



DoD MANUAL 4715.06, VOLUME 4

REGULATIONS ON VESSELS OWNED OR OPERATED BY THE DEPARTMENT OF DEFENSE: DISCHARGES INCIDENTAL TO NORMAL OPERATIONS

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Approved by:	Paul D. Cramer, Performing the Duties of Assistant Secretary of Defense for Energy, Installations, and Environment

Purpose: This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive 5135.03:

- This manual implements policy, assigns responsibilities, and provides procedures for environmental compliance of vessels owned or operated by DoD.
- This volume:
 - Implements policy, assigns responsibilities, and provides procedures for environmental compliance of vessels owned or operated by the United States Coast Guard (USCG).
 - Implements Section 1322(n)(2)(A) of Title 33, United States Code (U.S.C.) and issues the regulations governing the design, construction, installation, and use of marine pollution control devices (MPCDs) onboard Armed Forces vessels, including on board vessels owned or operated by the USCG, as necessary to achieve the standards issued in accordance with Sections 1700.14 through 1700.42 of Title 40, Code of Federal Regulations (CFR). Section 1700 of Title 40, CFR contains the Uniform National Discharge Standards (UNDS) for Armed Forces vessels.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

This volume:

a. Applies to OSD, the Military Departments (including the USCG at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this volume as the “DoD Components”).

b. Does not apply to:

(1) DoD Components that do not:

(a) Own or operate public vessels; or

(b) Have shore facilities that service DoD, USCG, or other authorized vessels.

(2) The Army Corps of Engineers.

(3) The National Defense Reserve Fleet.

1.2. POLICY.

In accordance with DoD Instruction 4715.06, the DoD Components will plan, program, and budget to achieve, maintain, and monitor compliance with applicable environmental requirements.

1.3. TERMINOLOGY CLARIFICATION.

In this volume:

a. The term “vessel” without a modifying adjective applies to all Armed Forces vessels, as defined in this volume, including those owned and operated by the USCG.

b. The term “DoD vessel” applies to Armed Forces vessels, excluding those owned and operated by the USCG.

SECTION 2: RESPONSIBILITIES

2.1. ASSISTANT SECRETARY OF DEFENSE FOR ENERGY, INSTALLATIONS, AND ENVIRONMENT (ASD(EI&E)).

Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the ASD(EI&E):

- a. Oversees DoD vessels' compliance with the requirements of this volume.
- b. Approves or disapproves requests for exemptions and system changes from the requirements of this volume for DoD vessels.
- c. Develops guidelines for DoD Component heads to establish and coordinate designated office(s).
- d. Assesses effective changes to UNDS discharges by other applicable regulations (e.g., terms and conditions established during consultations on Chapter 35 of Title 16, U.S.C., also known and referred to in this volume as the "Endangered Species Act of 1973," as amended).
- e. Send consolidated DoD non-compliance reports to the U.S. Environmental Protection Agency (EPA) and the U.S. National Marine Fisheries Service for each calendar year by March 31 of the following year at the following addresses:

EPA HQ
Office of Water, Office of Wetlands Oceans and Watersheds (4504T)
ATTN: UNDS Program
1400 Pennsylvania, Ave, NW
Washington, D.C. 20406

U.S. National Marine Fisheries Service
Endangered Species Act Interagency Cooperation Division
Office of Protected Resources
1315 East-West Highway
Floor 13
Silver Spring, MD 20910

2.2. DoD COMPONENT HEADS.

The DoD Component heads:

- a. Implement the procedures in this volume.
- b. Verify that supplemental guidance and procedures are in accordance with this volume.

c. Designate a technical authority to evaluate and approve systems, equipment, and materials for design, construction, installation, and use on vessels.

d. Develop, evaluate, and approve management practices for the control of marine pollution from discharges listed in this volume.

e. Review and coordinate affiliated requests for exemptions and system changes from the requirements of this volume.

f. Establish a person in charge (PIC) for each vessel or group of vessels.

g. Establish a designated office(s) to interact with regulators, receive non-compliance reports, and coordinate consolidation of non-compliance reports for dissemination, as needed, to the Secretary of the appropriate Military Department or the Commandant, USCG.

h. Establish requirements for shore facilities to ensure that collection capabilities (including wastewater collection barges) are available to support implementation of the requirements in this volume.

i. Require the supply system to support the availability of materials or supplies required by this volume.

2.3. SECRETARIES OF MILITARY DEPARTMENTS AND THE COMMANDANT, USCG.

In addition to the responsibilities in Paragraph 2.2., the Secretaries of the Military Departments and the Commandant, USCG:

a. Program, budget, and account for funds necessary so discharges from vessels under their authority achieve the performance standards described in this volume.

b. Develop, design, procure, and install appropriate systems and practices for vessels under their authority to achieve the discharge performance standards required by this volume.

c. Use the requirements of this volume in all specifications for development of vessel design and procurement, as well as port facility installations under their authority.

d. Update appropriate operational regulations applicable to vessel commanders and vessel masters specifying compliance with the performance standards aboard vessels under their authority.

2.4. SECRETARIES OF THE MILITARY DEPARTMENTS.

In addition to the responsibilities in Paragraphs 2.2. and 2.3., the Secretaries of the Military Departments:

a. Submit exemption and system change requests to the ASD(EI&E) for DoD vessels under their authority.

b. Send Military Services non-compliance reports to the Office of the ASD(EI&E) for each calendar year by March 1 of the following year.

2.5. COMMANDANT, USCG.

In addition to the responsibilities in Paragraphs 2.2. and 2.3., the Commandant, USCG:

a. Oversees compliance with the requirements of this volume for USCG vessels.

b. Approves or disapproves requests for exemptions and system changes from the requirements of this volume for vessels under their authority.

c. Sends consolidated USCG non-compliance reports to the EPA and the U.S. National Marine Fisheries Service for each calendar year by March 31 of the following year.

SECTION 3: APPLICATIONS AND EXEMPTIONS

3.1. GENERAL.

The requirements of this volume apply to all Armed Forces vessels that generate the controlled and monitored discharges listed in the table and discussed in Section 5.

Table 1. Discharges and Applicable Paragraphs with Descriptions and Requirements

DISCHARGE	PARAGRAPH
Aqueous Film-Forming Foam (AFFF)	5.1.a.
Boiler Blowdown	5.2.a.
Catapult Water Brake Tank and Post-Launch Retraction Exhaust	5.1.b.
Catapult Wet Accumulator Discharge	5.2.b.
Cathodic Protection	5.2.c.
Chain Locker Effluent	5.1.c.
Controllable Pitch Propeller (CPP) Hydraulic Fluid	5.1.d.
Deck Runoff	5.1.e.
Distillation and Reverse Osmosis (RO) Brine	5.1.f.
Elevator Pit Effluent	5.1.g.
Freshwater Lay-Up	5.2.d.
Firemain Systems	5.1.h.
Gas Turbine Water Wash	5.1.i.
Graywater	5.1.j.
Hull Coating Leachate	5.1.k.
Motor Gasoline and Compensating Discharge	5.1.l.
Mine Countermeasures Equipment Lubrication	5.2.e.
Non-Oily Machinery Wastewater	5.1.m.
Photographic Laboratory Drains	5.1.n.
Portable Damage Control Drain Pump Discharge	5.2.f.
Portable Damage Control Drain Pump Wet Exhaust	5.2.g.
Refrigeration and Air Conditioning Condensate	5.2.h.
Rudder Bearing Lubrication	5.2.i.
Seawater Cooling Overboard Discharge	5.1.o.
Seawater Piping Biofouling Prevention	5.1.p.
Small Boat Engine Wet Exhaust	5.1.q.
Sonar Dome Discharge	5.1.r.
Steam Condensate	5.2.j.
Stern Tube Seals and Underwater Bearing Lubrication	5.2.k.
Submarine Acoustic Countermeasures Launcher Discharge	5.2.l.
Submarine Bilgewater	5.1.s.
Submarine Emergency Diesel Engine Wet Exhaust	5.2.m.

Table 1. Discharges and Applicable Paragraphs with Descriptions and Requirements, Continued

DISCHARGE	PARAGRAPH
Submarine Outboard Equipment Grease and External Hydraulics	5.2.n.
Surface Vessel Bilgewater/Oil-Water Separator (OWS) Effluent	5.1.t.
Underwater Ship Husbandry	5.1.u.
Welldeck Discharges	5.1.v.

3.2. EXEMPTIONS.

a. Safety of Life at Sea Exemption.

Compliance with the standards of this volume is not required when the PIC, commanding officer, or master determines that a discharge is necessary to prevent the loss of life, personal injury, vessel endangerment, or severe damage to the vessel. Any discharge under Paragraph 3.2. requires an exception record in accordance with Paragraph 4.3.b.

b. National Security Exemptions.

(1) Mission Impact Exemptions.

Compliance with the standards of this volume is not required within 12 nautical miles (nm) from the nearest land when, in the judgment of the PIC, commanding officer, or master, that compliance with the operational requirements of Section 5 would adversely impact the ability of the vessel to carry out its mission. A discharge under this exemption requires an exception record in accordance with Paragraph 4.3.b.

(2) Requests for Additional Exemptions.

Requests for individual Armed Forces vessels or additional vessel-class exemptions to the design requirements of Section 5 will be reviewed and coordinated by the affiliated lead DoD Component head and addressed to the ASD(EI&E) through the chain of command. Requests must include technical, performance, and cost data that sufficiently demonstrate the exemption is necessary for the national security interests of the United States.

SECTION 4: GENERAL REQUIREMENTS

4.1. COMPLIANCE WITH STANDARDS.

a. In accordance with Section 1322(n)(2)(A) of Title 33, U.S.C., the Administrator of the EPA and the Secretary of Defense jointly determine the discharges incidental to normal vessel operation for which it is reasonable and practicable to require use of an MPCD to mitigate any adverse impacts of the specified discharges on the marine environment.

b. The EPA and the DoD have identified discharges incidental to normal vessel operations and categorized as one of the classifications listed in Paragraph 4.1.b.(1)-(2):

(1) Discharges for which it is reasonable and practicable to require use of an MPCD are identified in Section 1700.4 of Title 40, CFR and are referred to as “controlled discharges” in Paragraph 5.1.

(2) Discharges for which it is not reasonable or practicable to require use of an MPCD are identified in Section 1700.5 of Title 40, CFR and are referred to as “monitored discharges” in Paragraph 5.2.

c. The standards in Section 5 will apply to the operation and design of vessels as specified for each type of vessel, operation(s), and discharge as noted.

(1) Vessels must comply with the operational standards in Section 5 within 12 nm from the nearest land worldwide.

(2) Vessels will operate with due regard to recognized international standards and foreign agreements for environmental protection while not detracting unreasonably from their mission or endangering the health, safety, or welfare of the vessel and crew.

(3) The records and reporting requirements of this volume apply to waters only within 12 nm from the nearest land of the United States, unless otherwise noted.

d. The DoD Component technical authority will review the specifications, design, and construction of all new vessels to validate that they are designed and constructed to meet all requirements of this volume, unless otherwise noted.

e. If two or more regulated discharge streams are commingled, the resulting discharge stream must meet the requirements applicable to all discharge streams that are combined before discharge, unless otherwise stated in Section 5.

f. Shipboard personnel who receive, transfer, or dispose of discharges or supervise these processes will be trained in the respective DoD Component technical authority specified requirements before performing these duties.

g. In the event of a non-compliance to the operational standards in Section 5, all reasonable efforts will be taken to investigate and correct the cause, such as the repair of an equipment malfunction, to prevent future non-compliance event(s).

4.2. ASSESSMENT OF CHANGES TO SYSTEMS THAT PRODUCE DISCHARGES.

Implementing operational, design, or engineering changes to systems that produce a discharge can change the environmental effects of the discharge and, potentially, how the discharge will be controlled. Each DoD Component technical authority will establish processes to identify and assess changes that will affect the discharge volume, expected pollutants, expected pollutant concentrations, locality, or nature of such a discharge. Each DoD Component technical authority with ship systems requirements must complete a risk assessment on and approve any changes to the nature of a discharge.

a. For Armed Forces vessels, the affiliated lead DoD Component must review and coordinate discharge changes that are outside the scope of the currently established regulations and definitions through the chain of command, and the ASD(EI&E) must approve the changes before implementation.

b. The risk assessment must consider:

(1) Impacts to vessel operations.

(2) Impacts to the environment.

(3) Combined effects, including total mass loading of pollutants. This requirement applies to changes to existing vessels and designs for future vessels.

c. Improvements or changes to hull coating leachate or underwater ship husbandry discharges will require reporting to the ASD(EI&E), as required by the terms and conditions established during consultations on the Endangered Species Act of 1973, as amended.

4.3. RECORDS AND REPORTS.

The PIC is responsible for maintenance of all records and reports listed in this volume for 5 years from the date the records are created and stored in a retrievable method. The information in this paragraph will be available to the designated office(s) upon request. Any information made available upon request must be appropriately classified, as applicable, and handled in accordance with applicable legal classification requirements. Records and reports required in this volume apply to waters only within 12 nm from the nearest land of the United States, unless otherwise noted.

a. UNDS Record.

The PIC must maintain UNDS records required in this volume to support data requests from the designated office and regulator requests through the designated office. All UNDS records

must be generated in the ship's logs (e.g., main, engineering, or damage control) or an UNDS record book. UNDS records may be electronic or paper and may contain actual reports and records or may reference the location of the report or record retained in other books or electronic files.

b. Exception Records.

All vessels that have a discharge in accordance with Paragraph 3.2.a. or Paragraph 3.2.b.(1) must maintain an exception record and do not require non-compliance records or reports as described in Paragraphs 4.3.c. and 4.3.d. A single event that causes multiple discharges may be recorded as a series of individual events or as a single combined event. The exception record must contain:

- (1) Vessel owner information (e.g., U.S. Navy, USCG).
- (2) Vessel name and class.
- (3) Name and title of the PIC who determined the necessity of the discharge.
- (4) Date, location, and estimated volume of the discharge.
- (5) Explanation of the reason(s) the discharge occurred.
- (6) Actions taken to avoid, reduce, or otherwise mitigate the discharge.

c. Non-Compliance Records.

Any instance of non-compliance with any of the performance standards specified in Section 5 that occurs within 12 nm from United States land must be recorded, unless otherwise noted. A single event that causes multiple non-compliant discharges may be recorded as a series of individual events or as a single combined event. Non-compliance records must include:

- (1) Vessel owner information (e.g., U.S. Navy, USCG).
- (2) Vessel name and class.
- (3) Name and title of the PIC.
- (4) Description of any non-compliance and its cause.
- (5) Date of non-compliance.
- (6) Period of non-compliance (i.e., time and duration).
- (7) Location of the vessel during non-compliance.
- (8) Corrective action taken.

(9) Steps taken or planned to reduce, eliminate, and prevent non-compliance in the future.

(10) An estimate of the time the non-compliance is expected to continue if the non-compliance has not been corrected.

d. Non-Compliance Reports.

The PIC must report any non-compliance, including the information as required in Paragraph 4.3.c., to the designated office in writing or electronically within 5 calendar days from the time the PIC becomes aware of the non-compliance event. This reporting requirement is in addition to any reporting required for DoD vessels in Volume 2 of this manual.

SECTION 5: VESSEL DESIGN AND OPERATIONAL REQUIREMENTS FOR UNDS

5.1. CONTROLLED DISCHARGES.

a. AFFF.

(1) Operational Requirements.

(a) Discharge of AFFF is prohibited within 12 nm from the nearest land. AFFF must be either collected and stored for onshore disposal or discharged when the vessel is beyond 12 nm from the nearest land. AFFF used in firefighting is not covered by this volume.

(b) For vessels that do not normally operate or sail beyond 12 nm from the nearest land more than once per month on average, the discharge of a non-fluorinated AFFF alternative is:

1. Prohibited in port;
2. Prohibited in or near federally protected waters; and
3. Must occur as far from shore as possible.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if AFFF is discharged for other than its intended use within 12 nm from the nearest land of the United States.

b. Catapult Water Brake Tank and Post-Launch Retraction Exhaust.

(1) Operational Requirements.

(a) Discharges of catapult water brake tank effluent are prohibited within 12 nm from the nearest land.

(b) The number of post-launch retractions must not exceed the minimum required to test and validate the system and conduct qualification and operational training.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if catapult water brake tank effluent is discharged within 12 nm from the nearest land of the United States.

c. Chain Locker Effluent.

(1) Operational Requirements.

(a) For all vessels except submarines, the anchor chain must be carefully and thoroughly washed down (i.e., more than a cursory rinse) as it is hauled out of the water to remove sediment and organisms.

(b) For all vessels, the chain lockers must be inspected and, if required, cleaned during dry dockings to eliminate accumulated sediments and any potential accompanying pollutants. For vessels that do not dry dock, chain lockers must be inspected and, if required, cleaned every 6 years.

(c) The rinsing or pumping out of chain lockers is prohibited within 12 nm from the nearest land, except as indicated in Paragraph 5.1.c.(1)(d).

(d) For vessels that do not normally operate beyond 12 nm from the nearest land:

1. The rinsing or pumping out of chain lockers must occur as far from the nearest land as possible.

2. The rinsing or pumping out of chain lockers must not occur in federally protected waters unless not technically feasible (e.g., due to vessel operations or design).

(2) Reporting and Recordkeeping Requirements.

(a) The PIC must record the dates of all chain locker inspections and cleanings conducted worldwide.

(b) If a vessel discharges chain locker effluent in federally protected waters, the PIC must record the date and reason why discharge of chain locker effluent outside of federally protected waters was not technically feasible.

(c) A PIC must issue a non-compliance report if:

1. The anchor chain is not washed down as it is being hauled out of the water (except for submarines); or

2. A vessel discharges chain locker effluent within 12 nm from the nearest land of the United States unless the vessel does not normally operate beyond 12 nm from nearest land, as described in Paragraph 5.1.c.(1)(d).

d. CPP Hydraulic Fluid.

(1) Operational Requirements.

(a) Discharges of CPP hydraulic fluid that produce a sheen are prohibited within 12 nm from the nearest land of the United States, regardless of oil content.

(b) The protective seals on CPPs must be maintained to minimize the leaking of hydraulic fluid.

(c) To the greatest extent practicable, maintenance activities on CPPs must be conducted when a vessel is in dry dock. If maintenance and repair activities must occur when the vessel is not in dry dock, appropriate spill containment equipment (e.g., oil booms) must be used to contain any potential oil leakage.

(2) Design Requirements.

CPP systems will be designed to prevent or minimize leakage of hydraulic fluids during normal operations, maintenance, and repairs.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) CPP hydraulic fluid is discharged and causes a sheen within 12 nm from the nearest land of the United States.

(b) Appropriate spill containment equipment (e.g., oil booms) are not used when maintenance or repair activities occur when the vessel is not in dry dock.

e. Deck Runoff.

(1) Operational Requirements.

(a) Flight deck washdowns are prohibited within 12 nm from the nearest land.

(b) Deck washdowns must be minimized while in port and in federally protected waters.

(c) Before performing a deck washdown, exposed decks must be broom cleaned and on-deck debris, garbage, paint chips, residues, and spills must be removed, collected, and disposed of onshore in accordance with any applicable solid waste or hazardous substance management and disposal requirements.

(d) If a deck washdown, above-waterline hull cleaning, or precipitation results in a discharge, it must not produce a sheen. An investigation of the cause of any sheen will be made and the problem corrected, if possible.

(e) If a deck washdown or above-waterline hull cleaning will result in a discharge, it must be conducted with minimally toxic and phosphate-free soaps, cleaners, and detergents. The use of soaps that are labeled toxic is prohibited. Furthermore, soaps, cleaners, and detergents should not be caustic and must be biodegradable. All soaps and cleaners must be used as directed by the label.

(f) The presence of floating solids, visible foam, halogenated phenol compounds, dispersants, and surfactants in deck washdowns must be minimized.

(g) Topside surfaces and other above-waterline portions of the vessel must be well maintained to minimize the discharge of rust and other corrosion byproducts, cleaning compounds, paint chips, non-skid material fragments, and other materials associated with exterior topside surface preservation. Residual paint droplets entering the water must be minimized when conducting maintenance painting. The discharge of unused paint is prohibited. Paint chips and unused paint residues must be collected and disposed of onshore in accordance with any applicable solid waste and hazardous substance management and disposal requirements.

(h) When vessels conduct underway fuel replenishment, scuppers must be plugged to prevent the discharge of oil. Any oil spilled must be cleaned, managed, and disposed of onshore in accordance with any applicable oil and hazardous substance management and disposal requirements.

(i) Drip pans under deck machinery must be drained to a waste container for disposal onshore in accordance with any applicable oil and hazardous substance management and disposal requirements.

(2) Design Requirements.

Where feasible, machinery on deck must have coamings or drip pans, where necessary, to prevent spills and collect any oily discharge that may leak from machinery.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) Deck runoff, including precipitation, is discharged and causes a sheen within 12 nm from the nearest land of the United States.

(b) Deck washdown or above-waterline hull cleaning are conducted with soaps, cleaners, or detergents that are not minimally toxic, not phosphate free, not biodegradable, or are not used as directed by the label.

(c) A flight deck washdown is conducted within 12 nm from the nearest land of the United States.

(d) Exposed decks are not broom cleaned and on-deck debris, garbage, paint chips, residues, and spills are not removed, collected, and disposed of onshore in accordance with any applicable solid waste or hazardous substance management and disposal requirements before deck washdowns.

f. Distillation and RO Brine.

(1) Operational Requirements.

(a) Distillation and RO brine must not be discharged overboard within 12 nm from land if it comes into contact with machinery, industrial equipment (other than distillation or RO machinery and related components, piping, and pumps), or hazardous materials.

(b) Distillation and RO brine collected in the bilge are considered oily waste and must be managed as required by Paragraph 5.1.s. or Paragraph 5.1.t., as applicable. Distillation and RO brine discharge in contact with hazardous materials must be held for onshore disposal.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if brine has come in contact with machinery, industrial equipment (other than distillation and RO machinery), or hazardous materials and is discharged within 12 nm from the nearest land of the United States.

g. Elevator Pit Effluent.

(1) Operational Requirements.

(a) The discharge of elevator pit effluent is prohibited within 12 nm from the nearest land.

(b) If the elevator pit effluent is commingled with oily waste for the purposes of treatment before discharge, it is considered oily waste and must be discharged in accordance with Paragraph 5.1.t.

(2) Design Requirements.

Vessels must be designed to collect liquids that may accumulate in the elevator pit and provide a means to prevent discharge within 12 nm from the nearest land (e.g., providing for a means to transfer the contents of the elevator pit to the oily waste system).

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if elevator pit effluent is discharged within 12 nm from the nearest land of the United States and does not meet the operational requirements of Paragraph 5.1.g.(1).

h. Firemain Systems.

(1) Operational Requirements.

(a) Firemain systems may be discharged for testing and inspections of the firemain system. To the greatest extent practicable, maintenance and training should be conducted outside of port and as far away from shore as possible. Firemain systems may be discharged in port for certification, maintenance, and training if the intake comes directly from the surrounding waters or potable water supplies and there are no additions to the discharge (e.g., AFFF).

(b) Firemain systems must not be discharged in federally protected waters except when needed to comply with anchor washdown requirements found in Paragraph 5.1.c.

(c) Firemain systems may be used for secondary uses if the intake comes directly from the surrounding waters or potable water supplies.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if a vessel discharges its firemain system into federally protected waters except as permitted in Paragraph 5.1.h.(1)(b).

i. Gas Turbine Water Wash.

Landing craft gas turbine wash water discharge is addressed as a component of the welldeck discharges in Paragraph 5.1.v.

(1) Operational Requirements.

Except as specified in Paragraph 5.1.v., gas turbine water wash must not be directly discharged overboard within 12 nm from the nearest land. To the greatest extent practicable, gas turbine water wash must be collected separately and disposed of onshore in accordance with any applicable solid waste and hazardous substance management and disposal requirements. If collection capacity is exceeded and operations prevent disposal onshore, discharge is permitted but must be the minimum volume required to continue operations and must be beyond 12 nm from the nearest land.

(2) Design Requirements.

Vessels with internal gas turbines must be designed with collection capability to hold all gas turbine water wash generated during the maximum expected underway duration.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if gas turbine water wash is discharged within 12 nm from the nearest land of the United States.

j. Graywater.

(1) Operational Requirements.

(a) Discharges of graywater that produce a sheen are prohibited within 12 nm from the nearest land.

(b) For discharges from vessels that have the capacity to hold graywater:

1. Graywater must not be discharged in federally protected waters or the Great Lakes.

2. Graywater must not be discharged within 1 nm from shore if an onshore facility is available and disposal at such a facility is reasonable and practicable.

3. Production and discharge of graywater must be minimized within 1 nm from shore when an onshore facility is either not available or use of such a facility is not reasonable and practicable. Minimization measures will include suspending laundry operations and minimizing galley operations and showers to the extent reasonable and practicable.

(c) For discharges from vessels that do not have the capacity to hold graywater:

1. Production and discharge of graywater must be minimized in federally protected waters and the Great Lakes.

2. Graywater must not be discharged within 1 nm from shore if an onshore facility is available and disposal at such a facility is reasonable and practicable.

3. Production and discharge of graywater must be minimized within 1 nm from shore when an onshore facility is either not available or if use of such a facility is not reasonable and practicable. Minimization measures will include suspending laundry operations and minimizing galley operations and showers to the extent reasonable and practicable.

(d) Large quantities of cooking oils (e.g., from a deep fat fryer), including animal fats and vegetable oils, must not be added to the graywater system. Small quantities of cooking oils (e.g., from pot and dish rinsing) must be minimized if added to the graywater system within 3 nm from shore.

(e) Minimally toxic soaps, cleaners, and detergents and phosphate-free soaps, cleaners, and detergents must be used in the galley, scullery, and laundry. These soaps, cleaners, and detergents should also be free from bioaccumulative compounds and not cause the receiving water pH to fall below 6.0 or rise above 9.0 as a direct result of the discharge.

(f) Graywater combined with sewage on a vessel will be considered to be sewage and, for DoD vessels, must meet the applicable sewage discharge requirements in Volume 1 of this manual.

(2) Reporting and Recordkeeping Requirements.

(a) A PIC must issue a non-compliance report if:

1. A vessel with the capacity to hold graywater discharges graywater in federally protected waters or the Great Lakes.

2. Graywater is discharged and causes a sheen within 12 nm from the nearest land of the United States.

3. Soaps, cleaners, and detergents that are not minimally toxic or are not phosphate free are used in the galley, scullery, or ship's laundry.

(b) If a vessel discharges graywater within 1 nm from shore and an onshore facility for graywater disposal is available, the PIC must record the date and the reason why the disposal of graywater to the onshore facility was not reasonable and practicable.

k. Hull Coating Leachate.

(1) Operational Requirements.

(a) Antifouling hull coatings subject to registration pursuant to Section 136 of Title 7, U.S.C., also known and referred to in this volume as the “Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),” must be applied, maintained, and removed in a manner consistent with requirements on the coatings’ FIFRA label.

(b) Antifouling hull coatings not subject to FIFRA registration (i.e., exempt or not produced for sale and distribution in the United States) must not contain any biocides or toxic materials banned for use in the United States. This performance standard applies to all vessels, including vessels with a hull coating applied outside the United States.

(c) Antifouling hull coatings that contain tributyltin (TBT) or other organotin compounds that are used as a biocide must be removed or an overcoat must be applied.

(d) Incidental amounts of antifouling hull coating discharged after contact with other hard surfaces (e.g., moorings) are permissible.

(2) Design Requirements.

(a) Antifouling hull coatings must not contain TBT.

(b) Antifouling hull coatings must not contain any organotin compounds when the organotin is used as a biocide. Antifouling hull coatings may contain small quantities of organotin compounds other than TBT (e.g., dibutyltin) when the organotin is acting as a chemical catalyst and not present above 2,500 milligrams total tin per kilogram of dry paint film. Any such antifouling hull coatings must be designed to not slough or peel from the vessel hull.

(c) Non-copper-based and less toxic antifouling hull coatings must be used to the greatest extent practicable. Antifouling hull coatings with the lowest effective biocide release rates, rapidly biodegradable components (once separated from the hull surface), or non-biocidal alternatives, such as silicone coatings, must be used to the greatest extent practicable.

(d) To the greatest extent practicable, the use of antifouling hull coatings on vessels that are regularly removed from the water and unlikely to accumulate hull growth should be avoided.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) Antifouling hull coatings subject to FIFRA registration are not used in accordance with FIFRA labels.

(b) Antifouling hull coatings not subject to FIFRA registration contain biocides or toxic materials banned for use in the United States or are not used in accordance with the coating manufacturer's requirements.

(c) Antifouling hull coatings contain TBT or quantities of organotin compounds that exceed the quantity specified in Paragraph 5.1.k.(2)(b).

I. Motor Gasoline and Compensating Discharge.

(1) Operational Requirements.

(a) Discharges of motor gasoline and compensating discharge that produce a sheen are prohibited within 12 nm from the nearest land.

(b) The discharge of motor gasoline and compensating discharge must be minimized in port.

(c) The discharge of motor gasoline and compensating discharge is prohibited in federally protected waters.

(2) Reporting and Recordkeeping Requirements.

(a) A PIC must issue a non-compliance report if motor gasoline and compensating discharge cause a sheen within 12 nm from the nearest land of the United States.

(b) A PIC must issue a non-compliance report if a vessel discharges motor gasoline and compensating discharge into federally protected waters.

(c) Any discharge within 12 nm from the nearest land of the United States that produces a sheen must be recorded and reported to the USCG National Response Center immediately.

m. Non-Oily Machinery Wastewater.

(1) Operational Requirements.

(a) Water or wastewater known to contain oil or oily waste or additives that are toxic or bioaccumulative must not be introduced to the vessel's non-oily machinery wastewater.

(b) Direct discharge of non-oily machinery wastewater is permitted.

(c) Any non-oily machinery wastewater that contains oil or oily waste is considered oily waste and must be managed in accordance with Paragraph 5.1.s. or Paragraph 5.1.t., as applicable.

(2) Design Requirements.

To allow direct discharge, non-oily machinery wastewater must be segregated to an overboard drain or to a dedicated non-oily machinery wastewater tank. Non-oily machinery

wastewater directed to the bilge or oil and oily waste collection or holding tank is considered oily waste and must be processed in accordance with Paragraph 5.1.s. or Paragraph 5.1.t., as applicable.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if non-oily machinery wastewater is discharged and causes a sheen or is found to contain an additive that is toxic or bioaccumulative within 12 nm from the nearest land of the United States.

n. Photographic Laboratory Drains.

(1) Operational Requirements.

The discharge of photographic laboratory wastewater is prohibited. Photographic laboratory wastewater must be collected and held for onshore disposal.

(2) Design Requirements.

Photographic laboratory drains must be designed to allow collection and holding of laboratory wastewater for onshore disposal.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if photographic laboratory wastewater is discharged within 12 nm from the nearest land.

o. Seawater Cooling Overboard Discharge.

(1) To minimize seawater cooling overboard discharge to the greatest extent practicable:

(a) While pierside, secure seawater cooling systems are not necessary for normal in port operation of the vessel or vessel systems.

(b) When the vessel is equipped to connect to shore-based power, shore power should be used when it is readily available and capable of providing needed electricity.

(2) Requirements regarding fouling organisms removed from seawater piping are in Paragraph 5.1.p.

p. Seawater Piping Biofouling Prevention.

(1) Operational Requirements.

(a) Vessels equipped with onboard biofouling prevention systems must limit biofouling prevention chemicals to the quantity recommended or approved by the DoD Component technical authority, or the manufacturer's recommended quantity if no DoD Component technical authority guidance is provided, to minimize discharge of biofouling prevention chemicals while effectively controlling biofouling.

(b) Seawater piping biofouling prevention chemicals subject to registration in accordance with the FIFRA must be used in accordance with the FIFRA label. Pesticides or chemicals banned from use in the United States must not be used.

(c) A PIC must monitor dedicated seawater system performance to determine when a cleaning event is required.

(d) For all vessels, except for submarines, fouling organisms removed during a cleaning event inboard of the hull isolation valves are prohibited from being discharged within 12 nm from the nearest land and must be collected for onshore disposal. Related wastewater must be disposed in accordance with any applicable solid waste and hazardous substance management and disposal requirements. Cleaning events include, but are not limited to, mechanical or chemical maintenance procedures to remove attached biofouling organisms from dedicated seawater systems. Cleaning events do not include dedicated seawater system and biofouling prevention system operations.

(2) Design Requirements.

Seawater piping biofouling prevention systems must not be designed to use pesticides or chemicals banned for use in the United States.

(3) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) The amount of biofouling prevention chemicals added exceed those recommended by the DoD Component technical authority or the quantity recommended by the biofouling prevention equipment manufacturer;

(b) Seawater piping biofouling prevention chemicals are not used in accordance with FIFRA labels; or

(c) Fouling organisms removed during cleaning event are discharged within 12 nm from the nearest land of the United States, except for submarines.

q. Small Boat Engine Wet Exhaust.

(1) Operational Requirements.

(a) Vessels with four-stroke or two-stroke engines must be maintained in good operating order, well-tuned, and functioning in accordance with manufacturer specifications.

(b) Vessels with two-stroke engines must use environmentally acceptable lubricants, unless such use would be technologically infeasible as determined by the DoD Component technical authority.

(c) To the greatest extent practicable, low sulfur or alternative fuels must be used to reduce the concentration of pollutants in discharges from small boat engine wet exhaust.

(2) Design Requirements.

To the greatest extent practicable, four-stroke engines must be used instead of carbureted two-stroke engines on vessels fewer than 79 feet in length that will generate small boat engine wet exhaust.

(3) Reporting and Recordkeeping Requirements.

If non-environmentally acceptable lubricants are used on two-stroke engines, the justification for why non-environmentally acceptable lubricants were used must be documented and a copy retained in the UNDS records. Examples of technologically infeasible environmentally acceptable lubricants include those that do not have original equipment manufacturer approval, do not meet lubricant performance requirements, contain materials that are not approved for use on vessels, do not meet vessel operating conditions, or are not reasonably available to the vessel.

r. Sonar Dome Discharge.

(1) Operational Requirements.

(a) The water inside the sonar dome must not be discharged for maintenance activities unless the use of a dry dock for the maintenance activity is not feasible (e.g., when there is no dry dock available to support the maintenance activity or when the vessel's availability would be impacted to prevent the vessel from meeting its operational requirements).

(b) The water inside the sonar dome may be discharged for equalization of pressure between the interior and exterior of the dome.

(c) A bioaccumulative biofouling chemical should not be applied to the exterior of a sonar dome when a non-bioaccumulative alternative is available.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if a vessel discharges water from inside the sonar dome within 12 nm from the nearest land of the United States and does not meet the requirements of Paragraph 5.1.r.(1) of this volume, except for the purpose of equalizing the pressure of the dome or for maintenance activities during dry docking.

s. Submarine Bilgewater.

(1) Operational Requirements.

(a) Shipboard personnel aboard submarines must employ management practices that will minimize leakage of oil and other harmful pollutants into the bilge.

(b) The discharge of submarine bilgewater must not contain oil in quantities that cause a sheen.

(c) The discharge of submarine bilgewater must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. The use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures is permitted.

(d) The discharge of submarine bilgewater must contain only substances that are produced in the normal operation of a vessel. Oil solidifiers, flocculants, or other additives (excluding any dispersants or surfactants) may be used to enhance oil-water separation during processing in an OWS only if such solidifiers, flocculants, or other additives are minimized in the discharge and do not alter the chemical make-up of the oils being discharged. Solidifiers, flocculants, or other additives must not be directly added to, or otherwise combined with, the water in the bilge.

(e) The discharge of submarine bilgewater must not occur in port if the port has the capability to collect and transfer the submarine bilgewater to an onshore facility.

(f) The discharge of submarine bilgewater must be minimized and, if technologically feasible, discharged as far from shore as possible.

(g) The discharge of submarine bilgewater must be minimized in federally protected waters.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) Submarine bilgewater is discharged and causes a sheen, or contains a substance added to remove the appearance of a visible sheen, within 12 nm from the nearest land of the United States.

(b) Submarine bilgewater is discharged containing substances that are not produced during the normal operation of the vessel or that alter the chemical make-up of the oils being discharged within 12 nm from the nearest land of the United States.

(c) Submarine bilgewater discharge occurs in port when the port has the capability to collect and transfer submarine bilgewater to an onshore facility.

t. Surface Vessel Bilgewater/OWS Effluent.

(1) Operational Requirements.

(a) Oil prevention practices for all surface vessels must employ management practices that will minimize leakage of oil and other harmful pollutants into the bilge.

(b) For surface vessels equipped with an OWS and operable oil content monitor (OCM):

1. Direct bilgewater discharges are prohibited.

2. All bilgewater and oily waste holding tank contents must be processed through an OWS with an effluent fewer than 15 parts per million oil as registered by an OCM before discharging overboard.

3. The discharge of OWS effluent must occur while sailing at speeds greater than 6 knots, if the vessel is underway.

4. The discharge of OWS effluent must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. The use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures is permitted.

5. The discharge of OWS effluent must contain only substances that are produced in the normal operation of a vessel. Oil solidifiers, flocculants, or other additives (excluding any dispersants or surfactants) may be used to enhance oil-water separation during processing in an OWS only if such solidifiers, flocculants, or other additives are minimized in the discharge and do not alter the chemical make-up of the oils being discharged. Solidifiers, flocculants, or other additives must not be directly added to, or otherwise combined with, the water in the bilge.

6. The discharge of OWS effluent must not occur in port if the vessel has the capability to collect, hold, and transfer bilgewater to an onshore facility, if an onshore facility is available, and if disposal at such facility is reasonable and practicable.

7. The discharge of OWS effluent must be minimized within 1 nm of shore and in federally protected waters.

8. Vessels with an inoperable OWS or OCM that must discharge bilgewater within 12 nm must issue an exception record or a non-compliance record in accordance with Paragraphs 4.3.b or 4.3.c., respectively.

(c) For surface vessels with no OWS:

1. Bilgewater discharges must not occur if the vessel has the capability to collect, hold, and transfer bilgewater to an onshore facility, if an onshore facility is available, and if disposal at such a facility is reasonable and practicable.

2. The discharge of bilgewater must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. However, the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures is permitted.

3. The discharge of bilgewater must contain only substances that are produced in the normal operation of a vessel. Routine cleaning and maintenance activities associated with vessel equipment and structures are considered to be normal operation of a vessel.

4. The discharge of bilgewater must not cause a sheen. If a sheen occurs, the discharge must be suspended immediately and must be cleaned up.

(2) Design Requirements.

(a) All active surface vessels greater than 400 gross tons must be equipped with an OWS designed so effluent is monitored by an OCM before discharge.

(b) DoD vessels may have additional design requirements described in Volume 2 of this manual.

(3) Reporting and Recordkeeping Requirements.

(a) A PIC must issue a non-compliance report if:

1. A surface vessel equipped with an OWS and an OCM directly discharges bilgewater within 12 nm from the nearest land of the United States.

2. Surface vessel OWS effluent is discharged within 12 nm from the nearest land of the United States and causes a sheen or exceeds 15 parts per million oil as registered by an OCM.

3. Surface vessel OWS effluent is discharged in port and the vessel has the capability to collect and transfer OWS effluent to an onshore facility.

4. A surface vessel equipped with the capability to collect and transfer bilgewater to an onshore facility discharges bilgewater within 12 nm from the nearest land of the United States.

5. Surface vessel bilgewater is discharged within 12 nm from the nearest land of the United States and causes a sheen.

6. Surface vessel bilgewater or OWS effluent is discharged within 12 nm from the nearest land of the United States and contains substances that are not produced during the normal operation of the vessel or that alter the chemical make-up of the oils being discharged.

7. Surface vessel bilgewater or OWS effluent is discharged within 12 nm from the nearest land of the United States and contains an added substance that removes the appearance of visible sheen.

(b) Any discharge within 12 nm from the nearest land of the United States that produces a sheen must be recorded and immediately reported to the USCG National Response Center.

u. Underwater Ship Husbandry.

(1) Operational Requirements.

(a) For discharges from vessels that are fewer than 79 feet in length:

1. To the greatest extent practicable, vessel hulls with an antifouling hull coating must not be cleaned within 90 days after the antifouling coating application.

2. Vessel hulls must be inspected, maintained, and cleaned to minimize the removal and discharge of antifouling coatings and the transport of fouling organisms. To the greatest extent practicable, rigorous vessel hull cleanings must take place in dry dock or at a land-based facility where the removed fouling organisms or spent antifouling coatings can be disposed of onshore in accordance with any applicable solid waste or hazardous substance management and disposal requirements.

3. Before the vessel is transported overland from one body of water to another, vessel hulls must be inspected for any visible attached living organisms. If fouling organisms are found, they must be removed and disposed of onshore in accordance with any applicable solid waste and hazardous substance management and disposal requirements.

4. Vessel hull cleanings must be conducted in a manner that minimizes the release of antifouling hull coatings and fouling organisms, including:

a. Adherence to any applicable cleaning requirements found on the coating's FIFRA label. DoD Component technical authority will provide guidance on best management practices for applicable cleaning requirements.

b. Use of a vacuum or other collection and control technology, when available and feasible.

c. Use of soft brushes or less abrasive cleaning techniques to the greatest extent practicable.

d. Use of hard brushes only for the removal of hard growth.

(b) For discharges from vessels that are greater than or equal to 79 feet in length:

1. To the greatest extent practicable, vessel hulls with an antifouling hull coating must not be cleaned within 90 days after the antifouling coating application. To the greatest extent practicable, vessel hulls with copper-based antifouling coatings must not be cleaned within 365 days after coating application.

2. Vessel hulls must be inspected, maintained, and cleaned to minimize the removal and discharge of antifouling coatings and the transport of fouling organisms. To the greatest extent practicable, rigorous vessel hull cleanings must take place in dry dock or at a land-based facility where the removed fouling organisms or spent antifouling coatings can be disposed of onshore in accordance with any applicable solid waste or hazardous substance management and disposal requirements.

3. Vessel hull cleanings must be conducted in a manner that minimizes the release of antifouling hull coatings and fouling organisms, including:

a. Adherence to any applicable cleaning requirements found on the coating's FIFRA label.

b. Use of a vacuum or other collection and control technology, when available and feasible.

c. Use of soft brushes or less abrasive cleaning techniques to the greatest extent practicable.

d. Use of hard brushes only for the removal of hard growth.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if hull cleanings are not conducted in accordance with coatings' FIFRA labels.

v. Welldeck Discharges.

(1) Operational Requirements.

(a) Vessels in the welldeck are prohibited from releasing graywater into the welldeck while within 12 nm from the nearest land. Welldeck discharges that contain graywater from landing craft stored in the welldeck are prohibited within 12 nm from the nearest land.

(b) Washdowns of gas turbine engines from landing craft in the welldeck are prohibited within 3 nm from the nearest land and, to the greatest extent practicable, must be discharged outside of 12 nm from the nearest land.

(c) Vessels launching landing craft from or recovering landing craft into the welldeck will require that those landing craft and vehicles, including their treads, are washed down after completion of operations. If available, vehicles and equipment must be washed ashore before returning to the host vessel. Welldeck discharges from equipment and vehicle washdowns must not contain garbage or oil.

(d) Welldecks must be washed down with clean seawater when beyond 12 nm from the nearest land and the wash water and entrained sediments discharged overboard. Any remaining sediments will be collected, offloaded, and disposed in compliance with any applicable solid waste and hazardous substance management and disposal requirements. Vessels must keep the welldeck flooded area free from garbage and oil to prevent discharge.

(2) Reporting and Recordkeeping Requirements.

A PIC must issue a non-compliance report if:

(a) Graywater from landing craft carried in the welldeck is discharged within 12 nm from the nearest land of the United States;

(b) Gas turbine water wash from landing craft carried in the welldeck is discharged within 3 nm from the nearest land;

(c) Garbage is discharged from the welldeck within 12 nm from the nearest land; or

(d) A sheen is created from the welldeck discharges within 12 nm from the nearest land of the United States.

5.2. MONITORED DISCHARGES.

The discharges identified in this paragraph exhibit a low potential for causing adverse impacts on the marine environment, and therefore do not require an MPCD. However, changes to the design or operational procedures for these discharges must still be monitored and assessed pursuant to the procedures outlined in Paragraph 4.2. Design and operational procedures considered for monitored discharges are found on the EPA Website at <https://www.epa.gov/vessels-marinas-and-ports/uniform-national-discharge-standards-unds-phase-i-final-rule>. Until the discharge is assessed and approved, vessels are at risk for regulatory action based on the projected change. For example, the freshwater lay-up determination of low environmental effect was based on introducing fresh or potable water to the piping system while shutting down the system. If the addition of a new toxic biocide is being considered, this would likely result in a significantly different discharge, and the original determination may no longer stand. Furthermore, the conclusion that no control is necessary may no longer be valid, and the discharge may be subjected to State and local regulations. Monitored discharges include:

- a. Boiler blowdown.
- b. Catapult wet accumulator discharge.
- c. Cathodic protection.
- d. Freshwater lay-up.
- e. Mine countermeasures equipment lubrication.
- f. Portable damage control drain pump discharge.
- g. Portable damage control drain pump wet exhaust.
- h. Refrigeration and air conditioning condensate.
- i. Rudder bearing lubrication.
- j. Steam condensate.
- k. Stern tube seals and underwater bearing lubrication.
- l. Submarine acoustic countermeasures launcher discharge.
- m. Submarine emergency diesel engine wet exhaust.
- n. Submarine outboard equipment grease and external hydraulics.

GLOSSARY

G.1. ACRONYMS.

ACRONYM	MEANING
AFFF	aqueous film-forming foam
ASD(EI&E)	Assistant Secretary of Defense for Energy, Installations, and Environment
CFR	Code of Federal Regulations
CPP	controllable pitch propeller
EPA	Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
MPCD	marine pollution control device
nm	nautical mile
OCM	oil content monitor
OWS	oil-water separator
PIC	person in charge
RO	reverse osmosis
TBT	tributyltin
UNDS	Uniform National Discharge Standards
U.S.C.	United States Code
USCG	United States Coast Guard

G.2. DEFINITIONS.

Unless otherwise noted, these terms and their definitions are for the purpose of this volume.

TERM	DEFINITION
AFFF	The firefighting foam and seawater mixture discharged during training, testing, or maintenance operations of the firefighting system.

TERM	DEFINITION
Armed Forces vessels	Vessels owned or operated by the DoD or USCG when engaged in noncommercial service, other than vessels that are time or voyage chartered by the Armed Forces, vessels of the U.S. Army Corps of Engineers, vessels while in dry dock, or vessels that are memorials or museums.
bioaccumulative	Defined in Section 1700.3 of Title 40, CFR.
boiler blowdown	The water and steam discharged when a steam boiler is blown down or when a steam safety valve is tested.
catapult water brake tank and post-launch retraction exhaust	The oily water skimmed from the water tank used to stop the forward motion of an aircraft carrier catapult and the condensed steam discharged when the catapult is retracted. During the post-launch retraction of the catapult piston, the condensed steam remaining in the power cylinder and a small amount of residual oil from the catapult cylinder are discharged overboard through the catapult exhaust piping.
catapult wet accumulator discharge	The water discharged from a catapult wet accumulator, which stores a mixture of steam and water for launching aircraft from an aircraft carrier.
cathodic protection	The constituents released into surrounding water from sacrificial anode or impressed current cathodic hull corrosion protection systems.
chain locker effluent	The accumulated precipitation and seawater that is emptied from the compartment used to store the vessel's anchor chain. The small amount of water that is washed into the chain locker eventually drains through the bottom grating and into the sump where it can come into contact with paint chips, rust, grease, and sacrificial zinc anodes. Chain locker effluent is discharged when the chain locker sump is emptied directly overboard.
commanding officer or master	The single individual named as in command of or master of a vessel by the DoD or USCG and who is responsible for operating, manning, victualing, and supplying the Armed Forces vessel.
commingled	Two or more discharge streams that are combined into one.

TERM	DEFINITION
CPP hydraulic fluid	The hydraulic fluid that discharges into the receiving waters from propeller seals as part of normal operation and the hydraulic fluid released during routine maintenance of the propellers. High-pressure hydraulic oil is used throughout the CPP system of pumps, pistons, crossheads, and crank rings. The hydraulic fluid might be discharged into the surrounding water due to leaks associated with CPP seals and during routine maintenance or replacement of the propellers.
deck runoff	An intermittent discharge generated from precipitation, freshwater washdowns, wave action, or seawater spray falling on the weather deck or the flight deck that is discharged overboard through deck openings. Deck runoff contains any residues that may be present on the deck surface. It also includes above-waterline hull cleaning and any associated discharges.
distillation and RO brine	The concentrated seawater (i.e., brine) produced as a byproduct of the processes used to generate freshwater from seawater in distilling and RO equipment and machinery. The brine primarily consists of seawater but can also contain materials from these processes, such as nutrients and anti-scaling treatment chemicals as well as some metals, including copper and zinc.
DoD Component technical authority	An official in a technical oversight office who approves systems and equipment for installation on vessels and, if applicable, administers certification requirements.
DoD vessels	Vessels owned or operated by the DoD when engaged in noncommercial service, other than vessels that are time or voyage chartered by the Armed Forces, vessels of the U.S. Army Corps of Engineers, vessels while in dry dock, or vessels that are memorials or museums.
elevator pit effluent	The liquid that accumulates in, and is discharged from, the sumps of elevator wells on vessels.
environmentally acceptable lubricants	Defined in Section 1700.3 of Title 40, CFR.
federally protected waters	Defined in Section 1700.3 of Title 40, CFR.

TERM	DEFINITION
firemain systems discharge	The surrounding water pumped through the firemain system for testing, maintenance, and training, as well as secondary uses for the operation of certain vessel systems. The firefighting equipment served by a vessel's firemain system includes fire hose stations, seawater sprinkling systems, and foam proportioning stations. Any AFFF discharges associated with firemain systems are AFFF and not firemain systems discharges. The secondary uses of wet firemain systems may include deck washdowns, cooling water for auxiliary machinery, eductors, ship stabilization and ballast tank filling, and flushing for urinals, commodes, firemain loop recirculation, and pulpers. If the firemain system is used for a secondary use and a performance standard does not exist for that secondary use, then the performance standard for the firemain system applies.
freshwater lay-up	The potable water that is discharged from the seawater cooling system while the vessel is in port and the cooling system is in lay-up mode (i.e., a standby mode where seawater in the system is replaced with potable water for corrosion protection).
from the nearest land	The shortest distance between the vessel and the line of ordinary low water along a part of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland waters. The exception is the nearest land off the Northeastern coast of Australia, which is measured from a line drawn from a point on the coast of Australia at: Latitude 11°00' S., longitude 142°08' E., to a point at Latitude 10°35' S., longitude 141°55' E., to a point at Latitude 10°00' S., longitude 142°00' E., to a point at Latitude 9°10' S., longitude 143°52' E., to a point at Latitude 9°00' S., longitude 144°30' E., to a point at Latitude 10°41' S., longitude 145°00' E., to a point at Latitude 13°00' S., longitude 145°00' E., to a point at Latitude 15°00' S., longitude 146°00' E., to a point at

TERM	DEFINITION
	Latitude 17°30' S., longitude 147°00' E., to a point at Latitude 21°00' S., longitude 152°55' E., to a point at Latitude 24°30' S., longitude 154°00' E., to a point on the coast of Australia at Latitude 24°42' S., longitude 153°15' E.
garbage	Solid waste including, but not limited to, plastics, food waste, paper, cardboard, metals, and wood. Does not include hazardous materials.
gas turbine water wash	The water released from washing shipboard gas turbine components. Does not include water wash cleaning of aircraft gas turbine engines aboard ship.
graywater	Galley, bath, and shower water, as well as wastewater from lavatory sinks, laundry, interior deck drains, water fountains, and ship sinks. Does not include industrial wastes, infectious wastes, or human body wastes.
hazardous material	Defined in Section 171.8 of Title 49, CFR.
hull coating leachate	Constituents that leach, dissolve, ablate, or erode from the paint on the vessel hull into the surrounding seawater. Antifouling hull coatings contain biocides such as copper and zinc, which are used to prevent biofouling growth on the vessel's hull by continuous leaching of biocides into the surrounding water.
in port	From the pier to the line marking the seaward limit of inland waters.
mine countermeasures equipment lubrication	The constituents released into the surrounding seawater by erosion or dissolution from lubricated mine countermeasures equipment when the equipment is deployed and towed.
minimally toxic soaps, cleaners, and detergents	Defined in Section 1700.3 of Title 40, CFR.
motor gasoline and compensating discharge	Seawater taken into, and discharged from, motor gasoline tanks to eliminate free space where vapors could accumulate. Seawater, which is less buoyant than gasoline, occupies the free

TERM	DEFINITION
	space to prevent potentially explosive gasoline vapors from forming. The retained seawater is then discharged when the vessel refills the tanks with gasoline in port or when performing maintenance. Motor gasoline and compensating effluent is likely to contain residual oils and soluble traces of gasoline components and additives, as well as metals.
MPCD	Defined in Section 1700.3 of Title 40, CFR.
National Defense Reserve Fleet	Pursuant to Section 1744 of Title 50, U.S.C. the National Defense Reserve Fleet serves as a reserve of ships for national defense and national emergency response. These ships are owned and operated by the U.S. Department of Transportation Maritime Administration and can be activated to support the United States during national emergencies. The Maritime Administration Ready Reserve Force fleet that supports worldwide rapid deployment of U.S. military forces is a component of the fleet. The rest of it is composed of the older dry cargo ships, tankers, troop transports, and other assets in the Maritime Administration's custody that are maintained at a relatively low level of readiness.
non-oily machinery wastewater	The combined wastewater from the operation of distilling plants, water chillers, valve packings, water piping, low- and high-pressure air compressors, and propulsion engine jacket coolers. Non-oily machinery wastewater systems are designed to separate the wastewater generated from machinery that does not contain oil from the wastewater generated from machinery that has oil content. Vessels have numerous sources of it, including distilling plants start-up discharge, chilled water condensate drains, fresh and saltwater pump drains, potable water tank overflows, and leaks from propulsion shaft seals.
oily waste	A mixture of oil and water or oil and other fluids that is no longer useful.
photographic laboratory drains	Laboratory wastewater resulting from the processing of photographic film. The wastewater results from the processing of color, black-and-white, and X-ray film.
PIC	The single individual named master of the vessel, or placed in charge of the vessel, by the DoD or USCG and who is responsible for the operation, manning, victualing, and supplying

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of the Armed Forces vessel. Examples of a PIC include, but are not limited to:

A commanding officer, officer in charge, or senior commissioned officer onboard the vessel.

A civilian or military person assigned to a shore command or activity that has been designated as the PIC for one or more vessels, such as a group of boats or craft.

A tugmaster, craftmaster, coxswain, or other senior enlisted person onboard the vessel.

A licensed civilian mariner onboard a Military Sealift Command vessel.

A contracted commercial person at a shore installation that is not part of the DoD or USCG but as identified by the DoD or USCG.

A civilian or military person assigned as the PIC of a vessel through processes established by the DoD Component head.

portable damage control drain pump discharge

The seawater pumped through the portable damage control drain pump and discharged overboard during testing, maintenance, and training activities.

portable damage control drain pump wet exhaust

The seawater mixed and discharged with portable damage control drain pump exhaust to cool the exhaust and quiet the engine.

public vessel

A vessel owned, or bareboat chartered and operated, by the United States, except when the vessel is engaged in commerce.

refrigeration and air conditioning condensate

The drainage of condensed moisture from air conditioning units, refrigerators, freezers, and refrigerated spaces.

rudder bearing lubrication

The oil or grease released by the erosion or dissolution from lubricated bearings that support the rudder and allow it to turn freely.

TERM	DEFINITION
seawater cooling overboard discharge	The seawater discharge from dedicated piping systems that provides non-contact cooling water for other vessel systems. The cooling water is typically circulated through an enclosed system that does not come in direct contact with machinery but still may contain sediment from water intake, traces of hydraulic or lubricating oils, and trace metals leached or eroded from the pipes within the system.
seawater piping biofouling prevention	Seawater containing additives used to prevent the growth and attachment of biofouling organisms in dedicated seawater systems on vessels.
small boat engine wet exhaust	The seawater that is mixed and discharged with small boat propulsion engine exhaust to cool the exhaust and quiet the engine. It originates from vessels that are fewer than 79 feet in length with a diesel or gasoline engine wet exhaust system.
sonar dome discharge	The leaching of antifouling materials into the surrounding seawater and the release of seawater or freshwater retained within the sonar dome. Antifouling materials are used on the exterior of the sonar dome to prevent fouling that degrades sonar performance. The discharge of the water from the interior of the sonar dome occurs primarily when the vessel is pierside and is intermittent depending on when the dome is emptied for maintenance.
steam condensate	The condensed steam discharged from a vessel in port, where the steam originates from port facilities.
stern tube seals and underwater bearing lubrication	The seawater pumped through stern tube seals and underwater bearings to lubricate and cool them during normal operation.
submarine acoustic countermeasures launcher discharge	The seawater that is mixed with acoustic countermeasure device propulsion gas following a countermeasure launch that is then exchanged with surrounding seawater or partially drained when the launch assembly is removed from the submarine for maintenance.
submarine bilgewater	The wastewater from a variety of sources that accumulates in the lowest part of the submarine (i.e., bilge). Submarine bilgewater can contain a variety of constituents including cleaning agents, solvents, fuel, lubricating oils, and hydraulic oils.

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submarine emergency diesel engine wet exhaust	The seawater that is mixed and discharged with submarine emergency diesel engine exhaust to cool the exhaust and quiet the engine.
submarine outboard equipment grease and external hydraulics	The grease released into the surrounding seawater by erosion or dissolution from submarine equipment exposed to seawater.
surface vessel bilgewater/OWS effluent	The wastewater from a variety of sources that accumulates in the lowest part of the vessel (i.e., the bilge) and the OWS effluent produced when the wastewater is processed by an OWS. Bilgewater consists of water and other residue that accumulates in a compartment of the vessel's hull or is collected in the oily waste holding tank or any other oily water holding tank.
toxic materials	Defined in Section 1700.3 of Title 40, CFR.
underwater ship husbandry	Discharges that occur during the inspection, maintenance, cleaning, and repair of hulls and hull appendages while a vessel is waterborne. Underwater ship husbandry includes activities such as hull cleaning, fiberglass repair, welding, sonar dome repair, propeller lay-up, non-destructive testing or inspections, masker belt repairs, and painting operations. Underwater ship husbandry operations are normally conducted pierside and could result in the release of metals (e.g., copper or zinc) or the introduction of non-indigenous species.
United States	Defined in Section 1700.3 of Title 40, CFR.
USCG vessels	Vessels owned or operated by the USCG when engaged in noncommercial service, other than vessels operated by the USCG Auxiliary, vessels while in dry dock, vessels that are time or voyage chartered, or vessels that are memorials or in museums.
vessel	Defined in Section 1700.3 of Title 40, CFR.

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welldeck discharges

Discharges that include the water that accumulates from seawater flooding of the docking well (i.e., welldeck) of an amphibious support vessel used to transport, load, and unload amphibious vehicles and from maintenance and freshwater washings of the welldeck and equipment and vessels stored in the welldeck. They may include: washout when the vessel ballasts to embark or disembark landing craft; water or detergent and water mixture used for air-cushion landing craft gas turbine engine washes; graywater and condensate that can be discharged from the utility landing craft; freshwater wash to remove salt and dirt from vehicles, equipment, and landing craft; and U.S. Department of Agriculture washes for the welldeck, vehicle storage areas, and all vehicles, equipment, and landing craft during overseas operations. Vessels are still required to comply with any applicable solid waste and hazardous substance management and disposal requirements.

REFERENCES

Code of Federal Regulations, Title 40

Code of Federal Regulations, Title 49, Section 171.8

DoD Directive 5135.03, “Deputy Under Secretary of Defense for Acquisition and Sustainment ,”
December 10, 2020

DoD Instruction 4715.06, “Environmental Compliance in the United States,” May 4, 2015, as
amended

DoD Manual 4715.06, Volume 1, “Regulations on Vessels Owned or Operated by the
Department of Defense: Marine Sanitation Devices (MSDs),” June 6, 2017, as amended

DoD Manual 4715.06, Volume 2, “Regulations on Vessels Owned or Operated by the
Department of Defense: Oil Pollution Prevention,” June 7, 2017, as amended

United States Code Appendix, Title 50, Section 1744

United States Code, Title 7, Section 136 (also known as the “Federal Insecticide, Fungicide, and
Rodenticide Act”)

United States Code, Title 16, Chapter 35 (also known as the “Endangered Species Act of 1973,”
as amended)

United States Code, Title 33, Section 1322(n)(2)(A)