DoD Manual 4715.06, Volume 4

Regulations on Vessels Owned or Operated by the Department of Defense: Discharges Incidental to Normal Operations

Originating Component:	Office of the Under Secretary of Defense for Acquisition and Sustainment
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Incorporates and Cancels:	Responsibilities, requirements, and procedures regarding welldeck and anchor sediment in Volume 3, DoD Manual 4715.06, "Regulations on Vessels Owned or Operated by the Department of Defense: Ballast Water, Welldeck Sediment, and Anchor Sediment Management," June 7, 2017
Approved by:	Robert H. McMahon, Assistant Secretary of Defense for Sustainment

Purpose: This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive 5134.15; and the July 13, 2018 Deputy Secretary of Defense Memorandum:

- This manual implements policy, assigns responsibilities, and provides procedures for environmental compliance of vessels owned or operated by the 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.), also known as the "Clean Water Act," and issues the regulations governing the design, construction, installation, and use of marine pollution control devices on board Armed Forces vessels (as defined in the Glossary) as necessary to achieve the standards issued in accordance with Sections 1700.14 through 1700.42 of Title 40, Code of Federal Regulations (CFR).

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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 the 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" applies to all Armed Forces vessels, 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 SUSTAINMENT (ASD(S)). Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the ASD(S):

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

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).

2.2. DoD COMPONENT HEADS. The DoD Component heads:

a. Implement the procedures in this volume.

b. Verify supplemental guidance and procedures are in accordance with this volume.

c. Designate a technical authority to evaluate and approve systems and equipment for installation on vessels.

d. Develop, evaluate, and approve management practices for 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 noncompliance reports, and coordinate consolidation of noncompliance reports for dissemination, as needed, to the appropriate Secretary of the Military Department or the Commandant, USCG.

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 that 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 that are required by this volume to have discharge performance standards.

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 Paragraph 2.3., the Secretaries of the Military Departments:

a. Submit exemption and system change requests to the ASD(S) for vessels under their authority.

b. Send consolidated DoD noncompliance reports to the Office of the ASD(S), U.S. Environmental Protection Agency (EPA), and U.S. National Marine Fisheries Service for each calendar year by March 31 of the following year.

2.5. COMMANDANT, USCG. In addition to the responsibilities in Paragraph 2.3., the Commandant, USCG:

a. Approves or disapproves requests for exemptions and system changes from the requirements of this volume for vessels under his or her authority.

b. Sends consolidated USCG noncompliance 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 vessels owned or operated by the DoD Components that generate the controlled and monitored discharges listed in Table 1 and discussed in Section 5.

Table 1. Discharges and Applicable Paragraphs with Descriptions and Requirements

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3.2. EXEMPTIONS.

a. General Exemption. Compliance with the standards of this volume is not required when, in the judgment of the PIC, commanding officer, or master, managing discharges in accordance with such requirements would pose a threat to the safety of the vessel or the health, safety, or welfare of the crew or other personnel aboard. An exemption may also be granted if the ASD(S) determines that compliance would excessively and unreasonably detract from the military

characteristics, effectiveness, or safety of the DoD vessel. A discharge under this exemption requires an exception record in accordance with Paragraph 4.3.b.

b. 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 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.

c. Requests for Additional Exemptions. Requests for individual DoD 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(S) through the chain of command. Requests for individual USCG vessel or additional vessel-class exemptions to the design requirements of Section 5 will be reviewed and coordinated by the affiliated, lead USCG component head and addressed to the CG-designated office through the chain of command. Requests must include technical, performance, cost data, or projected vessel inactivation schedules that sufficiently demonstrate:

(1) Potential vessel inactivation.

(2) Impacts to the vessel's operational performance requirements.

(3) Impacts to the vessel's designed space, weight, or power requirements.

(4) Retrofitting that is cost prohibitive.

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 a marine pollution control device (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 them as follows:

(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 only apply to waters within 12 nm from the nearest land of the United States, unless otherwise noted.

d. The DoD Component technical authority will ensure vessels 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.

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. Any changes to the nature of a discharge must first have a risk assessment completed on the change and be approved before implementation by each DoD Component technical authority with ship systems requirements.

a. For DoD vessels, discharge changes that are outside the scope of the currently established regulations and definitions must be reviewed and coordinated by the affiliated lead DoD Component through the chain of command and approved by the ASD(S) before implementation.

b. For USCG vessels, discharge changes that are outside the scope of the currently established regulations and definitions must be approved by the USCG-designated office before implementation.

c. 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.

4.3. RECORDS AND REPORTS. The PIC is responsible for maintenance of all records and reports listed in this volume for a period of 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), on request. Any information made available on request must be appropriately classified, as applicable, and handled in accordance with applicable legal classification requirements. Records and reports required in this volume only apply to waters within 12 nm from the nearest land of the United States, unless otherwise noted.

a. Uniform National Discharge Standards (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 (i.e., 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. Exceptions Records. All vessels that have a discharge in accordance with Paragraph 3.2.a. or 3.2.b., and are not in compliance with this volume, must maintain an exception record. A single event that causes multiple discharges may be recorded and reported 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 the discharge occurred.

(6) Actions taken to avoid, reduce, or otherwise mitigate the discharge.

c. Noncompliance Records. Any instance of noncompliance with any of the performance standards specified in Section 5 that occurs within 12 nm of United States land must be recorded, unless otherwise noted. Noncompliance 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 noncompliance and its cause.

(5) Date of noncompliance.

(6) Period of noncompliance (i.e., time and duration).

(7) Location of the vessel during noncompliance.

(8) Corrective action taken.

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

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

d. Noncompliance Reports. The PIC must report any noncompliance, 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 noncompliance event.

SECTION 5: VESSEL DESIGN AND OPERATIONAL REQUIREMENTS FOR UNIFORM NATIONAL DISCHARGE STANDARDS

5.1. CONTROLLED DISCHARGES.

a. Aqueous Film-Forming Foam (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. This prohibition does not apply to actual firefighting or emergency responses.

(b) For vessels that do not normally operate or sail beyond 12 nm more than once per month, on average, approval may be granted by the vessel command structure to allow the discharge of a non-fluorinated AFFF alternative that has been approved by the appropriate DoD Component technical authority.

(2) Reporting and Recordkeeping Requirements. A PIC must issue a noncompliance report if AFFF is discharged within 12 nm from the nearest land of the United States.

b. Chain Locker Effluent.

(1) Operational Requirements.

(a) For all vessels, except for submarines, the anchor chain must be carefully and thoroughly washed down (i.e., more than a cursory rinse) as it is being 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.b.(1)(d).

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

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

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

(2) Reporting and Recordkeeping Requirements.

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

(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 noncompliance 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.b.(1)(d).

c. Distillation and Reverse Osmosis (RO) Brine.

(1) Operational Requirements.

(a) Distillation and RO brine must not be discharged overboard within 12 nm of 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) Outside 12 nm from the nearest land, distillation and RO brine collected in the bilge is considered oily waste and must be managed as required by Volume 2 of this manual. 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 noncompliance report if brine that 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.

d. 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 Volume 2 of this manual.

(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 of 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 noncompliance report if elevator pit effluent is discharged within 12 nm of the nearest land of the United States and does not meet the operational requirements of Paragraph 5.1.d.(1).

e. Gas Turbine Water Wash. Landing craft gas turbine wash water discharge is addressed as a component of the well deck discharges in Paragraph 5.1.k.

(1) Operational Requirements. Except as specified in Paragraph 5.1.k., 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 noncompliance report if gas turbine water wash is discharged within 12 nm from the nearest land of the United States.

f. 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 Volume 2 of this manual.

(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 Volume 2 of this manual.

(3) Reporting and Recordkeeping Requirements. A PIC must issue a noncompliance 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.

g. 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 noncompliance report if photographic laboratory wastewater is discharged within 12 nm from the nearest land.

h. 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 reduce discharge of biofouling prevention chemicals while effectively controlling biofouling.

(b) Seawater piping biofouling prevention chemicals subject to registration in accordance with Section 136 et seq. 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 used in accordance with the FIFRA label. Pesticides or chemicals banned for use in the United States must not be used.

(c) 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 waste water 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 noncompliance report if:

(a) 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.

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

i. Seawater Cooling Overboard Discharge. Operational Requirements.

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

(a) While pier side, secure seawater cooling systems 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.h.

j. 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, use four stroke-engines instead of carbureted two-stroke engines on vessels less 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 as to why non-environmentally acceptable lubricants were used must be documented by the DoD Component technical authority 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.

k. Welldeck Discharges.

(1) Operational Requirements.

(a) Landing craft 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 ensure 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 be free from garbage and must not contain oil.

(d) Welldecks will 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 noncompliance 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, and defined in the Glossary, currently exhibit a low potential for causing adverse impacts on the marine environment and therefore don't 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 would be 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.

AFFF	aqueous film-forming foam
ASD(S)	Assistant Secretary of Defense for Sustainment
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
MPCD	Marine Pollution Control Device
nm	nautical mile
PIC	person in charge
RO	reverse osmosis
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.

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

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 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. If two or more regulated discharge streams are combined into one, the resulting discharge stream must meet the requirements applicable to all discharge streams that are combined before discharge.

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.

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 13°00’ S., longitude 144°00’ E., to a point at

Latitude 15°00’ S., longitude 146°00’ E., to a point at

Latitude 18°00’ S., longitude 147°00’ E., to a point at

Latitude 21°00’ S., longitude 153°00’ E., to a point on the coast of Australia at

Latitude 24°42’ S., longitude 153°15’ E.

garbage. Encompasses all forms of 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. It does not include industrial wastes, infectious wastes, or human body wastes.

hazardous material. Defined in Section 171.8 of Title 49, CFR.

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.

MPCD. Defined in Section 1700.3 of Title 40, CFR.

National Defense Reserve Fleet. Established under Section 1744 of Title 50, U.S.C. to serve 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 and who is responsible for the operation, manning, victualing, and supplying of the DoD vessel. Examples of a PIC include, but are not limited to:

A commanding officer, officer in charge, or senior commissioned officer on-board 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 but as identified by the DoD; or

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.

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 less than 79 feet in length with a diesel or gasoline engine wet exhaust system.

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 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.

toxic. Defined in Section 1700.3 of Title 40, CFR.

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 museums.

vessel. Defined in Section 1700.3 of Title 40, CFR.

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

Deputy Secretary of Defense Memorandum, "Establishment of the Office of the Under Secretary of Defense for Research Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment," July 13, 2018

DoD Directive 5134.15, "Assistant Secretary of Defense for Operational Energy Plans and Programs (ASD(OEPP))," May 17, 2011

DoD Instruction 4715.06, "Environmental Compliance in the United States," May 4, 2015, 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, Title 7, Section 136 *et seq.* (also known as "Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)")

United States Code, Title 16

United States Code, Title 33

United States Code, Title 50, Section 1744

U.S. Environmental Protection Agency 712-C-98-075, "OPPTS 835.3100 Aerobic Aquatic Biodegradation," January 1998[1]

[1] Available at https://www.wbdg.org/FFC/EPA/EPACRIT/epa712_c_98_075.pdf