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ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF DEFENSE

40 CFR Part 1700

[EPA-HQ-OW-2016-0351; FRL-9949-12-OW]

RIN 2040-AF53

Uniform National Discharge Standards for Vessels of the Armed Forces--Phase II Batch Two

AGENCY: Environmental Protection Agency (EPA) and Department of Defense (DoD).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Defense (DoD) propose discharge performance standards for 11 discharges incidental to the normal operation of a vessel of the Armed Forces into the navigable waters of the United States, the territorial seas, and the contiguous zone. When implemented, the proposed discharge performance standards would reduce the adverse environmental impacts associated with the vessel discharges, stimulate the development of improved vessel pollution control devices, and advance the development of environmentally sound vessels of the Armed Forces. The 11 discharges addressed by the proposed rule are the following: catapult water brake tank and post-launch retraction exhaust, controllable pitch propeller hydraulic fluid, deck runoff, firemain systems, graywater, hull coating leachate, motor gasoline and compensating discharge, sonar dome discharge, submarine bilgewater, surface vessel bilgewater/oil-water separator effluent, and underwater ship husbandry.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**

ADDRESSES: Submit your comments, identified by Docket No. EPA-HQ-OW-2016-0351, at htttp://www.regulation.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Katherine B. Weiler, Marine Pollution Control Branch (4504T), U.S. EPA, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460; (202) 566-1280; weiler.katherine@epa.gov, or Mike Pletke, Chief of Naval Operations (N45), 2000 Navy Pentagon (Rm 2D253), Washington, DC 20350-2000; (703) 695-5184; mike.pletke@navy.mil.

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I. General Information

A. Legal Authority for the Proposed Rule

The EPA and DoD propose this rule under the authority of Clean Water Act (CWA) section 312 (33 U.S.C. 1322). Section 325 of the National Defense Authorization Act of 1996 ("NDAA"), entitled "Discharges from Vessels of the Armed Forces" (Pub. L. 104-106, 110 Stat. 254), amended CWA section 312, to require the Administrator of the U.S. Environmental Protection Agency (Administrator) and the Secretary of Defense of the U.S. Department of Defense (Secretary) to develop uniform national standards to control certain discharges incidental to the normal operation of a vessel of the Armed Forces. The term Uniform National Discharge Standards or UNDS is used in this preamble to refer to the provisions in CWA section 312(a)(12) through (14) and (n) (33 U.S.C. 1322(a)(12) through (14) and (n)).

B. Purpose of the Proposed Rule

UNDS are intended to enhance the operational flexibility of vessels of the Armed Forces domestically and internationally, stimulate the development of innovative vessel pollution control technology, and advance the development of environmentally sound ships. Section 312(n)(3)(A) of the CWA requires the EPA and DoD to promulgate uniform national discharge standards for certain discharges incidental to the normal operation of a vessel of the Armed Forces (CWA section 312(a)(12)), unless the Secretary finds that compliance with UNDS would not be in the national security interests of the United States (CWA section 312(n)(1)).

The proposed rule would amend title 40 Code of Federal Regulations (CFR) part 1700 to establish discharge performance standards for 11 discharges incidental to the normal operation of a vessel of the Armed Forces from among the 25 discharges for which the EPA and DoD previously determined (64 FR 25126, May 10, 1999) that it is reasonable and practicable to require a marine pollution control device (MPCD). The 11 discharges addressed by the proposal are the following: catapult water brake tank and post-launch retraction exhaust, controllable pitch propeller hydraulic fluid, deck runoff, firemain systems, graywater, hull coating leachate, motor gasoline and compensating discharge, sonar dome discharge, submarine bilgewater, surface vessel bilgewater/oil-water separator effluent, and underwater ship husbandry.

The proposed discharge performance standards would not become enforceable until after promulgation of a final rule, as well as promulgation of regulations by DoD under CWA section 312(n)(5)(C) to govern the design, construction, installation, and use of a MPCD.

UNDS do not apply to the following discharges from vessels of the Armed Forces: overboard discharges of rubbish, trash, garbage, or other such materials; sewage; air emissions resulting from the operation of a vessel propulsion system, motor-driven equipment, or incinerator; or discharges that require permitting under the National Pollutant Discharge Elimination System (NPDES) program, including operational discharges and other discharges that are not incidental to the normal operation of a vessel of the Armed Forces.

C. What Vessels are Potentially Affected by the Proposed Rule?

The proposed rule would apply to vessels of the Armed Forces. For the purposes of the rulemaking, the term "vessel of the Armed Forces" is defined at CWA section 312(a)(14). Vessel of the Armed Forces means any vessel owned or operated by the U.S. Department of Defense (i.e., U.S. Navy, Military Sealift Command, U.S. Marine Corps, U.S. Army, and U.S. Air Force),

other than a time- or voyage-chartered vessel, as well as any U.S. Coast Guard vessel designated by the Secretary of the Department in which the U.S. Coast Guard is operating. The preceding list is not intended to be exhaustive, but rather provides a guide for the reader regarding the vessels of the Armed Forces to be regulated by the proposed rule. The proposed rule would not apply to commercial vessels; private vessels; vessels owned or operated by state, local, or tribal governments; vessels under the jurisdiction of the U.S. Army Corps of Engineers; certain vessels under the jurisdiction of the U.S. Department of Transportation; vessels preserved as memorials and museums; vessels under construction; vessels in drydock; amphibious vehicles; and, as noted above, time- or voyage-chartered vessels. For answers to questions regarding the applicability of this action to a particular vessel, consult one of the contacts listed in the **FOR FURTHER INFORMATION CONTACT** section.

D. What is the Geographic Scope of the Proposed Rule?

The proposed rule would be applicable to discharges from a vessel of the Armed Forces operating in the navigable waters of the United States, territorial seas, and the contiguous zone (CWA section 1322(n)(8)(A)). The proposed rule applies in both fresh and marine waters and can include bodies of water such as rivers, lakes, and oceans. Together, the preamble refers to these waters as “waters subject to UNDS.”

Sections 502(7), 502(8), and 502(9) of the CWA define the term “navigable waters,” "territorial seas," and "contiguous zone," respectively. The term "navigable waters" means waters of the United States including the territorial seas, where the United States includes the states, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands. The term “territorial seas” means the belt of seas that generally extends

three miles seaward from the line of ordinary low water along the portion of the coast in direct contact with the open sea and the line marking the seaward limit of inland waters. The term "contiguous zone" means the entire zone established or to be established by the United States under Article 24 of the *Convention of the Territorial Sea and the Contiguous Zone*. Generally, the contiguous zone extends seaward for the next nine miles (i.e., from three to 12 miles from the U.S. coastline). The proposed rule would not be applicable seaward of the contiguous zone.

E. Rulemaking Process

The UNDS rulemaking is a joint rulemaking between the EPA and DoD and is under development in three phases. The first two phases reflect joint rulemaking between the EPA and DoD; the third phase is a DoD-only rule.

Phase I

The EPA and DoD promulgated the Phase I regulations on May 10, 1999 (64 FR 25126), and these existing regulations are codified at 40 CFR part 1700. During Phase I, the EPA and DoD identified the discharges incidental to the normal operation of a vessel of the Armed Forces for which it is reasonable and practicable to require control with a MPCD to mitigate potential adverse impacts on the marine environment (CWA section 312(n)(2)), as well as those discharges for which it is not. Section 312(a)(13) of the CWA defines a MPCD as any equipment or management practice, for installation or use on a vessel of the Armed Forces, that is designed to receive, retain, treat, control, or discharge a discharge incidental to the normal operation of a vessel; and determined by the Administrator and the Secretary to be the most effective equipment or management practice to reduce the environmental impacts of the discharge consistent with the considerations set forth by UNDS.

During Phase I, the EPA and DoD identified the following 25 discharges as requiring

control with a MPCD: Aqueous Film-Forming Foam; Catapult Water Brake Tank and Post-Launch Retraction Exhaust; Chain Locker Effluent; Clean Ballast; Compensated Fuel Ballast; Controllable Pitch Propeller Hydraulic Fluid; Deck Runoff; Dirty Ballast; Distillation and Reverse Osmosis Brine; Elevator Pit Effluent; Firemain Systems; Gas Turbine Water Wash; Graywater; Hull Coating Leachate; Motor Gasoline and Compensating Discharge; Non-Oily Machinery Wastewater; Photographic Laboratory Drains; Seawater Cooling Overboard Discharge; Seawater Piping Biofouling Prevention; Small Boat Engine Wet Exhaust; Sonar Dome Discharge; Submarine Bilgewater; Surface Vessel Bilgewater/Oil-Water Separator Effluent; Underwater Ship Husbandry; and Welldeck Discharges (40 CFR 1700.4).

During Phase I, the EPA and DoD identified the following 14 discharges as not requiring control with a MPCD: Boiler Blowdown; Catapult Wet Accumulator Discharge; Cathodic Protection; Freshwater Layup; Mine Countermeasures Equipment Lubrication; Portable Damage Control Drain Pump Discharge; Portable Damage Control Drain Pump Wet Exhaust; Refrigeration/Air Conditioning Condensate; Rudder Bearing Lubrication; Steam Condensate; Stern Tube Seals and Underwater Bearing Lubrication; Submarine Acoustic Countermeasures Launcher Discharge; Submarine Emergency Diesel Engine Wet Exhaust; and Submarine Outboard Equipment Grease and External Hydraulics.

As of the effective date of the Phase I rule (June 9, 1999), neither states nor political subdivisions of states may adopt or enforce any state or local statutes or regulations with respect to the 14 discharges that were identified as not requiring control, except to establish no-discharge zones (CWA sections 312(n)(6)(A) and 312(n)(7)). However, section 312(n)(5)(D) of the CWA authorizes a Governor of any state to submit a petition to DoD and the EPA requesting the re-evaluation of a prior determination that a MPCD is required for a particular discharge (40 CFR

1700.4) or that a MPCD is not required for a particular discharge (40 CFR 1700.5), if there is significant new information not considered previously, that could reasonably result in a change to the determination (CWA section 312(n)(5)(D) and 40 CFR 1700.11).

Phase II

Section 312(n)(3) of the CWA provides for Phase II and requires the EPA and DoD to develop federal discharge performance standards for each of the 25 discharges identified in Phase I as requiring control. In doing so, the EPA and DoD are required to consult with the Department in which the U.S. Coast Guard is operating, the Secretary of Commerce, interested states, the Secretary of State, and other interested federal agencies. In promulgating Phase II discharge performance standards, CWA section 312(n)(2)(B) directs the EPA and DoD to consider seven factors: the nature of the discharge; the environmental effects of the discharge; the practicability of using the MPCD; the effect that installation or use of the MPCD would have on the operation or the operational capability of the vessel; applicable U.S. law; applicable international standards; and the economic costs of installation and use of the MPCD. Section 312(n)(3)(C) of the CWA further provides that the EPA and DoD may establish discharge standards that (1) distinguish among classes, types, and sizes of vessels; (2) distinguish between new and existing vessels; and (3) provide for a waiver of applicability of standards as necessary or appropriate to a particular class, type, age, or size of vessel.

The EPA and DoD developed a process to establish the Phase II discharge performance standards in three batches (three separate rulemakings). The first batch of discharge performance standards was published on February 3, 2014 (79 FR 6117) and addressed 11 of the 25 discharges identified as requiring control (64 FR 25126). The second batch of discharge performance standards, the subject of this proposed rule, addresses 11 additional discharges

identified as requiring control (64 FR 25126). The third batch of discharge performance standards that will address the remaining three discharges will be proposed in a separate rule.

In developing the Phase II discharge performance standards, the EPA and DoD reference the 2013 NPDES Vessel General Permit and the 2014 NPDES Small Vessel General Permit (hereinafter referred to collectively as the NPDES VGPs) as the baseline for each comparable discharge incidental to the normal operation of a vessel of the Armed Forces (78 FR 21938, April 12, 2013 and 79 FR 53702, September 10, 2014). The NPDES VGPs provide for CWA authorization of discharges incidental to the normal operation of non-military and non-recreational vessels extending to the outer reach of the three-mile territorial sea as defined in CWA section 502(8). The NPDES VGPs include effluent limits that are based on both the technology available to treat pollutants (i.e., technology-based effluent limitations), and limits that would be protective of the designated uses of the receiving waters (i.e., water quality-based effluent limits), including both non-numeric and numeric limitations. Vessels covered under the NPDES VGPs vary widely by type, size, and activity and similarly, the contents and volume of the waste streams can vary dependent upon seas, cargo carried, and age of the vessel. Though the 2013 NPDES VGP was remanded to EPA after a judicial challenge, *NRDC v. EPA*, 808 F.3d 556 (2d Cir. 2015), the contested issues remanded to EPA are specific to the CWA NPDES permit program and thus are not relevant to the development of the proposed UNDS discharge performance standards. Numeric effluent limitations were used when feasible but due to the variety of vessel types, sizes, and activities, the EPA also used non-numeric effluent limitations to regulate vessel discharges covered by the NPDES VGPs. Additional information on NPDES permitting can be found on-line at http://www.epa.gov/npdes/.

Using the NPDES VGPs as a baseline for developing the performance standards for

discharges incidental to the normal operation of a vessel of the Armed Forces allowed the EPA and DoD to maximize the use of the EPA's scientific and technical work developed to support the NPDES VGPs. The NPDES VGPs technology-based and water quality-based effluent limitations were then adapted, as appropriate, for the relevant discharges from vessels of the Armed Forces.

Phase III

Phase III of UNDS requires DoD, in consultation with the EPA and the Secretary of the Department in which the U.S. Coast Guard is operating, within one year of finalization of the Phase II standards, to promulgate regulations governing the design, construction, installation, and use of MPCDs necessary to meet the discharge performance standards. DoD will implement the Phase III regulations under the authority of the Secretary as a DoD publication. The Phase III regulations will be publicly released and are expected to be made available on the Defense Technical Information Center website: http://www.dtic.mil/whs/directives. Similar to Phase II, Phase III will be promulgated in three batches.

Following the effective date of regulations under Phase III, it will be unlawful for a vessel of the Armed Forces to operate within waters subject to UNDS if the vessel is not equipped with a MPCD that meets the final Phase II standards (CWA section 312 (n)(7)). It also will be unlawful for a vessel of the Armed Forces to discharge a regulated UNDS discharge into an UNDS no-discharge zone (i.e., waters where a prohibition on a discharge has been established) (CWA section 312(n)(8)). Any person in violation of this requirement shall be liable to a civil penalty of not more than $5,000 for each violation (CWA section 312(j)). The Secretary of the Department in which the U.S. Coast Guard is operating shall enforce these provisions and may utilize law enforcement officers, EPA personnel and facilities, other federal agencies, or the

states to carry out these provisions. States may also enforce these provisions (CWA section 312(k) and (n)(9)).

In addition, as of the effective date of the Phase III regulations, neither States nor political subdivisions of States may adopt or enforce any state or local statute or regulation with respect to discharges identified as requiring control, except to establish no-discharge zones (CWA section 312(n)(7)). CWA section 312(n)(7) provides for the establishment of no-discharge zones either (1) by State prohibition after application and a determination by the EPA, or (2) directly by EPA prohibition. The Phase I UNDS regulations established the criteria and procedures for establishing UNDS no-discharge zones (40 CFR 1700.9 and 40 CFR 1700.10).

If a state determines that the protection and enhancement of the quality of some or all of its waters require greater environmental protection, the state may prohibit one or more discharges incidental to the normal operation of a vessel of the Armed Forces, whether treated or not, into those waters (40 CFR 1700.9). A state prohibition does not apply until after the Administrator determines that (1) the protection and enhancement of the quality of the specified waters within the state require a prohibition of the discharge into the waters; (2) adequate facilities for the safe and sanitary removal of the discharge incidental to the normal operation of a vessel are reasonably available for the waters to which the prohibition would apply; and (3) the prohibition will not have the effect of discriminating against a vessel of the Armed Forces by reason of the ownership or operation by the federal government, or the military function, of the vessel (40 CFR 1700.9(b)(2)).

Alternatively, a State may request that the EPA prohibit, by regulation, the discharge of one or more discharges incidental to the normal operation of a vessel of the Armed Forces, whether treated or not, into specified waters within a state (40 CFR 1700.10). In this case, the

EPA would make a determination that the protection and enhancement of the quality of the specified waters requires a prohibition of the discharge. As with the application of a state prohibition described above, the Administrator would need to determine that (1) the protection and enhancement of the quality of the specified waters within the state require a prohibition of the discharge into the waters; (2) adequate facilities for the safe and sanitary removal of the discharge incidental to the normal operation of a vessel are reasonably available for the waters to which the prohibition would apply; and (3) the prohibition will not have the effect of discriminating against a vessel of the Armed Forces by reason of the ownership or operation by the federal government, or the military function, of the vessel (40 CFR 1700.9(b)(2)). The EPA may not, however, disapprove a state application for this latter type of prohibition for the sole reason that there are not adequate facilities for the safe and sanitary removal of such discharges (CWA section 312(n)(7)(B)(ii) and 40 CFR 1700.10(b)).

The statute also requires the EPA and DoD to review the determinations and standards every five years and, if necessary, to revise them based on significant new information. Specifically, CWA section 312(n)(5)(A) and (B) contain provisions for reviewing and modifying both of the following determinations: (1) whether control should be required for a particular discharge, and (2) the substantive standard of performance for a discharge for which control is required. A Governor also may petition the Administrator and the Secretary to review a UNDS determination or standard if there is significant new information, not considered previously, that could reasonably result in a change to the determination or standard (CWA section 312(n)(5)(D) and 40 CFR 1700.11).

F. Summary of Public Outreach and Consultation with Federal Agencies, States, Territories, and Tribes

During the development of the proposed rule, the EPA and DoD consulted with other federal agencies, states, and tribes regarding the reduction of adverse environmental impacts associated with discharges from vessels of the Armed Forces; development of innovative vessel pollution control technology; and advancement of environmentally sound vessels of the Armed Forces. In addition, the EPA and DoD reviewed comments on the NPDES VGPs.

G. Supporting Documentation

The proposed rule is supported by "Technical Development Document (TDD) Phase I Uniform National Discharge Standards (UNDS) for Vessels of the Armed Forces," the UNDS Phase I rules, the "Final 2013 Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (VGP)," the "Vessel General Permit (VGP) Fact Sheet," the "Final Small Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels Less Than 79 Feet (sVGP)," the "Small Vessel General Permit (sVGP) Fact Sheet," the "Economics and Benefits Analysis of the Final 2013 Vessel General Permit (VGP)," the "Economics and Benefits Analysis of the Final 2013 Small Vessel General Permit (sVGP)," the "February 2014 Uniform National Discharge Standards for Vessels of the Armed Forces--Phase II," the "Report to Congress: Study of Discharges Incidental to Normal Operation of Commercial Fishing Vessels and Other Non-Recreational Vessels Less than 79 Feet," and the "Environmentally Acceptable Lubricants." These documents are available from the EPA Water Docket, Docket No. EPA-HQ-OW-2016-0351 (Email: ow-docket@epa.gov; Phone Number: (202) 566-2426; Mail: Water Docket, *Mail Code:* 2822-IT, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460; or Online: http://www.regulations.gov). The NPDES VGPs background documents also are available online: *https://www.epa.gov/npdes/vessels.*

H. What Should I Consider as I Prepare My Comments?

The public may submit comments in written or electronic form. Electronic comments must be identified by the docket number EPA-HQ-OW-2016-0351. These electronic submissions will be accepted in Microsoft Word or Adobe PDF. If your comment cannot be read due to technical difficulties and you cannot be contacted for clarification, the EPA and DoD may not be able to consider your comment. Avoid the use of special characters and any form of encryption. Tips for Preparing Comments. Please follow these guidelines as you prepare your comments so that the EPA and DoD can better address them in a timely manner.

1. Identify the proposed rule by docket number and other identifying information (subject heading, Federal Register date, and page number).
2. Explain why you agree or disagree with any proposed discharge performance standards; suggest alternatives and substitute language for your requested changes.
3. Describe any assumptions and provide any technical information or data that you used.
4. Provide specific examples to illustrate your concerns and suggest alternatives.
5. Explain your views as clearly as possible.

Make sure to submit your comments by the comment period deadline. The EPA and DoD are not obligated to accept or consider late comments.

II. UNDS Performance Standards Development

During the development of the proposed discharge performance standards, the EPA and DoD analyzed the information from the Phase I of UNDS, considered the relevant language in the NPDES VGPs effluent limitations, and took into the consideration the seven statutory factors listed in CWA section 312(n)(2)(B). These seven statutory factors are: the nature of the discharge; the environmental effects of the discharge; the practicability of using the MPCD; the effect that installation or use of the MPCD would have on the operation or operational capability

of the vessel; applicable U.S. law; applicable international standards; and the economic costs of the installation and use of the MPCD. The EPA and DoD determined that the NPDES VGPs effluent limitations, which include technology-based and water quality-based effluent limitations, provide a sound basis to serve as a baseline for developing the discharge performance standards for the 11 discharges in this proposed rule. The subsections below outline the EPA and DoD's approach to considering the seven statutory factors listed in CWA section 312(n)(2)(B).

A. Nature of the Discharge

During Phase I, the EPA and DoD gathered information on the discharges incidental to the normal operation of a vessel of the Armed Forces and developed nature of the discharge reports. The nature of the discharge reports discuss how the discharge is generated, volumes and frequencies of the generated discharge, where the discharge occurs, and the constituents present in the discharge. In addition, the EPA and DoD reviewed relevant discharge information in the supporting documentation of the NPDES VGPs. The EPA and DoD briefly describe the nature of each of the 11 discharges below; however, the complete nature of the discharge reports can be found in Appendix A of the Technical Development Document – EPA 821-R-99-001.

B. Environmental Effects

Discharges incidental to the normal operation of a vessel of the Armed Forces have the potential to negatively impact the aquatic environment. The discharges contain a wide variety of constituents that have the potential to negatively impact aquatic species and habitats. These discharges can cause thermal pollution and can contain aquatic nuisance species (ANS), nutrients, bacteria or pathogens (e.g., *E. coli* and fecal coliforms), oil and grease, metals, most conventional pollutants (e.g., organic matter, bicarbonate, and suspended solids), and other toxic

and non-conventional pollutants with toxic effects. While it is unlikely that these discharges would cause an acute or chronic exceedance of the EPA recommended water quality criteria across a large water body, these discharges have the potential to cause adverse environmental impacts on a more localized scale due to the end-of-pipe nature of the discharges. For each of the 11 discharges below, the EPA and DoD discuss the constituents of concern released into the environment and potential water quality impacts. The proposed discharge performance standards would reduce the discharge of constituents of concern and mitigate the environmental risks to the receiving waters.

C. Cost, Practicability, and Operational Impacts

The universe of vessels of the Armed Forces affected by the proposed rule encompasses more than 6,000 vessels distributed among the U.S. Navy, Military Sealift Command, U.S. Coast Guard, U.S. Army, U.S. Marine Corps, and U.S. Air Force. These vessels range in design and size from small boats with lengths of less than 20 feet for coastal operations, to aircraft carriers with lengths of over 1,000 feet for global operations. Approximately 80 percent of the vessels of the Armed Forces are less than 79 feet in length. Larger vessels (i.e., vessels with length greater than or equal to 79 feet) comprise 20 percent of the vessels of the Armed Forces. The EPA and DoD considered vessel class, type, and size when developing the proposed discharge standards as not all vessels of the Armed Forces have the same discharges. For more information on the various vessel classes, characteristics, and missions, see Appendix A.

The EPA and DoD assessed the relative costs, practicability, and operational impacts of the proposed rule by comparing current operating conditions and practices of vessels of the Armed Forces with the anticipated operating conditions and practices that would be required to meet the proposed discharge performance standards. The EPA and DoD determined that the

proposed discharge performance standards applicable to operating conditions and practices for the 11 discharges would only result in a marginal increase in performance costs, practicability, and operational impacts.

D. Applicable U.S. and International Law

The EPA and DoD reviewed U.S. laws and international standards that would be relevant to discharges incidental to the normal operation of a vessel of the Armed Forces. A number of U.S. environmental laws include specific provisions for federal facilities and properties that may result in different environmental requirements for federal and non-federal entities. Similarly, many international treaties do not apply to vessels of the Armed Forces either because vessels of the Armed Forces are entitled to sovereign immunity under international law or because any particular treaty may apply different approaches to the adoption of appropriate environmental control measures consistent with the objects and purposes of such treaties. The EPA and DoD incorporated any relevant information in the development of the proposed discharge standards after reviewing the requirements of the following treaties and domestic implementing legislation, as well as other relevant and potentially applicable U.S. environmental laws: International Convention for the Prevention of Pollution from Ships (also referred to as MARPOL); International Convention on the Control of Harmful Anti-Fouling Systems on Ships; Act to Prevent Pollution from Ships; CWA section 311, as amended by the Oil Pollution Control Act of 1990; CWA section 402 and the National Pollutant Discharge Elimination System Vessel General Permit and small Vessel General Permit; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Hazardous Materials Transportation Act; Title X of the Coast Guard Authorization Act of 2010; National Marine Sanctuaries Act; Antiquities Act of 1906; Resource Conservation and Recovery Act; Toxic Substances Control Act; and the St. Lawrence Seaway

Regulations. The EPA and DoD invite comment on the application of the laws and international standards considered in the development of the proposed discharge performance standards.

E. Definitions

The EPA and DoD propose adding UNDS definitions to 40 CFR part 1700. Specifically, the proposal would establish new definitions or revise proposed definitions found in UNDS Phase II Batch One (79 FR 6117, February 3, 2014) for the following terms: bioaccumulative; biodegradable; environmentally acceptable lubricants; Great Lakes; minimally-toxic; minimally-toxic soaps, cleaners, and detergents; not bioaccumulative; phosphate free soaps, cleaners, and detergents; and state. The EPA and DoD propose defining these terms in order to support the proposal of the discharge performance standards described in the following section. These definitions are intended to clarify, simplify, or improve understanding of the proposed discharge performance standards. Some of the definitions are slightly different from the definitions established under the NPDES VGPs in order to increase clarity and understanding. The EPA and DoD invite comment on these definitions as applied to the specific proposed discharge performance standards for vessels of the Armed Forces.

III. UNDS Discharge Analysis and Performance Standards

This section describes the nature of the discharge, the environmental effects of the discharge, and the proposed discharge performance standards determined to be reasonable and practicable to mitigate the adverse impacts to the marine environment for the 11 discharges. In developing these standards, the EPA and DoD considered the information from Phase I of UNDS, Phase II of UNDS, the NPDES VGPs effluent limitations, and the seven statutory factors listed in CWA section 312(n)(2)(B). For more information on each discharge included in this proposed rule, please see the Phase I Uniform National Discharge Standards for Vessels of the

Armed Forces: Technical Development Document; EPA 821-R-99-001.

The 11 proposed discharge performance standards described in each section below apply to vessels of the Armed Forces operating within waters subject to UNDS, except as otherwise expressly excluded in the "exceptions" in 40 CFR 1700.39. In addition, if two or more regulated discharge streams are combined prior to discharge, then the resulting discharge would need to meet the discharge performance standards applicable to each of the discharges that are being combined (40 CFR 1700.40). Furthermore, recordkeeping (40 CFR 1700.41) and non-compliance reporting (40 CFR 1700.42) apply generally to each proposed discharge performance standard unless expressly provided in a particular discharge performance standard.

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

1. Nature of Discharge

Catapult water brake tank and post-launch retraction exhaust is the oily water skimmed from the water brake tank and the condensed steam discharged during catapult operations. Catapult water brakes stop the forward motion of an aircraft carrier catapult system used to launch various aircraft from Navy aircraft carriers. In waters subject to UNDS, the catapult water brake is primarily used for testing catapults on recently constructed aircraft carriers, following major drydock overhauls, or after major catapult modifications. Most flight operations occur outside of waters subject to UNDS. The catapult water brake tank serves as the water supply for the catapult water brake system. During each aircraft launch or test, lubricating oil is introduced to the catapult water brake tank by the catapult pistons; as the water is recirculated through the catapult water brake and the water brake tank, oil accumulates in the tank. The testing alone of the catapult water brake does not generate a sufficient accumulation of oily water in the catapult

water brake tank to generate a discharge. However, during flight operations the oily water from the catapult water brake tank is discharged above the waterline.

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 flight operations (including qualification and operational training) and testing both generate the post-launch retraction exhaust discharge.

Only Navy aircraft carriers, which represent less than one percent of vessels of the Armed Forces, are likely to produce catapult water brake tank and post-launch retraction exhaust discharge.

For more information regarding catapult water brake tank and post-launch retraction exhaust discharge, please see the catapult water brake tank and post-launch retraction exhaust nature of the discharge report in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

The catapult water brake tank and post-launch retraction exhaust discharges could negatively impact receiving waters due to the presence of lubricating oil and small amounts of metals generated within the catapult system itself. Additionally, the post-launch retraction exhaust discharge contains oil and water (in the condensed steam), nitrogen (in the form of ammonia, nitrates and nitrites, and total nitrogen), and metals such as copper and nickel from the piping systems. Among the constituents, oil, copper, lead, nickel, nitrogen, ammonia, bis(2-ethylhexyl) phthalate, phosphorus, and benzidine could be present in concentrations that exceed the EPA recommended water quality criteria.

Prohibiting the discharge of catapult water brake tank effluent and limiting the number of post-launch retraction exhaust discharges to only those required to support necessary testing and training operations would significantly limit the potential for release of the associated constituents of concern and protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to prohibit the discharge of catapult water brake tank effluent and to minimize post-launch retraction exhaust discharges by limiting the number of launches required to test and validate the system and conduct qualification and operational training.

B. Controllable Pitch Propeller Hydraulic Fluid

1. Nature of Discharge

Controllable pitch propeller (CPP) hydraulic fluid is 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. CPPs are used to control a vessel's speed or direction while maintaining a constant propulsion plant output (i.e., varying the pitch or "bite" of the propeller blades without varying the propulsion shaft speed). 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.

Leakage through CPP seals is most likely to occur while the vessel is underway because the CPP system operates under higher pressure when underway than at pierside or at anchor. CPP assemblies are typically designed to operate at 400 pounds per square inch (psi) without leaking. Typical CPP internal pressures while pierside range from 6 to 8 psi. CPP seals are designed to last five to seven years, which is the longest period between scheduled dry-dock

cycles, and are inspected quarterly for damage or excessive wear. As a result of the hub design and frequent CPP seal inspections, leaks of hydraulic fluid from CPP hubs are expected to be negligible.

CPP blade maintenance or replacement, which occurs in port on an as-needed basis when dry-docking is unavailable or impractical, also might result in the discharge of hydraulic fluid.

U.S. Coast Guard patrol ships, Navy surface combatants and some amphibious support ships, and some Military Sealift Command auxiliary ships might produce this discharge. Those ships represent approximately five percent of the vessels of the Armed Forces.

For more information regarding discharges from CPP systems, please see the CPP hydraulic fluid nature of the discharge report in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

The amount of hydraulic fluid released during underwater CPP maintenance could cause a sheen in the receiving waters. Constituents of the discharge include paraffins, olefins, and metals such as copper, aluminum, tin, nickel, and lead. Metal concentrations are expected to be insignificant because hydraulic fluid is not corrosive to metal piping, and the hydraulic fluid is continually filtered to protect against system failures. The use of shore facilities for CPP maintenance activities when possible would reduce the discharge of hydraulic fluid. The use of spill containment measures would minimize any adverse environmental effects, should the release of oil occur. Reducing the likelihood of discharge of CPP hydraulic fluid and the associated constituents of concern would protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that the protective seals on CPPs be maintained in good operating order to minimize the leakage of hydraulic fluid. To the greatest extent practicable, maintenance activities on CPPs should be conducted when a vessel is in drydock. If maintenance and repair activities must occur when the vessel is not in drydock, appropriate spill response equipment (e.g., oil booms) must be used to contain and clean any oil leakage. The discharge of CPP hydraulic fluid must not contain oil in quantities that: cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or contain an oil content above 15 parts per million (ppm) as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or otherwise are harmful to the public health or welfare of the United States.

C. Deck Runoff

1. Nature of Discharge

Deck runoff is 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.

Residues and contaminants present on the deck originate from topside equipment components as well as the varied activities that take place on the deck. Some or all of these pollutants can be introduced to the deck from shipboard activities, storage of material on the deck, maintenance activities, and the decking material itself. Deck runoff has the potential to contain a variety of pollutants, including oil and grease, petroleum hydrocarbons, surfactants,

soaps and detergents, glycols, solvents, and metals. Constituents and volumes of deck runoff vary widely depending on the purpose, service, and practices of the vessel.

All vessels of the Armed Forces generate deck runoff and the discharge occurs whenever the deck surface is exposed to water. Only vessels of the Armed Forces that support flight operations have flight decks. The proposed standards distinguish between flight decks and other vessel decks.

For more information regarding deck runoff, please see the deck runoff nature of the discharge report in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

Deck runoff could negatively impact receiving waters due to the possible presence of oil and grease, petroleum hydrocarbons, surfactants, soaps and detergents, glycols, solvents, and metals. These constituents may be present in concentrations that could potentially contribute to an exceedance of the EPA recommended water quality criteria. Existing DoD management practices provide for the clean-up of oil and other substances spilled during routine maintenance. These practices reduce the environmental effects of the discharge. Prohibiting the washdown of flight decks and restricting the discharge of deck runoff and the associated constituents of concern would protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that vessels prohibit flight deck washdowns and minimize deck washdowns while in port and in federally-protected-waters. Additionally, before deck washdowns occur, 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 waste management and disposal

requirements. If a deck washdown or above water line hull cleaning would create a discharge, the washdown or above water line cleaning must be conducted with minimally-toxic and phosphate free soaps, cleaners, and detergents. The use of soaps that are labeled as toxic is prohibited. All soaps and cleaners must be used as directed by the label. Furthermore, soaps, cleaners, and detergents should not be caustic and must be biodegradable. Where feasible, machinery on deck must have coamings or drip pans where necessary to collect any oily discharge that may leak from machinery and prevent spills. The drip pans must be drained to a waste container for proper disposal onshore in accordance with any applicable oil and hazardous substance management and disposal requirements. The presence of floating solids, visible foam, halogenated phenol compounds, and dispersants and surfactants in deck washdowns must be minimized. Topside surfaces and other above-water-line portions of the vessel must be well-maintained to minimize the discharge of rust and other corrosion by-products, 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 applicable solid waste and hazardous substance management and disposal requirements. 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 onshore oil and hazardous substance management and disposal requirements.

D. Firemain Systems

1. Nature of Discharge

Firemain system discharges consist of 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. Firemain systems are essential to the safety of a vessel and crew and therefore, require testing and maintenance. The firefighting equipment served by a vessel's firemain system includes fire hose stations, seawater sprinkling systems, and foam proportioning stations. Any foam discharges associated with firemain systems are not covered under this performance standard but would need to meet the requirements of 40 CFR 1700.14 (aqueous film-forming foam). 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.

Firemain systems for vessels of the Armed Forces fall into two categories: wet and dry firemains. Wet firemains are continuously pressurized so that the system has the capacity to provide water immediately upon demand. Dry firemains are not charged with water and, as a result, do not supply water upon demand. Most Navy surface vessels operate wet firemains and most Military Sealift Command vessels, U.S. Coast Guard, and U.S. Army vessels use dry firemains.

The firemain system includes all components between the fire pump suction sea chest and the cutout valves to the various services including sea chests, fire pumps, valves, piping, fire hoses, and heat exchangers. The water passed through the firemain system is drawn from the sea and returned to the sea by either discharge over the side from fire hoses or through submerged pipe outlets. The seawater discharged overboard from the firemain system can contain entrained or dissolved materials, principally metals, from natural degradation of the internal components of the firemain system itself. Some traces of oil or other lubricants may also enter the seawater from

valves or pumps. 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.

Most vessels of the Armed Forces greater than or equal to 79 feet in length are expected to discharge from firemain systems. Most boats and service craft that are less than 79 feet in length do not generate firemain systems discharge because smaller boats and craft typically use portable fire pumps or fire extinguishers. Approximately 20 percent of vessels of the Armed Forces produce firemain systems discharge.

For more information regarding firemain systems, please see the firemain systems nature of the discharge report in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

Discharges from the firemain system could negatively impact receiving waters due to the possible presence of copper, zinc, nickel, aluminum, tin, silver, iron, titanium, and chromium. Many of these constituents can be traced to the corrosion and erosion of the firemain piping system, valves, or pumps. Consequently, when feasible, the maintenance and training discharges from the firemain should occur outside of ports or other shallow waters. Restricting the discharge from firemain systems and the associated constituents of concern would protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

Firemain systems may be discharged for testing and inspections of the firemain system. The EPA and DoD propose to require that to the greatest extent practicable, firemain system maintenance and training be conducted outside of port and as far away from shore as possible. In

addition, firemain systems must not be discharged in federally-protected waters except when needed to comply with anchor washdown requirements in Subpart 1700.16 (Chain locker effluent). Firemain systems may be used for secondary uses if the intake comes directly from the surrounding waters or potable water supplies.

E. Graywater

1. Nature of Discharge

Graywater is galley, bath, and shower water, as well as wastewater from lavatory sinks, laundry, interior deck drains, water fountains, and shop sinks. On vessels of the Armed Forces, graywater is distinct from blackwater. Blackwater is the sewage generated by toilets and urinals and is regulated separately. Graywater discharges can contain oil and grease, detergent and soap residue, bacteria, pathogens, metals (e.g., cadmium, chromium, lead, copper, zinc, silver, nickel, and mercury), solids, and nutrients.

Vessels of the Armed Forces have different methods for collecting and discharging graywater. Most vessels are designed to direct graywater to the vessel's sewage tanks while pierside for transfer to a shore-based treatment facility. These vessels are not generally designed to hold graywater for extended periods of time and must drain or pump their graywater overboard while operating away from the pier in order to preserve holding capacity for sewage tanks. Some vessels with either larger graywater holding capacity or U.S. Coast Guard-certified marine sanitation devices (MSDs) have the capacity to hold or treat graywater for longer periods of time.

Approximately 20 percent of the vessels of the Armed Forces (i.e., aircraft carriers, surface combatants, amphibious support ships, submarines, patrol ships, and some auxiliary ships, boats, and service craft) generate graywater.

For more information regarding graywater, please see the graywater nature of the discharge in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

Graywater discharges may contain soaps and detergents; oil and grease from foods; food residue; nutrients and oxygen demand from food residues and detergents; hair; bleach and other cleaners and disinfectants; pathogens; and a variety of additional personal care products such as moisturizer, deodorant, perfume, and cosmetics. Graywater discharge could negatively impact receiving waters due to the possible presence of bacteria, pathogens, oil and grease, detergent and soap residue, metals (e.g., cadmium, chromium, lead, copper, zinc, silver, nickel, and mercury), solids, and nutrients (e.g., phosphates from the detergents). Of these constituents, the EPA and DoD have found ammonia, copper, lead, mercury, nickel, silver, and zinc in concentrations that may exceed the EPA recommended water quality criteria. Restricting the discharge of graywater and the associated constituents of concern would protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that large quantities of cooking oils (e.g., from deep fat fryers), including animal fats and vegetable oils, must not be added to graywater systems. The EPA and DoD further propose to require that the addition of smaller quantities of cooking oils (e.g., from pot and dish rinsing) to the graywater system must be minimized when the vessel is within three miles of shore. The EPA and DoD propose to require that graywater discharges must not contain oil in quantities that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or contain an oil content above 15 ppm as measured

by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or otherwise are harmful to the public health or welfare of the United States. In addition, 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 lead to extreme shifts in the receiving water pH (i.e., pH to fall below 6.0 or rise above 9.0).

For vessels designed with the capacity to hold graywater, EPA and DoD propose to require that graywater must not be discharged in federally-protected waters or the Great Lakes. In addition, such vessels would be prohibited from discharging graywater within one mile of shore if an onshore facility is available and use of such a facility is reasonable and practicable. When an onshore facility is either not available or when use of such a facility is not reasonable and practicable, production and discharge of graywater must be minimized within one mile of shore.

For vessels that do not have the capacity to hold graywater, EPA and DoD propose to require that graywater production must be minimized in federally-protected waters or the Great Lakes. In addition, such vessels would be prohibited from discharging graywater within one mile of shore if an onshore facility is available and use of such a facility is reasonable and practicable. When an onshore facility is either not available or use of such a facility is not reasonable and practicable, production and discharge of graywater must be minimized within one mile of shore.

F. Hull Coating Leachate

1. Nature of Discharge

Hull coating leachate is defined as the constituents that leach, dissolve, ablate, or erode from the paint on the vessel hull into the surrounding seawater. Antifouling hull coatings are

often used on vessel hulls to prevent or inhibit the attachment and growth of aquatic life or biofouling and contain biocides which are used to prevent biofouling growth on the hull by continuous leaching of biocides into the surrounding water. The primary biocide in most antifouling hull coatings is copper, although zinc is also used. Copper ablative coatings, which are designed to wear or ablate away as a result of water flow over a hull, and vinyl antifouling hull coatings, which release copper as a result of copper leaching and hydrolysis of rosin particles, are the most predominantly used copper-containing coatings. Tributyltin (TBT)-based coatings were historically used on vessel hulls; however, antifouling coatings with organotin (e.g., TBT) compounds used as active ingredients are no longer authorized for use in the United States and as such are no longer applied to vessels of the Armed Forces.

Approximately 50 percent of the vessels of the Armed Forces use antifouling hull coatings and contribute to the hull coating leachate discharge when they are waterborne.

For more information regarding hull coating leachate, please see the hull coating leachate nature of the discharge report in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

The discharge of hull coating leachate could negatively impact receiving waters due to the presence of copper and zinc that are used as biocides. While the rate at which the metals leach from coatings is relatively slow (4–17 micrograms per square centimeter-day ($\mu g/cm^2/day$)), metal-leaching coatings can account for significant accumulations of metals in receiving waters of ports where numerous vessels are present. The adverse impact could be significant in waters already classified as impaired due to elevated metal levels, for example, copper. While the purpose of antifouling hull coatings is to prevent marine organisms from

growing on the hull, an effective antifoulant should minimize the attachment and transport of non-indigenous species, decrease fuel usage, and reduce gaseous emissions. Restricting the discharge of hull coating leachate and the associated constituents of concern would protect the quality of the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that antifouling hull coatings subject to FIFRA (7 U.S.C 136 et seq.) must be applied, maintained, and removed in a manner consistent with requirements on the coatings' FIFRA labels. The EPA and DoD also propose to prohibit the use of biocides or toxic materials banned for use in the United States (including those on EPA's List of Banned or Severely Restricted Pesticides). This proposed requirement would apply to all vessels, including vessels with a hull coating applied outside of the United States. Antifouling hull coatings must not contain TBT or other organotin compounds as a hull coating biocide. Antifouling hull coatings may contain small quantities of organotin compounds when the organotin is used as a chemical catalyst and is not present above 2,500 milligrams of total tin per kilogram of dry paint film. Also, any such antifouling hull coatings used must be designed to not slough or peel from the vessel hull. In addition, the proposed standard would encourage the use of non-biocidal alternatives to copper coatings to the greatest extent practicable. The EPA and DoD also recommend to the greatest extent practicable, the use of antifouling hull coatings with the lowest effective biocide release rates, rapidly biodegradable components (once separated from the hull surface), or use of non-biocidal alternatives, such as silicone coatings. Finally, to the greatest extent practicable, avoid the use of anti-fouling hull coatings on vessels that are regularly removed from the water and unlikely to accumulate hull growth.

G. Motor Gasoline and Compensating Discharge

1. Nature of Discharge

Motor gasoline and compensating discharge is the 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 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. Only U.S. Navy amphibious support ships, which represent less than one percent of the vessels of the Armed Forces, produce motor gasoline and compensating discharge.

For more information regarding motor gasoline and compensating discharge, please see the motor gasoline and compensating discharge nature of the discharge in Appendix A of the Technical Development Document— EPA 821–R–99–001.

2. Environmental Effects

Motor gasoline and compensating discharge could negatively impact receiving waters due to the presence of residual oil. The discharge may contain traces of gasoline constituents, which generally contain alkanes, alkenes, aromatics (e.g., benzene, toluene, ethylbenzene, phenol, and naphthalene), metals, and additives. Analyses of compensating discharge have shown that benzene, toluene, ethylbenzene, phenol, and naphthalene may exceed the EPA recommended water quality criteria. Restricting the discharge of motor gasoline and compensating discharge and the associated constituents of concern would protect the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that the discharge of motor gasoline and

compensating effluent must not contain oil in quantities that: cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or contain an oil content above 15 ppm as measured by the EPA Method 1664a or other appropriate method for determination of oil content as accepted by the IMO (e.g., ISO Method 9377) or U.S. Coast Guard; or otherwise are harmful to the public health or welfare of the United States. In addition, if an oily sheen is observed, the EPA and DoD propose to require that any spill or overflow of oil must be cleaned up, recorded, and reported to the National Response Center immediately. The discharge of motor gasoline and compensating discharge must be minimized in port and is prohibited in federally-protected waters.

H. Sonar Dome Discharge

1. Nature of Discharge

Sonar dome discharge occurs from the leaching of antifouling materials into the surrounding seawater and the release of seawater or freshwater retained within the sonar dome. Sonar domes are structures located on the hull of ships and submarines, used for the housing of electronic equipment for detection, navigation, and ranging. The shape and design pressure in sonar domes are maintained by filling them with water. Antifouling materials are used on the exterior of the sonar dome to prevent fouling which degrades sonar performance. Navy surface ship domes are made of rubber with an exterior layer that is impregnated with TBT. On submarines and Military Sealift Command surface ships, the sonar domes are made of steel or glass reinforced plastic and do not contain TBT but are covered with an antifouling coating.

The discharge of the water from the interior of the sonar domes primarily occurs when the vessel is pierside and is intermittent depending on when the dome is emptied for maintenance.

On average, sonar domes on surface vessels are emptied twice a year and sonar domes on submarines are emptied once a year. The discharge of sonar dome water can range between 300 gallons to 74,000 gallons depending on the size of the sonar dome and the type of maintenance event.

Approximately ten percent of vessels of the Armed Forces generate sonar dome discharge. These vessel types include auxiliary ships, submarines, and surface combatants.

For more information regarding sonar dome discharge, please see the sonar dome nature of the discharge report in Appendix A of the Technical Development Document — EPA 821–R–99–001.

2. Environmental Effects

Sonar dome discharge could negatively impact receiving waters due to the possible presence of antifouling agents on the exterior rubber boots of the sonar dome, as well as from tin, zinc, copper, nickel, and epoxy paint from a sonar dome interior. The concentrations of some of these components are estimated to exceed the EPA recommended water quality criteria. Restricting the sonar dome discharge and the associated constituents of concern would protect the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that the water inside the sonar dome not be discharged for maintenance activities unless the use of a drydock for the maintenance activity is not feasible. The water inside the sonar dome may be discharged for equalization of pressure between the interior and exterior of the dome. This would include the discharge of water required to protect the shape, integrity, and structure of the sonar dome due to internal and external pressures and forces. The EPA and DoD also propose to require that a biofouling chemical that is

bioaccumulative should not be applied to the exterior of a sonar dome when a non-bioaccumulative alternative is available.

I. Submarine Bilgewater

1. Nature of Discharge

Submarine bilgewater is the wastewater from a variety of sources that accumulates in the lowest part of the submarine (i.e., bilge). Submarine bilgewater consists of a mixture of discharges and leakage from a wide variety of sources (e.g., seawater accumulation, normal water leakage from machinery, and fresh water washdowns), and includes all the wastewater collected in the bilge compartment, oily waste holding tank, or any other oily water or holding tank. Consequently, the discharge can contain a variety of constituents including cleaning agents, solvents, fuel, lubricating oils, and hydraulic oils. Submarines have a drain system consisting of a series of oily bilge collecting tanks and a waste oil collecting tank or tank complex to collect oily wastewater. Discharges from these tanks occur from the bottom of the tank after gravity separation. Some submarines have baffles to enhance the separation of oil and water.

Approximately one percent of the vessels of the Armed Forces are submarines and generate submarine bilgewater. Most submarines do not discharge bilgewater while in transit within waters subject to UNDS and instead hold and transfer submarine bilgewater to a shore-based facility. However, one class of submarines (SSN 688) discharges some of the water phase of the separated bilgewater collecting tank, as necessary.

For more information regarding submarine bilgewater, please see the submarine bilgewater nature of the discharge report in the Technical Development Document – EPA-821-R-99-001.

2. Environmental Effects

Submarine bilgewater discharge could negatively impact receiving waters due to the possible presence of oil and grease, volatile and semivolatile organic compounds, and metals. These constituents occur in cleaning agents, solvents, fuel, lubricating oils, and hydraulic oils used on submarines and may be present in concentrations that could contribute to an exceedance of the EPA recommended water quality criteria. Restricting the discharge of submarine bilgewater and the associated constituents of concern would help to protect the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that the discharge of submarine bilgewater must not contain oil in quantities that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or contain an oil content above 15 ppm as measured by the EPA Method 1664a or other appropriate method for determination of oil content as accepted by the IMO (e.g., ISO Method 9377) or U.S. Coast Guard; or otherwise are harmful to the public health or welfare of the United States. In addition, the discharge of submarine bilgewater must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. The proposed performance standard would not, however, prohibit the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures. The discharge of submarine bilgewater also must only contain 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 oil-water separator only if such solidifiers, flocculants, or other additives are minimized in the discharge

and do not alter the chemical composition of the oils in the discharge. Solidifiers, flocculants, or other additives must not be directly added, or otherwise combined with, the water in the bilge.

The EPA and DoD propose to require that submarine bilgewater discharges must not occur while the submarine is in port, when the port has the capability to collect and transfer the bilgewater to an onshore facility. If the submarine is not in port, then any such discharge must be minimized and discharged as far from shore as technologically feasible. The EPA and DoD also propose to require that submarine bilgewater discharges be minimized in federally-protected waters. Finally, submarines would need to employ management practices to minimize leakage of oil and other harmful pollutants into the bilge.

J. Surface Vessel Bilgewater/Oil-Water Separator Effluent (OWSE)

1. Nature of Discharge

Surface vessel bilgewater is the wastewater from a variety of sources that accumulates in the lowest part of the vessel (the bilge) and the oil-water separator effluent is produced when the wastewater is processed by an oil-water separator. 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. The primary sources of drainage into the bilge are the main engine room(s) and auxiliary machinery room(s), which house the vessel's propulsion system and auxiliary systems (i.e., steam boilers and water purification systems), respectively.

The composition of bilgewater varies from vessel-to-vessel and from day-to-day on the same vessel. The propulsion and auxiliary systems use fuels, lubricants, hydraulic fluid, antifreeze, solvents, and cleaning chemicals as part of routine operation and maintenance. Small quantities of these materials enter the bilge as leaks and spills in the engineering spaces. Bilgewater generation rates vary by vessel and by vessel class because of the differences in

vessel age, shipboard equipment (e.g., type of propulsion system), operations, whether the vessel segregates its non-oily wastewater from the bilge, and other procedures.

Approximately 75 percent of vessels of the Armed Forces generate surface vessel bilgewater/oil-water separator effluent; submarines and some of the smaller boats and service craft do not generate surface vessel bilgewater discharge/oil-water separator effluent. Oil-water separator systems are installed on most vessels of the Armed Forces to collect the waste oil for onshore disposal. Some smaller vessels are not outfitted with oil-water separator systems; thus, bilgewater is stored for onshore disposal.

For more information regarding surface vessel bilgewater/oil-water separator effluent, please see the surface vessel bilgewater/oil-water separator nature of the discharge report in Appendix A of the Technical Development Document – EPA 821–R–99–001.

2. Environmental Effects

Surface vessel bilgewater/oil-water separator effluent could negatively impact receiving waters due to the possible presence of oil and grease, volatile and semivolatile organic compounds, and metals. These constituents exist in cleaning agents, solvents, fuel, lubricating oils, and hydraulic oils and may be present in concentrations that could potentially contribute to an exceedance of the EPA recommended water quality criteria. Restricting the discharge of surface vessel bilgewater/oil-water separator effluent and the associated constituents of concern would protect the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that surface vessels equipped with an oil-water separator must not discharge bilgewater and must only discharge oil-water separator effluent through an oil-content monitor. All surface vessels greater than 400 gross tons must be equipped

with an oil-water separator. If measurements for gross tonnage are not available for a particular vessel, full displacement measurements may be used instead. The EPA and DoD also propose to require that the discharge of oil-water separator effluent not occur in port if the port has the capability to collect and transfer oil-water separator effluent to an onshore facility. In addition, the discharge of oil-water separator effluent must be minimized within one mile of shore, must occur at speeds greater than six knots if the vessel is underway, and must be minimized in federally-protected waters.

For surface vessels not equipped with an oil-water separator, the EPA and DoD propose to require that bilgewater must not be discharged if the vessel has the capability to collect, hold, and transfer to an onshore facility.

In addition, the discharge of bilgewater/oil-water separator effluent must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. The proposed performance standard would not, however, prohibit the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures. The discharge of bilgewater/oil-water separator effluent must contain substances that are produced in the normal operation of a vessel. For the discharge of oil-water separator effluent, oil solidifiers, flocculants or other additives (excluding any dispersants or surfactants) may be used to enhance oil/water separation during processing only if such solidifiers, flocculants, or other additives are minimized and do not alter the chemical composition of the oils in the discharge. Solidifiers, flocculants, or other additives must not be directly added, or otherwise combined with, the water in the bilge.

The discharge of surface vessel bilgewater/oil-water separator effluent must not contain oil in quantities that cause a film or sheen upon or discoloration of the surface of the water or

adjoining shorelines; or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or contain an oil content above 15 ppm as measured by the EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or otherwise are harmful to the public health or welfare of the United States.

When a visible sheen is observed as a result of a surface vessel bilgewater/oil-water separator effluent discharge, the discharge must be suspended immediately until the problem is corrected. Any spill or overflow of oil or other engine fluids must be cleaned up, recorded, and reported immediately to the National Response Center. The surface vessel must also employ management practices to minimize leakage of oil and other harmful pollutants into the bilge. Such practices may include regular inspection and maintenance of equipment and remediation of oil spills or overflows into the bilge using oil-absorbent or other spill clean-up materials.

K. Underwater Ship Husbandry

1. Nature of Discharge

Underwater ship husbandry discharges 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/inspections, masker belt repairs, and painting operations. Underwater ship husbandry operations are normally conducted pierside, and could result in the release of metals (copper or zinc) or the introduction of non-indigenous species.

All vessels of the Armed Forces greater than or equal to 79 feet in length and some boats and service craft less than 79 feet in length, comprising 60 percent of the vessels, are expected to generate underwater ship husbandry discharge. While underwater ship husbandry discharges

occur during the maintenance of all classes of vessels, many vessels less than 79 feet in length are regularly pulled from the water for hull maintenance or stored on land.

For more information regarding underwater ship husbandry, please see the underwater ship husbandry nature of the discharge report in Appendix A of the Technical Development Document — EPA 821–R–99–001.

2. Environmental Effects

Underwater ship husbandry could negatively impact receiving waters due to the possible presence of metals and non-indigenous species. With the exception of underwater hull cleaning, other underwater ship husbandry discharges have a low potential for causing an adverse environmental effect. Metals, such as copper and zinc from antifouling coatings, are released during underwater hull cleaning in concentrations that have the potential to cause an adverse environmental effect and could contribute to an exceedance of the EPA recommended water quality criteria. The potential also exists for release of non-indigenous species during hull cleaning. Restricting the discharge from underwater ship husbandry activities and the associated constituents of concern would protect the receiving waters.

3. Selection of Marine Pollution Control Device Performance Standard

The EPA and DoD propose to require that to the greatest extent practicable, vessel hulls with antifouling hull coatings must not be cleaned within 90 days after the antifouling coating application. Vessel hulls must be inspected, maintained, and cleaned to minimize the removal and discharge of antifouling hull coatings and transport of fouling organisms. To the greatest extent practicable, rigorous vessel hull cleanings must take place in drydock or at a land-based facility where the removed fouling organisms or spent antifouling hull coatings can be disposed of onshore in accordance with any applicable solid waste or hazardous substance management

and disposal requirements. The proposed performance standard would also require that vessel hull cleanings be conducted in a manner that minimizes the release of antifouling hull coatings and fouling organisms (e.g., less abrasive techniques and softer brushes to the greatest extent practicable). Vessel hull cleanings must also adhere to any applicable cleaning requirements found on the coatings' FIFRA label. For vessels less than 79 feet in length, the proposed standard would require inspection of vessels before overland transport to a different body of water to control invasive species. For vessels greater than 79 feet in length, the proposed standard would require that to the greatest extent practicable, vessel hulls with a copper-based antifouling coating must not be cleaned within 365 days after the antifouling coating application.

IV. Additional Information of the Proposed Rule

This section provides an overview of the additional amendments proposed for 40 CFR part 1700. These proposed changes include the reservation of sections for the remaining discharge standards.

1. Reservation of Sections

As noted previously, the EPA and DoD are proposing the Phase II standards in three batches. For the purpose of proposing the remaining batches, the proposal reserves the following sections for those future rulemaking actions:

Section 1700.17 Clean Ballast;

Section 1700.18 Compensated Fuel Ballast;

Section 1700.21 Dirty Ballast;

V. Related Acts of Congress and Executive Orders

Additional information about these statutes and Executive Orders can be found at https://www.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act

This action does not impose any new information collection burden, as the EPA and DoD have determined that Phase II of UNDS does not create any additional collection of information beyond that already mandated under the Phase I of UNDS. The Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations (40 CFR part 1700) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2040–0187. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act (RFA)

We certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action implements mandates specifically and explicitly set forth in CWA section 312 without the exercise of any policy discretion by EPA.

E. Executive Order 13132: Federalism

The EPA and DoD concluded that the proposed rule, once finalized in Phase III, will

have federalism implications. Once the proposed discharge performance standards are promulgated in Phase III by DoD, adoption and enforcement of new or existing state or local regulations for the discharges will be preempted.

Accordingly, the EPA and DoD provide the following federalism summary impact statement. During Phase I of UNDS, the EPA and DoD conducted two rounds of consultation meetings (i.e., outreach briefings) to allow states and local officials to have meaningful and timely input into the development of the rulemaking. Twenty-two states accepted the offer to be briefed on UNDS and discuss state concerns. The EPA and DoD provided clarification on the technical aspects of the UNDS process, including preliminary discharge determinations and analytical information supporting decisions to control or not control discharges. State representatives were provided with discharge summaries containing the description, analysis, and preliminary determination of each of the 39 discharges from vessels of the Armed Forces—25 of which were determined to require control.

During Phase II, the EPA and DoD consulted again with state representatives early in the process of developing the proposed regulation. On March 9, 2016, the EPA held a Federalism consultation in Washington, DC, and invited representatives from states and political subdivisions of states in order to obtain meaningful and timely input in the development of the proposed discharge standards. The EPA and DoD informed the state representatives that the two agencies planned to use the NPDES VGPs effluent limitations as a baseline for developing the proposed discharge performance standards for the 25 discharges identified in Phase I as requiring control. During the Federalism consultation period, the EPA and DoD did not receive any substantive comments from state and local government entities.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implication as specified in Executive Order 13175. The UNDS rulemaking will not impact vessels operated by tribes because the rule only regulates discharges from vessels of the Armed Forces. However, tribes may be interested in this action because vessels of the Armed Forces, including U.S. Coast Guard vessels, may operate in or near tribal waters. The EPA hosted a National Teleconference on March 23, 2016, in order to obtain meaningful and timely input during the development of the proposed discharge standards. The EPA and DoD informed the representatives that the two agencies planned to use the NPDES VGPs effluent limitations as a baseline for developing the discharge performance standards for the 25 discharges identified in Phase I as requiring control. During the Tribal consultation period, the EPA and DoD did not receive any substantive comments from the Indian Tribal Governments.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA and DoD do not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The 11 proposed discharge standards are designed to control discharges incidental to the normal operation of a vessel of the Armed Forces that could adversely affect human health and the environment. The standards reduce the impacts to the receiving waters and any person using the receiving waters, regardless of age.

H. Executive Order 13211: Actions that Concern Regulations that Significantly Affect Energy Supply, Distribution, and Use

This action is not subject to Executive Order 1321, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

This action involves technical standards. The EPA and DoD propose to use ISO Method 9377– determination of hydrocarbon oil index. ISO Method 9377 is a voluntary consensus standard developed by an independent, non-governmental international organization.

J. Executive Order 13112: Invasive Species

Executive Order 13112, entitled "Invasive Species" (64 FR 6183, February 8, 1999), requires each federal agency, whose actions may affect the status of invasive species, to identify such actions, and, subject to the availability of appropriations, use relevant programs and authorities to, among other things, prevent, detect, control, and monitor the introduction of invasive species. As defined by this Executive Order, "invasive species" means an alien species whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health.

As part of the environmental effects analyses, the EPA and DoD considered the control of invasive species when developing the proposed discharge performance standards for all 11 discharges (See Section II). For example, the underwater ship husbandry discharge performance standard requires the inspection of all vessels under 79 feet in length for the detection and removal of invasive species prior to transport overland from one body of water to another. This requirement as well as others within the proposed discharge standards would help to prevent or control the introduction of invasive species into the receiving waters.

K. Executive Order 13089: Coral Reef Protection

Executive Order 13089, entitled "Coral Reef Protection" (63 FR 32701, June 16, 1998), requires all federal agencies to identify actions that may affect U.S. coral reef ecosystems; utilize their programs and authorities to protect the conditions of such ecosystems; and to the extent

permitted by law, ensure that any actions they authorize, fund, or carry out will not degrade the conditions of such ecosystems. The proposed discharge standards are designed to control or eliminate the discharges incidental to the normal operation of vessels of the Armed Forces, ultimately minimizing the potential for causing adverse impacts to the marine environment including coral reefs.

L. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA and DoD believe that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February, 16, 1994). The proposed discharge performance standards only apply to vessels of the Armed Forces and ultimately increase environmental protection.

VI. Appendix A - Description of Vessels of the Armed Forces

Table A-1

Vessel Type	**Total Vessels of the Armed Forces**			
	Large Vessels (Greater than or equal to 79 feet)		Small Vessels (Less than 79 feet)	
	Count	% of Vessels	Count	% of Vessels
Aircraft Carriers	10	1		
Amphibious Support Ships	33	3		
Auxiliary Ships	361	33		
Boats			5,128	100

Patrol Ships	180	17		
Service Craft	345	32	12	< 1
Submarines	71	6		
Surface Combatants	90	8		
Total	**1,090**	100	**5,140**	100

Table A-1 provides information regarding the composition of vessels of the Armed Forces by vessel type and vessel size.

Aircraft Carriers: These are the largest vessels of the Armed Forces. They are designed primarily for conducting combat operations by fixed wing aircraft that are launched with catapults. Nuclear energy powers all vessels in this group. Aircraft carriers exceed 1,000 feet in length, and have crews of 4,000 to 6,000. Except during transit in and out of port, these vessels operate predominantly seaward of waters subject to UNDS.

Amphibious Support Ships: These are large vessels, ranging in length from 569 feet to 847 feet, designed to support amphibious assault operations. Many of these vessels have large clean ballast tanks used to lower and raise the hull during amphibious operations, and welldecks to support the recovery of landing crafts and amphibious vehicles. These large ocean-going vessels may operate within waters subject to UNDS during training and testing of equipment.

Auxiliary Ships: This is a large and diverse group of self-propelled vessels with lengths equal to or greater than 79 feet in length and designed to provide general support to either combatant forces or shore-based establishments. These ships fulfill multiple duties including, but are not limited to, transporting supplies (e.g., fuel, ammunitions) and troops to and from the theater of

operations, executing mine countermeasures operations, conducting research, maintaining navigations systems (e.g., buoys), and recovering targets and drones. This vessel class has crew sizes ranging from 10 to 200 people. Depending on mission and operation requirements, these vessels operate both within and seaward of waters subject to UNDS.

Boats: This type of vessel encompasses 81 percent of the vessels of the Armed Forces and includes all self-propelled vessels less than 79 feet in length. These vessels are used for such roles as security, combat operations, rescue, and training. Because of their relatively small size, these vessels have small crews that range from 1 to 19, and produce limited sources of liquid discharges. These vessels operate predominantly within waters subject to UNDS, but may operate seaward of waters subject to UNDS when deployed from larger ships.

Patrol Ships: These are self-propelled vessels with lengths equal to or greater than 79 feet in length, and are designed to conduct patrol duties (i.e., maritime homeland security, law enforcement, and national defense missions). Vessels in this group have crew sizes ranging from 10 to 200. Some vessels in this group may operate seaward of waters subject to UNDS, but the majority predominantly operate within waters subject to UNDS conducting security patrol missions.

Service Craft: This is a diverse group of non-self-propelled vessel classes designed to provide general support to other vessels in the Armed Forces fleet or shore-based establishments. Vessel classes in this group have an average length of 155 feet with more than 95 percent of them being between 40 feet and 310 feet. While most of these vessels have a very limited crew or no crew, barracks craft can provide sleeping accommodations for 100 to 1,200 crew members. These vessels include multiple barges and lighter designs, dredges, floating dry-docks, floating cranes, floating causeway ferries, floating roll-on-off discharge facilities, dry deck shelters, floating

workshops, and floating barracks. These vessels operate predominantly within waters subject to UNDS.

Submarines: These submersible combat vessels powered with nuclear energy can fulfill combatant, auxiliary, or research and development roles. Except during transit in and out of port, these vessels operate predominantly seaward of waters subject to UNDS.

Surface Combatants: These are surface ships designed primarily to engage in attacks against airborne, surface, sub-surface, and shore targets. Vessel classes in this group range in length from 378 feet to 567 feet, and have crew sizes that range from 40 for the Littoral Combat Ship to under 400 for a Guided Missile Destroyer or Cruiser. Except during transit in and out of port, these vessels operate predominantly seaward of waters subject to UNDS.

List of Subjects in 40 CFR Part 1700

Environmental protection, Armed Forces, Vessels, Coastal zone, Reporting and recordkeeping requirements, Water pollution control.

Dated: September 16, 2016.

Gina McCarthy,
Administrator, Environmental Protection Agency.

Dated: September 26, 2016.

Dennis McGinn,
Assistant Secretary of the Navy, Energy, Installations, and Environment.

For the reasons stated in the preamble, title 40, chapter VII, of the Code of Federal Regulations is proposed to be amended as follows:

PART 1700— UNIFORM NATIONAL DISCHARGE STANDARDS FOR VESSELS OF THE ARMED FORCES

1. The authority citation for 40 CFR part 1700 continues to read as follows:

Authority: 33 U.S.C. 1322, 1361.

Subpart A — Scope

2. Section 1700.3 is amended by adding in alphabetical order definitions for "Bioaccumulative", "Biodegradable", "Environmentally acceptable lubricants", "Great Lakes", "Minimally-toxic", "Minimally-toxic soaps, cleaners, and detergents", "Not bioaccumulative", "Phosphate free soaps, cleaners, and detergents", and "State" to read as follows:

§ 1700.3 Definitions.

* * * * *

Bioaccumulative means the opposite of *not bioaccumulative*.

Biodegradable means the following for purposes of the standards:

(1) Regarding *environmentally acceptable lubricants* and greases, *biodegradable* means lubricant formulations that contain at least 90% (weight in weight concentration or w/w) or grease formulations that contain at least 75% (w/w) of a constituent substance or constituent substances (only stated substances present above 0.10% must be assessed) that each demonstrate either the removal of at least 70% of dissolved organic carbon, production of at least 60% of the theoretical carbon dioxide, or consumption of at least 60% of the theoretical oxygen demand within 28 days. Test methods include: Organization for Economic Co-operation and Development Test Guidelines 301 A-F, 306, and 310, ASTM 5864, ASTM D-7373, OCSPP Harmonized Guideline 835.3110, and International Organization for Standardization 14593:1999. For lubricant formulations, the 10% (w/w) of the formulation that need not meet the above biodegradability requirements, up to 5% (w/w) may be non-biodegradable, but not bioaccumulative, while the remaining 5-10% must be inherently biodegradable. For grease formulations, the 25% (w/w) of the formulation that need not meet the above biodegradability requirement, the constituent substances may be either inherently biodegradable or non-biodegradable, but may not be bioaccumulative. Test methods to demonstrate inherent

biodegradability include: OECD Test Guidelines 302C (>70% biodegradation after 28 days) or OECD Test Guidelines 301 A-F (>20% but <60% biodegradation after 28 days).

(2) Regarding *cleaning products*, *biodegradable* means products that demonstrate either the removal of at least 70% of dissolved organic carbon, production of at least 60% of the theoretical carbon dioxide, or consumption of at least 60% of the theoretical oxygen demand within 28 days. Test methods include: Organization for Economic Cooperation and Development Test Guidelines 301 A-F, 306, and 310, and International organization for Standardization 14593:1999.

(3) Regarding *biocidal substances*, *biodegradable* means a compound or mixture that yields 60% of theoretical maximum carbon dioxide and demonstrate a removal of at least 70% of dissolved organic carbon within 28 days as described in EPA 712-C-98-075 (OPPTS 835.3100 Aerobic Aquatic Biodegradation).

* * * * *

Environmentally acceptable lubricants means lubricants that are *biodegradable*, *minimally-toxic*, and *not bioaccumulative* as defined in this subpart. The following labeling programs and organizations meet the definition of being *environmentally acceptable lubricants*: Blue Angel, European Ecolabel, Nordic Swan, the Swedish Standards SS 155434 and 155470, Safer Choice, and the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) requirements.

*** * * * ***

Great Lakes means waters of the United States extending to the international maritime boundary with Canada in Lake Ontario, Lake Erie, Lake Huron (including Lake St. Clair), Lake Michigan, and Lake Superior, and the connecting channels (Saint Mary's River, Saint Clair

River, Detroit River, Niagara River, and Saint Lawrence River to the international maritime boundary with Canada).

* * * * *

Minimally-toxic means a substance must pass either OECD 201, 202, and 203 for acute toxicity testing, or OECD 210 and 211 for chronic toxicity testing. For purposes of the standards, equivalent toxicity data for marine species, including methods ISO/DIS 10253 for algae, ISO TC147/SC5/W62 for crustacean, and OSPAR 2005 for fish, may be substituted for OECD 201, 202, and 203. If a substance is evaluated for the formulation and main constituents, the LC50 of fluids must be at least 100 mg/L and the LC50 of greases, two-stroke oils, and all other total loss lubricants must be at least 1000 mg/L. If a substance is evaluated for each constituent substance, rather than the complete formulation and main compounds, then constituents comprising less than 20% of fluids can have an LC50 between 10-100 mg/L or a no-observed-effect concentration (NOEC) between 1-10 mg/L, constituents comprising less than 5% of fluids can have an LC50 between 1-10 mg/L or a NOEC between 0.1-1 mg/L, and constituents comprising less than 1% of fluids, can have an LC50 less than 1 mg/L or a NOEC between 0-0.1 mg/L.

Minimally-toxic soaps, cleaners, and detergents means any substance or mixture of substances which has an acute aquatic toxicity value (LC50) corresponding to a concentration greater than 10 ppm and does not produce byproducts with an acute aquatic toxicity value (LC50) corresponding to a concentration less than 10 ppm. *Minimally-toxic soaps, cleaners, and detergents* typically contain little to no nonylphenols.

* * * * *

Not bioaccumulative means any of following: the partition coefficient in the marine environment is log Kow <3 or >7 using test methods OECD 117 and 107; molecular mass > 800 Daltons; molecular diameter > 1.5 nanometer; bioconcentration factor (BCF) or bioaccumulation factor (BAF) is < 100 L/kg, using OECD 305, OCSPP 850.1710, OCSPP 850.1730, or a field-measured BAF; or polymer with molecular weight fraction below 1,000 g/mol is <1%.

* * * * *

Phosphate free soaps, cleaners, and detergents means any substance or mixture of substances which contain, by weight, 0.5% or less of phosphates or derivatives of phosphates.

State means a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

* * * * *

3. Revise subpart D to read as follows:

Subpart D — Marine Pollution Control Device (MPCD) Performance Standards

Sec.
1700.14 [Reserved]
1700.15 Catapult water brake tank and post launch retraction exhaust.
1700.16 through 1700.18 [Reserved]
1700.19 Controllable pitch propeller hydraulic fluid.
1700.20 Deck runoff.
1700.21 through 1700.23 [Reserved]
1700.24 Firemain systems.
1700.25 [Reserved].
1700.26 Graywater.
1700.27 Hull coating leachate.
1700.28 Motor gasoline and compensating discharge.
1700.29 through 1700.33 [Reserved]
1700.34 Sonar dome discharge.
1700.35 Submarine bilgewater.
1700.36 Surface vessel bilgewater/oil-water separator effluent.
1700.37 Underwater ship husbandry.
1700.38 through 1700.42 [Reserved]

Subpart D — Marine Pollution Control Device (MPCD) Performance Standards

§ 1700.14 [Reserved]

§ 1700.15 Catapult water brake tank & post-launch retraction exhaust.

(a) Discharges of catapult water brake tank effluent are prohibited.

(b) The number of post-launch retractions must be limited to the minimum number required to test and validate the system and conduct qualification and operational training.

§ 1700.16 through 1700.18 [Reserved]

§ 1700.19 Controllable pitch propeller hydraulic fluid.

(a) The protective seals on controllable pitch propellers must be maintained to minimize the leaking of hydraulic fluid.

(b) To the greatest extent practicable, maintenance activities on controllable pitch propellers must be conducted when a vessel is in drydock. If maintenance and repair activities must occur when the vessel is not in drydock, appropriate spill response equipment (e.g., oil booms) must be used to contain and clean any oil leakage.

(c) The discharge of controllable pitch propeller hydraulic fluid must not contain oil in quantities that:

(1) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(2) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(3) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(4) Otherwise are harmful to the public health or welfare of the United States.

§ 1700.20 Deck runoff.

(a) Flight deck washdowns are prohibited.

(b) Minimize deck washdowns while in port and in federally-protected waters.

(c) Prior to 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 or above water line 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.

(e) 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. The drip pans must be drained to a waste container for disposal onshore in accordance with any applicable oil and hazardous substance management and disposal requirements. The presence of floating solids, visible foam, halogenated phenol compounds, dispersants, and surfactants in deck washdowns must be minimized.

(f) Topside surfaces and other above water line portions of the vessel must be well maintained to minimize the discharge of rust (and other corrosion by-products), 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.

(g) 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.

§ 1700.21 through 1700.23 [Reserved]

§ 1700.24 Firemain systems

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

(b) Firemain systems must not be discharged in federally-protected waters except when needed to washdown the anchor chain to comply with anchor washdown requirements in § 1700.16.

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

§ 1700.25 [Reserved]

§ 1700.26 Graywater.

(a) 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 one mile of 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 one mile of shore when an onshore facility is either not available or use of such a facility is not reasonable and practicable.

(b) 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 or the Great Lakes.

(2) Graywater must not be discharged within one mile of 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 one mile of shore when an onshore facility is either not available or use of such a facility is not reasonable and practicable.

(c) 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 three miles of shore.

(d) 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 lead to extreme shifts in the receiving water pH. For purposes of this subparagraph, extreme shifts means causing the receiving water pH to fall below 6.0 or rise above 9.0 as a direct result of the discharge.

(e) The discharge of graywater must not contain oil in quantities that:

(1) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(2) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(3) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(4) Otherwise are harmful to the public health or welfare of the United States.

§ 1700.27 Hull coating leachate.

(a) Antifouling hull coatings subject to registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C 136 et seq.) 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 (including those on EPA's List of Banned or Severely Restricted Pesticides). This performance standard applies to all vessels, including vessels with a hull coating applied outside the United States.

(c) Antifouling hull coatings must not contain tributyltin (TBT).

(d) 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. In addition, any such antifouling hull coatings must be designed to not slough or peel from the vessel hull.

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

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

(g) To the greatest extent practicable, use non-copper based and less toxic antifouling hull coatings. To the greatest extent practicable, use antifouling hull coatings with the lowest effective biocide release rates, rapidly biodegradable components (once separated from the hull surface), or use non-biocidal alternatives, such as silicone coatings.

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

§ 1700.28 Motor gasoline and compensating discharge.

(a) The discharge of motor gasoline and compensating effluent must not contain oil in quantities that:

(1) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(2) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(3) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(4) Otherwise are harmful to the public health or welfare of the United States.

(b) The discharge of motor gasoline and compensating effluent must be minimized in port. If an oily sheen is observed, any spill or overflow of oil must be cleaned up, recorded, and reported to the National Response Center immediately.

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

§ 1700.29 through 1700.33 [Reserved]

§ 1700.34 Sonar dome discharge.

(a) The water inside the sonar dome must not be discharged for maintenance activities unless the use of a drydock for the maintenance activity is not feasible.

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

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

§ 1700.35 Submarine bilgewater.

The discharge of submarine bilgewater:

(a) Must not contain oil in quantities that:

(1) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(2) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(3) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(4) Otherwise are harmful to the public health or welfare of the United States.

(b) Must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. This performance standard does not prohibit the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures.

(c) Must only contain 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 oil-water separator 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, or otherwise combined with, the water in the bilge.

(d) Must not occur in port if the port has the capability to collect and transfer the submarine bilgewater to an onshore facility.

(e) Must be minimized and, if technologically feasible, discharged as far from shore as possible.

(f) Must be minimized in federally-protected waters.

(g) Must employ management practices that will minimize leakage of oil and other harmful pollutants into the bilge.

§ 1700.36 Surface vessel bilgewater/oil-water separator effluent.

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

(b) Surface vessels equipped with an oil-water separator must not discharge bilgewater and must only discharge oil-water separator effluent through an oil-content monitor consistent

with paragraph (c) of this section. All surface vessels greater than 400 gross tons must be equipped with an oil-water separator. Surface vessels not equipped with an oil-water separator must only discharge bilgewater consistent with paragraph (d) of this section.

(c) The discharge of oil-water separator effluent:

(1) Must not contain oil in quantities that:

(i) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(ii) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(iii) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(iv) Otherwise are harmful to the public health or welfare of the United States.

(2) Must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. This performance standard does not prohibit the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures.

(3) Must only contain 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 oil-water separator 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, or otherwise combined with, the water in the bilge.

(4) Must not occur in port if the vessel has the capability to collect and transfer oil-water separator effluent to an onshore facility.

(5) Must be minimized within one mile of shore.

(6) Must occur while sailing at speeds greater than six knots, if the vessel is underway.

(7) Must be minimized in federally-protected waters.

(d) The discharge of bilgewater (i.e., wastewater from the bilge that has not been processed through an oil-water separator):

(1) Must not occur if the vessel has the capability to collect, hold, and transfer bilgewater to an onshore facility.

(2) Notwithstanding the prohibition of the discharge of bilgewater from vessels that have the capability to collect, hold, and transfer bilgewater to an onshore facility; the discharge of bilgewater:

(i) Must not contain dispersants, detergents, emulsifiers, chemicals, or other substances to remove the appearance of a visible sheen. This performance standard does not prohibit the use of these materials in machinery spaces for the purposes of cleaning and maintenance activities associated with vessel equipment and structures.

(ii) Must only contain 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.

(iii) Must not contain oil in quantities that:

(A) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or

(B) Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or

(C) Contain an oil content above 15 ppm as measured by EPA Method 1664a or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g., ISO Method 9377) or U.S. Coast Guard; or

(D) Otherwise are harmful to the public health or welfare of the United States.

(iv) Must be suspended immediately if a visible sheen is observed. Any spill or overflow of oil or other engine fluids must be cleaned up, recorded, and reported to the National Response Center immediately.

§ 1700.37 Underwater ship husbandry.

(a) For discharges from vessels that are less 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 drydock 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) Prior to the transport of the vessel 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:

(i) Adhere to any applicable cleaning requirements found on the coatings' FIFRA label.

(ii) Use soft brushes or less abrasive cleaning techniques to the greatest extent practicable.

(iii) Use hard brushes only for the removal of hard growth.

(iv) Use a vacuum or other collection/control technology, when available and feasible.

(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 drydock 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:

(i) Adhere to any applicable cleaning requirements found on the coatings' FIFRA label.

(ii) Use soft brushes or less abrasive cleaning techniques to the greatest extent practicable.

(iii) Use hard brushes only for the removal of hard growth.

(iv) Use a vacuum or other collection/control technology, when available and feasible.

§ 1700.38 through 1700.42 [Reserved]

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