accomplished during normal daylight working hours, when operating schedule permits, and conducted by well-trained personnel? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.c			
17. Before scheduling fueling operations, is it confirmed that the transfer facility, including mobile facilities, have a current and valid operations manual for transfer operations that has been examined by the cognizant Captain of the Port in accordance with Title 33 CFR 154.325? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.c			
18. During fueling/defueling, are topside watches maintained having a direct communication to fuel transfer pump station? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.c.(1)			
19. During fueling/defueling, is each tank level continuously monitored while it is being filled with fuel? (Remote tank-level indicators and/or tank soundings shall be used as the primary method of obtaining tank levels.) Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.c.(4)			
20. Prior to actual fuel transfer, do transfer personnel inform the EO/EPO, officer of the deck, and the fuel supplier that the vessel is ready to commence fueling operations? Reference: COMDTINST M16455.1 (series), Chapter 5.B.6.c.(5)			
G. Hazardous Material and Hazardous Waste			
1. Has the ship avoided discharge of any hazardous material at sea not in accordance with this Manual? If not, explain in the remarks section. Reference: COMDTINST M16455.1 (series), Chapter 6.C			
2. Has the Commanding Officer appointed in writing the Hazardous Materials Coordinator? Reference: Hazardous Waste Management Manual, COMDTINST M16478.1 (series), Chapter 10 COMDTINST M16455.1 (series), Chapter 6.D			
a. Does this crewmember have the requisite knowledge to perform the assigned duties (i.e. taken the online Collateral Duty Environmental Coordinator Course or equivalent)?			
3. Is hazardous material transferred to shore facilities for proper disposal? Reference: COMDTINST M16455.1 (series), Chapter 6.C.2			
4. Is the Hazardous Material Coordinator required to reconcile all hazardous material left on the pier prior to the vessel leaving port, and is the associated documentation kept on file? Reference: COMDTINST M16455.1 (series), Chapter 6.C			
5. Is labeling, handling, and storage of hazardous material accomplished in accordance with The Hazardous Waste Management Manual, COMDTINST M16478.1 (series)?			
H. Solid Waste			
1. Does the vessel have a waste (garbage) management plan? Reference: COMDTINST M16455.1 (series), Chapter 7.B			
2. Are placards showing garbage disposal and pulper restrictions as required in Chapter 7 of this Manual posted? Reference: COMDTINST M16455.1 (series), Chapter 7.CB.2.b and Table 7-1			
3. Has training been provided to crewmembers to identify the different classes of waste and allowable disposal practices? Reference: COMDTINST M16455.1 (series), Chapter 7.C			
4. Is plastic waste prohibited from being discharged at sea? Reference: COMDTINST M16455.1 (series), Chapter 7.B.1			
5. Are trash receptacles clearly labeled with information alerting crewmembers of the importance of segregation and with what items are to be placed in each receptacle (plastic, metal, glass, etc)? Reference: COMDTINST M16455.1 (series), Chapter 7.B.10			

APPENDIX C TO COMDTINST M16455.1A

6. Is garbage discharge prohibited within 3 nm of any shore? Reference: COMDTINST M16455.1 (series), Table 7-1			
7. In the event of a plastic discharge, does the vessel record the event in the unit log, including the date, time, and location of discharge, approximate weight and cubic volume of the discharge, and nature of the material discharged? Reference: COMDTINST M16455.1 (series), Chapter 7.B.1.c			
8. If equipped with an incinerator, is it used for the disposal of non-hazardous garbage only? Reference: COMDTINST M16455.1 (series), Chapter 4.B.2.b			
I. Medical Waste			
1. Has training been provided to the crewmembers responsible for processing and disposing of medical waste? Reference: COMDTINST M16455.1 (series), Chapter 8.C			
2. Is infectious medical waste (including needles, syringes, scalpels and other sharps) packaged correctly for ashore disposal in accordance with the Medical Manual, COMDTINST M6000.1 (series)?			
3. Are sharps collected in plastic autoclavable sharps containers? References: Medical Manual, COMDTINST M6000.1 (series), Chapter 13.J Reference: COMDTINST M16455.1 (series), Chapter 8.B.4			
J. Oil and Hazardous Substances (OHS) Spill and Reporting Procedures			
1. Does the ship have and maintain the recommended OHS spill response supplies? Reference: COMDTINST M16455.1 (series), Chapter 9.B.2, Appendix E			
2. Have personnel been exercised in OHS spill response procedures within the last year? Reference: COMDTINST M16455.1 (series), Chapter 9.C			
3. Has the vessel considered in-port watch section response as well as onboard response for OHS spill response training? Reference: COMDTINST M16455.1 (series), Chapter 9.C			
4. Cutters only. Is your Cutter Oil Pollution Emergency Plan current and available to those who may need it? Reference: COMDTINST M16455.1 (series), Chapter 9.B.8.			
K. Ballast Water and Anchor Sediment Control Policy			
1. Are the anchor, chain, and appendages thoroughly washed down with seawater when being retrieved to prevent onboard collection of sediment, mud, and silt? Reference: COMDTINST M16455.1 (series), Chapter 10.B.7			
2. When chain lockers are washed down to flush out sediment, mud and silt, is it outside of 12 miles from land whenever possible? Reference: COMDTINST M16455.1 (series), Chapter 10.B.7			
3. Is ballast water taken on when outside of 200 nm from shore? Reference: COMDTINST M16455.1 (series), Chapter 10.B.3.a			
a. If not, when discharging ballast water, is a complete ballast water exchange performed outside of 200 nm?			
4. Is the loading and flushing of the ballast tanks entered into the ship's unit log? Reference: COMDTINST M16455.1 (series), Chapter 10.B.1.a			
5. Do the log entries include the geographical position and the amount of ballast water taken on? Reference: COMDTINST M16455.1 (series), Chapter 10.B.1.a			
L. Marine Mammal Protection Policy			
1. Are all personnel aware that marine mammals are protected from unpermitted "taking" under the Marine Mammal Act? Reference: COMDTINST M16455.1 (series), Chapter 11.A.1			
2. Is the protection of marine wildlife taken into consideration during operations and planning? Reference: COMDTINST M16455.1 (series), Chapter 11.B.1			
3. Has there been any marine wildlife related incident since the last evaluation? If no skip to section M.			

APPENDIX C TO COMDTINST M16455.1A

4. Were marine wildlife related incidents reported properly? Reference: COMDTINST M16455.1 (series), Chapter 11.CB.1.a.6			
M. Noise Policy			
1. Does the ship restrict noise to the maximum extent possible to normal daylight hours? Reference: COMDTINST M16455.1 (series), Chapter 12.B			
N. Ozone Depleting Substances (ODS)			
1. Is consumption data recorded whenever refrigerant is added? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
2. Are maintenance records kept on AC&R systems repairs and include the following information: Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
a. Technician(s) performing work,			
b. Pounds of refrigerant removed, and			
c. Pounds of refrigerant added?			
3. Are annual records maintained on the equipment leakage rates for 3 years? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
4. Are mission critical ODS procured from the ODS reserve (stockpile)? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
a. When necessary, are ODS procurement approvals (waivers) obtained for the open purchase of ODS?			
5. Are consumption and leakage rates of ODS recorded? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
a. Are annual leakage rates of not more than 15 percent of total installed refrigerant charge of air conditioning equipment maintained?			
b. Is an annual leakage rate of not more than 35 percent of total installed refrigerant charge of ship stores and cargo refrigeration maintained?			
6. Does the unit have a policy of replacing small refrigeration equipment (icemakers, coolers, etc.) when it no longer functions properly? Replacement equipment must use a non Class 1 or 2 refrigerant. Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
7. Is the ship equipped with a refrigerant recovery unit? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			
8. Has the vessel completely converted to HFC-134A (R-134A) or a technically acceptable alternative? Reference: COMDTINST M16455.1 (series), Chapter 4.B.4			

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D: SUMMARY OF INSPECTIONS, RECORDS, AND REPORTS

Inspection	Report Due	Page	
Compliance self assessment	Annually	2-6	
Records and Report	Report Due	Page	
Halon/refrigerant	Conditional	4-2	
Marine Coating VOC	Conditional	4-2	
Machinery Log	Emergency Dewater	5-6	
	Oil Movement	5-8	
	Oil Discharge	5-8	
	Ballast Transfer	10-1	
Unit Log	Untreated Sewage w/in 3nm	3-4	
	Oil Discharge	5-8	
	Unprocessed garbage in IMO special area	7-3	
	Infectious Medical Waste discharge	8-1	
	SMA speed restriction violation	11-3	
Report of Casualty	Increased potential of or actual unauthorized discharge	5-1,2, 7-3, 9-2,3	
Mammal Strike	When strike occurs	11-3	

APPENDIX D TO COMDTINST M16455.1A

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX E: RECOMMENDED SPILL RESPONSE INVENTORY

OIL AND HAZARDOUS SUBSTANCES (OHS) SPILL RESPONSE KIT

1. Explanation of Columns for OHS Spill Response Kit:

- a. Item Name
- b. COG Number
- c. Stock Number
- d. Column 1: quantities recommended for:
Cutters over 200 ft in length
- e. Column 2: quantities recommended for:
Cutters between 65 and 200 ft in length

APPENDIX E TO COMDTINST M16455.1A

OIL AND HAZARDOUS SUBSTANCES (OHS) SPILL RESPONSE KIT

Item Description	COG	Stock Number	Column 1	Column 2
Spill Containment Material				
Sorbent Sweep (18" x 100' bale)	9G	4235-01-281-4608	16 ea	8 ea
Sorbent Sheet (18"x18" - 100 sheet/bale)	9G	4235-01-219-7414	2 be	1 be
Oil & Water Absorbent (20 / bx) (Absorbent Pillow)	9Q	7930-01-353-6414	1 bx	1 bx
Sorbent Sox (15 / bx)	9Q	7930-01-353-6415	1 bx	1 bx
Decontaminating Agent (15lb / cn)	9G	6850-01-230-8556	2 cn	1 cn
Steel Drum (30 gal)	9Z	8110-00-866-1728	1 ea	1 ea
Plastic Bags (100 / bx)	9Q	8105-01-183-9764	1 bx	1 bx
Scrub Brush	9Q	7920-00-282-2470	12 ea	12 ea
Brush Handle	9Q	7920-00-141-5452	12 ea	6 ea
Rubber Dustpan	9Q	7920-00-616-0109	12 ea	6 ea
Squeegee	9Q	7920-00-224-8339	12 ea	6 ea
Tongs	9Q	7330-00-616-0998	6 ea	3 ea
Sealing Tape	9Q	7510-01-362-7043	2 ro	1 ro
Personal Protective Equipment (PPE)				
Disposable Coveralls, Large (6 / cs) (Saranex Coated)	9D	8415-01-415-7450	1 cs	1 cs
Disposable Coveralls, Medium (6 / cs) (Saranex Coated)	9D	8415-01-415-7451	1 cs	1 cs
Coveralls, Medium	9D	8415-00-601-0794	6 ea	6 ea
Coveralls, Large	9D	8415-00-601-0797	6 ea	6 ea
Toxicological Gloves	9D	8415-00-753-6553	6 pr	3 pr
Chemical & Oil Gloves (Sz 10)	9D	8415-01-013-7382	24 pr	12 pr
Surgeon's Gloves (50 / pkg)	9L	6515-01-145-8841	2 pkg	1 pkg
Air Filtering Mask (20 / bx) (Note 1)	9D	4240-01-429-2685 P/N 5450T12	1 bx	1 bx
Air Filtering Respirator (12 / bx)	9Z	4240-01-300-9411	1 bx	1 bx
Air Filtering Respirator	9Z	4240-01-022-8501	12 ea	6 ea

OIL AND HAZARDOUS SUBSTANCES (OHS) SPILL RESPONSE KIT

Item Name	COG	Stock Number	Column 1	Column 2
Personal Protective Equipment (PPE) (Cont'd)				
Air Filtering Respirator Cartridge, Organic Vapor/Acid (10 / bx)	9Z	4240-01-103-8475	1 bx	1 bx
Air Filtering Respirator Cartridge, Dust, mist, fumes (10 / bx)	9Z	4240-01-230-6894	2 pg	1 pg
Chemical Goggles	9Z	4240-00-190-6432	12 pr	6 pr
Accessories				
Accessories Storage Box	9C	2540-00-348-7792	4 ea	2 ea
Blue Litmus Paper (100 / bx) (Note 2)	9L	6640-00-290-0146	1 bx	1 bx
Guide for Hazardous Material Incidents, Emergency Response Handbook	9Z	7610-01-350-5837	1 ea	1 ea
Non-Regulated Hazardous Material (Spill Residue) Label	1H	MSC 4400/5 (10/97)	1 pkg	1 pkg
PCB Identification Label (Note 3)	1H	NAVSEA 5090/3 1L 0116-LF-008-6500	1 pkg	1 pkg
Tending Line, 1/4 in diameter (50 ft) (Note 4)	9Q	4020-00-968-1350	2 rl	2 rl
Snap Hook (Note 4)	9Z	5340-00-275-4584	16 ea	8 ea
Notes/Remarks				
Note 1: The air mask is designed for use in non-oil contaminated atmospheres and must meet NIOSH N95 standards. The masks can be open purchased.				
Note 2: Litmus paper not stocked in wholesale system, must procure locally.				
Note 3: Requisition from NAVICP-Philadelphia				
Note 4: Two 50 ft Tending Lines shall be fabricated by ship's force using snap hooks and tending line. A snap hook shall be attached to each end of the tending line for use in guiding sorbent sweep when used over the side.				

THIS PAGE INTENTIONALLY LEFT BLANK

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
USCG Cutter (W___)

Address line 1
Address line 2
Phone:(###) ###-####
Fax: (###) ###-####

CUTTERINST 9670.1A
DDMMYY

USCGC CUTTER INSTRUCTION 9670.1A

Subj: OIL POLLUTION RESPONSE PLAN

- Ref: (a) Vessel Environmental Manual, COMDTINST M16455.1 (series)
(b) Cutter Organization Manual, COMDTINST M5400.16 (series)
(c) U. S. Code of Federal Regulations, [33 C.F.R. § 151.26]

1. PURPOSE. This plan is written in accordance with the Vessel Environmental Manual, COMDTINST M16455.1 (series). It outlines the procedures that will minimize damage when a pollution incident has occurred or is likely to occur. The appendices contain names, telephone numbers, etc of all contacts referenced in the plan, as well as other reference material. The appendices must be maintained up to date.
2. ACTION. Department Heads shall ensure compliance with this Instruction. All hands shall be familiar with the contents of this instruction.
3. DIRECTIVES AFFECTED. None.
4. DISCUSSION. In the event of a pollution incident or a likely pollution incident, specific actions are required to minimize environmental, property, and personnel damage. This instruction addresses and documents the pre-incident planning required to adequately respond to such an incident.
5. ENVIRONMENTAL ASPECT AND IMPACT. None.
6. FORMS AVAILABILITY. None.

C. O. Ofcutter
//S//

Chapter 1. REPORTING REQUIREMENTS

- A. When To Report. A spill is defined as an accidental or un-permitted discharge of regulated material into or upon the water. Any quantity that may cause detectable harm or causes a sheen on the water is a reportable spill.
- B. What to Report. All notifications shall include as much information and detail as possible, and shall be made in a timely manner.
1. The following information is mandatory for initial notification:
 - a. Cutter name and call sign.
 - b. Date, time, and location of the incident.
 - c. Course, speed, and intended track of the cutter.
 - d. Type and estimate of quantity of material discharged, or future discharge potential.
 - e. Cause of discharge.
 - f. Weather and sea conditions on scene.
 - g. Cleanup status.
 - h. Current cutter condition.
 - i. Threat to health and safety and/or environment.
 - j. Radio station(s) and frequencies guarded.
 - k. Date and time of next report.
 2. Upon completion of the initial report, follow-on reports shall be made to the on-scene coordinator, including as much information that is essential for the protection of the marine environment. These follow-up reports shall include the following information:
 - a. Additional details on the material that was spilled.
 - b. Additional details on the condition of the vessel and ability to transfer ballast and fuel.
 - c. Additional details on the quantity, extent, and movement of the pollution and whether the discharge is continuing.
 - d. Any changes in the on-scene weather or sea conditions.
 - e. Actions being taken with regard to the discharge and the movement of the ship.
- C. Whom to Contact. In carrying out missions and in transits that will carry CGC _____ through the COTP zones / Sectors below. See Appendix A for contact information.
- a. COTP zone / Sector _____
 - b. COTP zone / Sector _____
 - c. (continue as needed)
- D. Environmentally Significant Spills. For spills anywhere resulting from catastrophic events, causing significant adverse public reaction, having geopolitical implications or for other causes warranting critical incident reports per COMDTINST 3100.8 (series), Critical Incident Communications. Vessels shall make the initial report by the Critical Incident Communications system.

- a. As soon as safely practical, notify OPCON with information copies to Commandant (CG-45, CG-0941E, and CG-0922).
- b. Complete a Pollution Report (POLREP) within 24 hours.

Chapter 2. STEPS TO CONTROL A DISCHARGE

A. Operational Spills (pipe leakage, tank overflow, and tank or hull leak). As far as safely practical, secure the source of the discharge. Make efforts to keep any discharged liquids that have not yet gone into the water onboard the ship; this can be done using shipboard fittings, traditional absorbent pads, sorbent booms, etc. Refer to Appendix E of the Vessel Environmental Manual, COMDTINST M16455.1 (series) for a recommended list of spill response items to be carried onboard. Deploy a containment boom if available. If the vessel is not underway, deploy personnel as necessary (small boat, pier, boat hook, etc) with cleanup materials to recover spilled materials from the water.

B. Spills Resulting From Casualties (grounding, fire or explosion, collision, hull failure, or excessive listing). The guidance listed above in Section 2.a also applies here, however, in these situations that guidance must be weighed against the overall safety of the ship and crew.

- C. Cutter-specific step.
- D. Next cutter-specific step.
- E. Next cutter-specific step.
- F. (continue as needed).

Chapter 3. NATIONAL AND LOCAL COORDINATION

A. The Commanding Officer shall notify the NRC that an oil discharge or hazardous substance release has occurred and coordinate response activities with appropriate response agencies (i.e., USCG, Environmental Protection Agency, etc.).

Chapter 4. POINTS OF CONTACT

List of Points of Contact for COTP zones / Sectors listed in Section 3 and their contact numbers:

- A. Oil and Hazardous Substance (OHS) Spill Response Within the U.S. Contiguous Zone. For spills taking place within 24 nautical miles of the U.S. shoreline, cutters shall contact:
 - a. OPCON with information copies to Commandant (CG-45, CG-0941E, and CG-0922).
 - b. National Response Center (NRC): telephone (800) 424-8802.
 - c. Captain of the Port (COTP) / Sector (####) ####-####.
 - d. State or territorial response agency (####) ####-####.

APPENDIX F TO COMDTINST M16455.1A

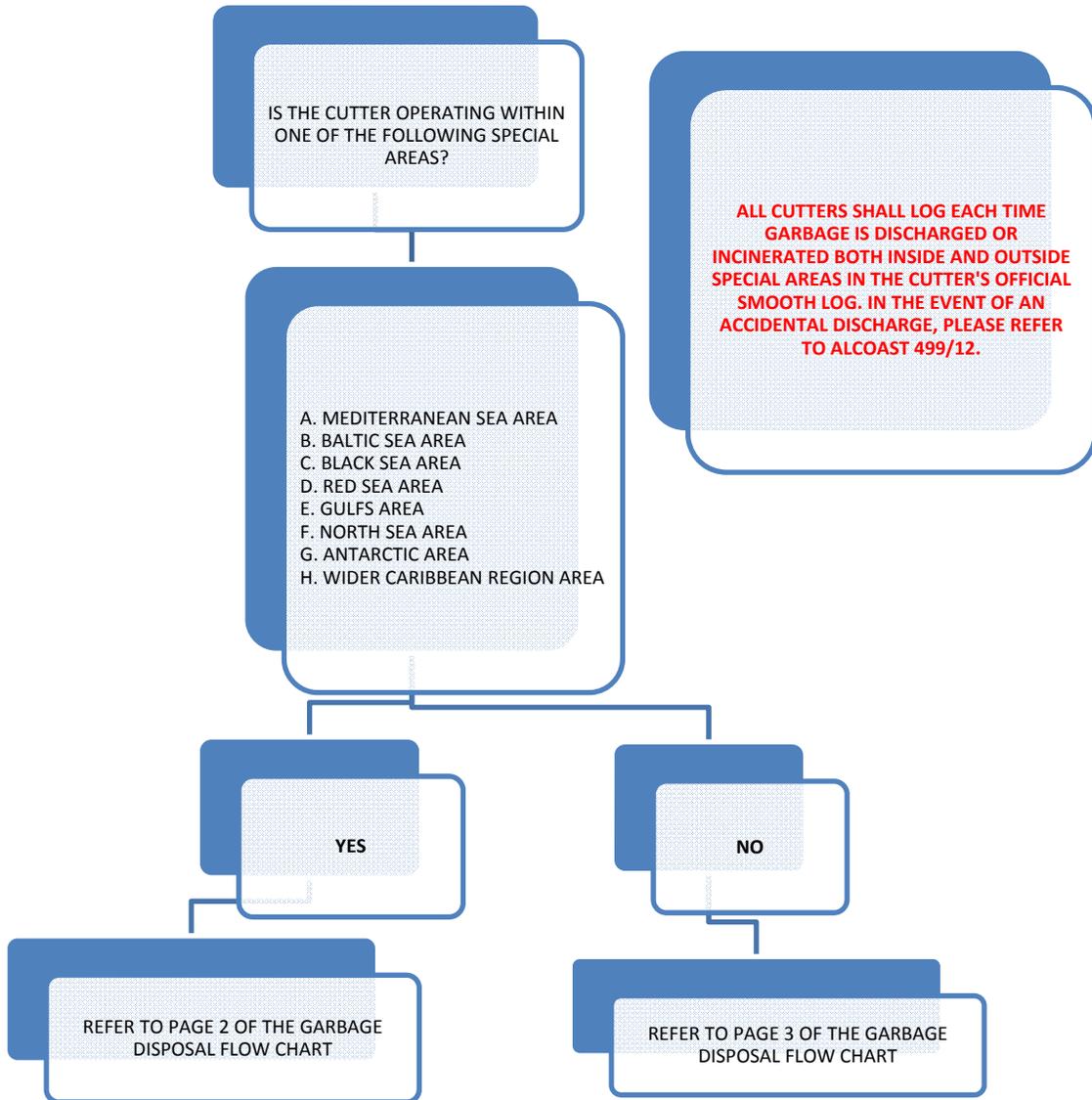
B. OHS Spill Response in Waters of Foreign Countries. For spills taking place in waters of foreign countries, cutters shall contact:

- a. The appropriate agency or authority as designated in the LOGREQ reply or servicing Port Agent.
- b. OPCON with information copies to Commandant (CG-45, CG-0941E, and CG-0922).

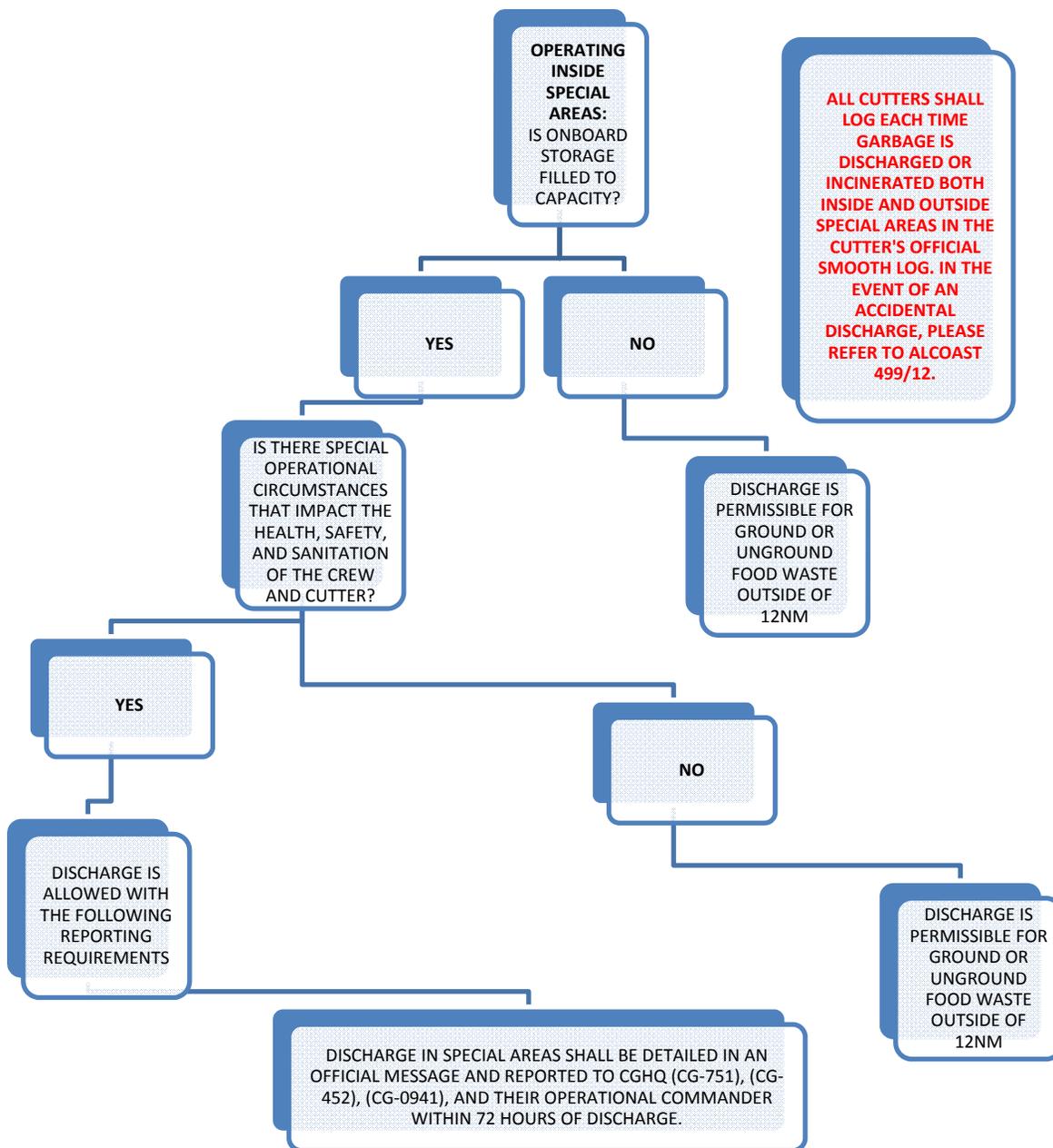
C. OHS Spill Response in International Waters. For spills taking place in international waters, cutters shall contact:

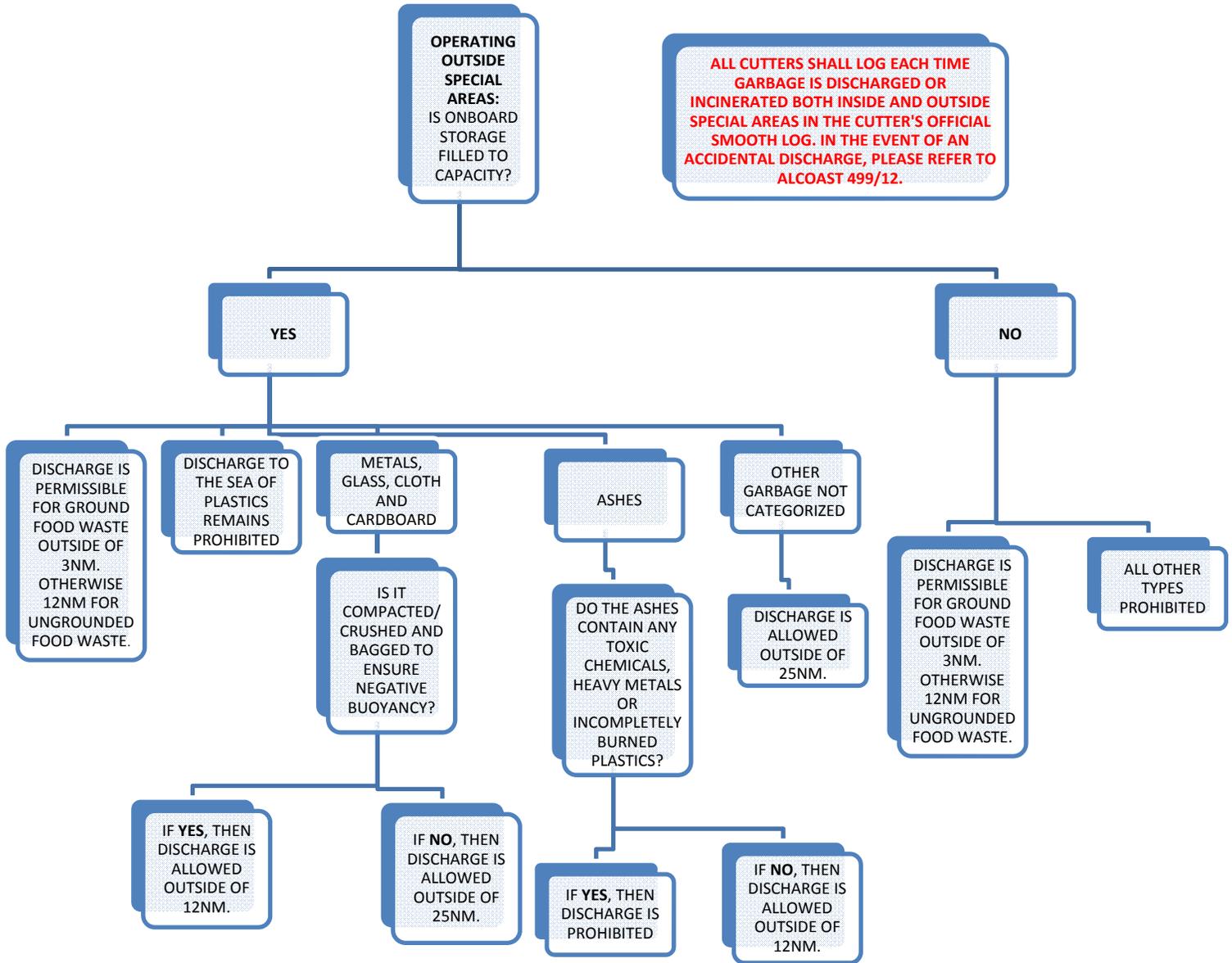
- a. OPCON with information copies to Commandant (CG-45, CG-0941E, and CG-0922).
- b. National Response Center (NRC) by telephone at (800) 424-8802.

APPENDIX G. GARBAGE DISCHARGE FLOW CHARTS



APPENDIX G TO COMDTINST M16455.1A





THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX H. GARBAGE DISCHARGE REPORT TEMPLATE

R XXXXXXXZ XXX XX
FM [REPORTING CUTTER]
TO OPCON
INFO COMDT COGARD WASHINGTON DC//CG-45/CG-751/0941//
UNCLAS/N0593//
SUBJ/GARBAGE DISCHARGE WITHIN SPECIAL AREA REPORT//
1. DISCHARGE DETAILS:
A. DATE, TIME, AND LOCATION
B. AMOUNT OF GARBAGE DISCHARGED (IN CUBIC FEET)
C. COMPOSITION OF GARBAGE MATERIAL DISCHARGED
D. MISSION AT THE TIME GARBAGE WAS DISCHARGED
E. REASON FOR DISCHARGE AND POSSIBLE IMPACT TO THE CUTTER IF
THE GARBAGE WAS NOT DISCHARGED
BT
NNNN

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX I. SEASONAL MANAGEMENT AREAS – NORTH ATLANTIC RIGHT WHALE

1. Graphical representations are available on the Vessel Environmental page on CG Portal.
2. *Southeast U.S.* (south of St. Augustine, FL to north of Brunswick, GA): Vessels shall travel at a speed of 10 knots or less over ground during the period of November 15 to April 15 each year in the area bounded by the following: Beginning at 31°27'00.0" N–080°51'36.0" W; thence west to charted mean high water line then south along charted mean high water line and inshore limits of COLREGS limit to a latitude of 29°45'00.0" N thence east to 29°45'00.0" N–080°51'36.0" W; thence back to starting point.
3. *Mid-Atlantic U.S.* (from north of Brunswick, Georgia to Rhode Island): Vessels shall travel 10 knots or less over ground in the period November 1 to April 30 each year:
 - a. In the area bounded by the following: 33°56'42.0" N–077°31'30.0" W; thence along a NW bearing of 313.26° True to charted mean high water line then south along mean high water line and inshore limits of COLREGS limit to a latitude of
31°27'00.0" N; thence east to
31°27'00.0"N–080°51'36.0" W; thence to
31°50'00.0"N–080°33'12.0" W; thence to
32°59'06.0"N–078°50'18.0" W; thence to
33°28'24.0"N–078°32'30.0" W; thence to
33°36'30.0"N–077°47'06.0" W; thence back to starting point.
 - b. Within a 20-nm (37 km) radius (as measured seaward from COLREGS delineated coastlines and the center point of the port entrance) at the:
 - (1) Ports of New York/New Jersey:
40°29'42.2" N–073°55'57.6" W;
 - (2) Delaware Bay (Ports of Philadelphia and Wilmington):
38°52'27.4" N–075°01'32.1" W;
 - (3) Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore):
37°00'36.9" N–075°57'50.5" W; and
 - (4) Ports of Morehead City and Beaufort, NC:

APPENDIX I TO COMDTINST M16455.1A

34°41'32.0" N–076°40'08.3" W; and

- c. In Block Island Sound, in the area bounded by the following coordinates:

Beginning at 40°51'53.7" N–70°36'44.9"W; thence to

41°20'14.1" N–70°49'44.1"W; thence to

41°04'16.7" N–71°51'21.0"W; thence to

40°35'56.5" N–71°38'25.1"W; thence back to starting point.

4. Northeast U.S. (north of Rhode Island):

- a. *In Cape Cod Bay, MA:* Vessels shall travel at a speed of 10 knots or less over ground during the period of January 1 to May 15 in Cape Cod Bay, in an area beginning at 42°04'56.5" N–070°12'00.0"W; thence north to 42°12'00.0" N–070°12'00.0" W; thence due west to charted mean high water line; thence along charted mean high water within Cape Cod Bay back to beginning point.

- b. *Off Race Point:* Vessels shall travel at a speed of 10 knots or less over ground during the period of March 1 to April 30 each year in waters bounded by straight lines connecting the following points in the order stated:

42°30'00.0" N–069°45'00.0" W; thence to

42°30'00.0" N–070°30'00.0" W; thence to

42°12'00.0" N–070°30'00.0" W; thence to

42°12'00.0" N–070°12'00.0" W; thence to

42°04'56.5" N–070°12'00.0" W; thence along charted mean high water line and inshore limits of COLREGS limit to a latitude of 41°40'00.0" N; thence due east to 41°41'00.0" N–069°45'00.0" W; thence back to starting point.

- c. *Great South Channel:* Vessels shall travel at a speed of 10 knots or less over ground during the period of April 1 to July 31 each year in all waters bounded by straight lines connecting the following points in the order stated:

42°30'00.0" N–069°45'00.0" W

41°40'00.0" N–069°45'00.0" W

41°00'00.0" N–069°05'00.0" W

APPENDIX I TO COMDTINST M16455.1A

42°09'00.0" N-067°08'24.0" W

42°30'00.0" N-067°27'00.0" W

42°30'00.0" N-069°45'00.0" W.

5. Dynamic Management Areas (DMA): NOAA may institute voluntary speed restrictions of 10 knots or less in locations outside of the SMAs where elevated Right Whale densities are observed.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX J. ACRONYMS

AC&R	Air Conditioning and Refrigeration
AEPC	Afloat Environmental Protection Coordinator
AFFF	Aqueous Film-Forming Foam
ANB	Aids-to-Navigation Boat
APPS	Act for the Prevention of Pollution at Sea
CAA	Clean Air Act
CASREP	Casualty Report
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	Chlorofluorocarbon (see also HCFC)
C.F.R.	United States Code of Federal Regulations
CHT	Collection, Holding and Transfer
COLREGS	Convention on the International Regulations for Preventing Collisions at Sea, 1972
COTP	Captain of the Port
CWA	Clean Water Act
DoD	Department of Defense
DoT	Department of Transportation
EC&R	Environmental Compliance and Restoration
EEZ	Exclusive Economic Zone
EIAB	Environmental Incident Analysis Board
EIRB	Environmental Incident Review Board
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FOSC	Federal On-Scene Coordinator (see also OSC)
HCFC	Hydrochlorofluorocarbon (see also CFC)
HM	Hazardous Material
HW	Hazardous Waste
IMO	International Maritime Organization
LOGREQ	Logistics Request
MARPOL	Marine Pollution (roughly – see definition)
MEPC	Maritime Environment Protection Committee (of IMO)
MPPCF	Million Particles per Cubic Foot
MSD	Marine Sanitation Device
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NISA	National Invasive Species Act
NLS	Noxious Liquid Substances
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
NSTM	Naval Ship's Technical Manual
OCM	Oil Content Meter
ODS	Ozone Depleting Substance
OHS	Oil and Hazardous Substance
OinC	Officer in Charge
OPCON	Operational Commander

APPENDIX J TO COMDTINST M16455.1A

OSC	On-Scene Coordinator
OWHT	Oily Water Holding Tank
OWS	Oily Water Separator
PIC	Person In Charge
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SFLC	Surface Forces Logistics Center
SITREP	Situation Report
SMA	Seasonal Management Area
SOFA	Status Of Forces Agreement
SOLAS	Safety Of Life At Sea
TJAG	The Judge Advocate General of the USCG
UNDS	Uniform National Discharge Standards
U.S.C.	United States Code
VOC	Volatile Organic Compound
VTMP	Vessel Topside Management Plan
WLB	Seagoing Buoy Tender