



V.Ships Ship Management

VESSEL GENERAL PERMIT (VGP)

Compliance Manual

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)



NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)



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INTRODUCTION

The purpose of this manual is to provide Masters and ship's staff with the necessary information to meet the requirements of the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) General Permit for Ships (VGP).

This manual provides information and guidance on how to comply with the requirements with some extracts from the VGP.

A full copy of the VGP is contained in Appendix I of this manual.

Please note that a completed copy of the VGP is not required to be onboard.

The VGP regulation applies to owners and operators of commercial vessels and large recreational vessels (those greater than 79 feet or 24.08 meters) operating in the capacity of a means of transportation in waters subject to the permit, i.e., waters of the U.S. as defined in 40 CFR§122.2.

In general, "waters of the U.S." are inland waters and the territorial sea, which extends three nautical miles from the shore. **This permit only applies when operating in such waters.**

1. Vessels on frequent and regular visits to US ports (e.g. every 2 weeks or less) must follow the requirements continuously.
2. Vessels calling less frequently in the USA must comply with the regulations:
 - on departure from the last port prior to entering US Permit Waters, however if less than two weeks, then
 - Two weeks prior to entering US Permit Waters
3. All ships that could trade to the USA must ensure that on completion of dry-docking, a dry-dock inspection report is obtained as per 4.1.4

The regulation concerns the routine and necessary discharges for the operation of the vessel e.g. cooling water for the main engine and run-off from the deck during rainfall. For this a permit is now required, the Vessel General Permit (VGP)

The Environmental Protection Agency (EPA) has identified 26 possible discharges from ships that are covered by the General Permit. There are other discharges that are not covered by the General Permit but are regulated by other U.S. regulations e.g. sewage.

This regulation became law on 19th December 2008, with an implementation date of February 6th, 2009. Requirements for inspections, training, recordkeeping and reporting, imposed by EPA in today's permit are required to be met as of February 19, 2009.



STRUCTURE OF THE PERMIT (PART 1.1)

This permit is structured as follows:

- General requirements that apply to all eligible vessel discharges are found in Parts 1 through 4;
- Specific additional requirements that apply to particular vessel classes are found in Part 5; and
- Specific additional requirements that apply in individual States or Indian Country Lands are found in Part 6.

The Appendices, listed in this proposed permit as Parts 7 through 15, include definitions, the notice of intent form, and the notice of termination form.



DISCHARGE TYPES SPECIFICALLY NOT AUTHORIZED BY THE PERMIT (1.2.3)

There are several discharge types that are not be authorized or covered by this permit

Sewage from Vessels

Sewage discharges are not permitted under this permit and are covered by existing MARPOL regulations which requires a holding tank or marine sanitation device (MSD).

Used or Spent Oil

The discharge of used or spent oil no longer being used for its intended purpose is not permitted under permit. This also prohibits the discharge of used or spent oil by adding it to a discharge stream that is eligible for coverage under this permit.

Rubbish, Trash, Garbage or Other Materials Discharged Overboard

Rubbish, trash, garbage or other materials discharged overboard are not permitted under this permit. MARPOL Annex V contains prohibitions against the discharge of garbage within the 3-mile territorial sea and in inland waters. This includes bulk dry cargo residues.

Photo Processing Waste

Photo processing waste is not eligible for coverage under the permit and is prohibited.

Effluent from Dry Cleaning Operations

Tetrachloroethylene, is not permitted to be discharged under this permit.

Discharges of Medical Waste and Related Materials

The discharge of medical waste spent or unused pharmaceuticals, formaldehyde or other biohazards no longer being used for their intended purposes are not permitted to be discharged under this permit.

Discharges of Noxious Liquid Substance (NLS) Residues

Discharge of NLS's is not permitted under this permit and these are covered by MARPOL regulations.

Tetrachloroethylene (perchloroethylene) degreasers

Discharges of tetrachloroethylene degreasers or other products containing tetrachloroethylene are not eligible for coverage under this permit.

Discharges Currently or Previously Covered by Another Permit

The VGP is not intended to supplant or replace any current or previous NPDES permit.



PERMIT COMPLIANCE AND PENALTIES (1.4)

There are penalties for failure to comply with these regulations.

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. Further violations result in penalties being doubled.

The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. **In addition, false statements or representations, as well as alterations or false entries in documents, may be punishable by more severe criminal penalties in line with US Law.**

Any noncompliance with the requirements of this permit constitutes a violation of the Clean Water Act. Each day a violation continues is a separate violation of this permit. Where requirements and schedules for taking corrective actions are included in this permit, the time intervals provided are not grace periods, but schedules considered reasonable for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these corrective actions are not allowed to persist indefinitely.

You must return to compliance as promptly as possible, but no later than the time period specified in this permit. For provisions specifying a time period to remedy noncompliance, the initial and continuing failure, such as a violation of numeric or non-numeric effluent limit, constitutes a violation of this permit and the Clean Water Act. As such, any time periods specified for remedying noncompliance do not relieve parties of the initial underlying noncompliance.

To provide clarity for the permit holder, there are additional reminders in certain sections of this permit about what constitutes a permit violation. The absence of such a reminder in a particular section does not mean that failure to meet that requirement is not a permit violation.



PERMIT AUTHORIZATION (1.5)

To obtain authorization under this permit a notice of intent (NOI) is required to be submitted to EPA. Prior to NOI submission, vessels are automatically authorized to discharge under this permit. This automatic authorization extends until owner/operators of vessels submit NOI's.

Your Vessel Control Group will confirm to you when the NOI has been submitted. When this has been done, the vessel must legally comply with the VGP requirements.

Note however that requirements for inspections, training, recordkeeping and reporting, imposed by EPA are required to be met as of February 19, 2009

NOI's cannot be submitted prior June 19th, 2009.



EFFLUENT LIMITS AND RELATED REQUIREMENTS (2.0)

General

In the limits below and throughout this permit, the term “minimize” means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best marine practice.

You must not add any constituents to any discharge that are not incidental to the normal operation of a vessel.

You may not dilute discharges eligible for coverage under this permit prior to their discharge in order to meet limits set forth in this permit.

For technology-based effluent limits and related requirements it is necessary to meet the following effluent limits, regardless of the type of vessel.

Material Storage (Part 2.1.1)

Any materials, whether cargo or for use onboard the vessel, that may be exposed to precipitation, surface water spray, or wind can potentially be discharged on their own or become part of other waste streams. Materials that may not be considered toxic in small concentrations could pose an environmental threat if significant amounts are washed overboard, particularly in shallow or impaired waters.

The permit requires that all vessel operators practice good environmental stewardship by minimizing any exposure of contaminants that may result in releases of cargo or onboard materials to the environment. This can be accomplished by containerizing or covering materials, and generally limiting any exposure of these materials to wind, rain, or spray.

Specific numeric limitations on toxic substances are not feasible for this potential source of pollutants, sound marine practices should be sufficient to reduce most accidental or incidental discharges of cargo or stored materials. EPA requires that emphasis on training and educating vessel crew on the use and environmental benefits of these practices must be standard practice.

For cargoes or other onboard materials which might wash overboard or dissolve as a result of contact with precipitation or surface water spray, or which may be blown overboard by air currents, minimize the amount of time these items are exposed to such conditions. Locate storage areas on the vessel for such items in covered areas where feasible. If water draining from storage areas comes in contact with oily materials, you must:

- Use dry cleanup methods or absorbents to clean up the wastewater,
- Store the water for onshore disposal, or



- Run the water through an oily water separator or other appropriate technology so that the discharge will not contain oil in quantities that may be harmful

Toxic and Hazardous Materials (Part 2.1.2)

Toxic and hazardous materials must be properly contained to avoid contamination of the discharges covered by this permit. A zero-discharge standard is in place for toxic and hazardous materials.

Vessels are required to ensure that toxic and hazardous substances are treated in a manner that prevents releases due to precipitation or surface water spray. Vessels must store, label, and secure toxic and hazardous materials in suitable, sealed containers.

Toxic and hazardous materials must be stowed in protected areas of the vessel unless the Master determines this would interfere with essential vessel operations or safety of the vessel. Any discharge which is made for safety reasons must be documented as part of the requirements in Part 4.2. This includes ensuring that toxic and hazardous materials are in appropriate sealed containers constructed of a suitable material, labeled, and secured.

Containers must not be overfilled and incompatible wastes should not be mixed. Exposure of containers to ocean spray or precipitation must be minimized. Jettisoning of containers holding toxic or hazardous material is not authorized by this permit

Fuel Spills/Overflows (Part 2.1.3)

Even small amounts of spilled fuel can contaminate large areas of water, making it uninhabitable for plants and animals. All spills can be prevented by taking basic precautions when filling fuel tanks. The permit requires vessel operators to implement these precautions that will prevent, or in the case of a spill, contain any fuel that is released to surface waters. Through proper fueling operations and training on spill treatment, vessel operators may reduce impacts caused by human error or improper equipment use.

VMS Procedures:

Fleet operations 6.7.2 Bunkering Procedure

Form Tec 08: Bunkering Operations Checklist

Oil Transfer Procedures (USA) - For oil transfer in the USA the vessel must also have prepared oil transfer procedures compiled as required by CFR 33 155/156.

In the event of a spill the VRP or NTVRP as appropriate to the vessel type is to be followed.

Owner/operators shall ensure that any crew members responsible for conducting fueling operations are trained in methods to minimize spills caused by human error and/or the improper use of equipment.



Discharges of Oil, Including Oily Mixtures (Part 2.1.4)

Discharges of oil, including oily mixtures, can significantly impact aquatic and terrestrial organisms and their ecosystems. When oil, including oily mixtures, is discharged in small quantities, aquatic ecosystems have limited ability to assimilate, oxidize, degrade, and destroy many of the hydrocarbons present in oil. However, when discharged in significant quantities from a single vessel, or in moderate quantities from numerous vessels, oil releases have been documented to create severe environmental impacts.

The permit requires that any oil, including oily mixtures, other than those exempted in 40 CFR 110.5, may not be discharged in quantities that may be harmful.

Overall no discharges of oil or oily mixtures are permitted in waters to which this permit applies.

In the event of a spill the VRP or NTVRP as appropriate to the vessel type is to be followed.

Compliance with Other Statutes and Regulations Applicable to Vessel Discharges (Part 2.1.5)

As required by 40 C.F.R 122.44(p), vessels must comply with any applicable regulations promulgated by the Secretary of the Department in which the Coast Guard is operating, that establish specifications for safe transportation, handling, carriage, and storage of pollutants.

Discharges from vessels must comply with sections 311 (33 U.S.C. 1321) of the Federal Pollution Water Pollution Control Act (the Clean Water Act), the Act to Prevent Pollution from Ships (APPS 33 USC §§ 190-1915), the National Marine Sanctuaries Act, (16 U.S.C. 1431 *et seq.*) and implementing regulations found at 15 CFR Part 922 and 50 CFR Part 404, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. § 136 *et seq.*), and the Oil Pollution Control Act (OPA '90, 33 U.S.C. § 2701-2720).



EFFLUENT LIMITS AND RELATED REQUIREMENTS FOR SPECIFIC DISCHARGE CATEGORIES (2.2)

(Refer to copy of Vessel general Permit in Appendix 1 for full details)

Vessel Discharges Eligible for Coverage under VGP

The discharges eligible for coverage under the proposed permit are those discharges incidental to the normal operation of a vessel. Discharges incidental to normal operation include deck runoff from routine deck cleaning, bilgewater from properly functioning oily water separators, and ballast water.

Some potential discharges are not incidental to the normal operation of a vessel. For example, intentionally adding used motor oil to the bilge tank will result in a discharge that is not incidental to the normal operation of a vessel. Furthermore, any discharge that result from a failure to properly maintain the vessel and equipment, even if the discharge is of a type that is otherwise covered by the proposed permit, is not eligible for permit coverage.

Discharges that are neither covered by this permit nor exempt from section 402 of the Clean Water Act must be covered under a separate individual or general permit.

The following list identifies and describes each effluent stream eligible for coverage under the proposed permit.

Deck Washdown and Runoff and Above Water Line Hull Cleaning (Part 2.2.1)

Deck run off occurs from all vessels as a result of precipitation or deck cleaning. Constituents of deck runoff may include oil, grease, cleaner or detergent residue, paint chips, and general debris (e.g., paper, wire). Discharge rates for deck runoff vary from vessel to vessel and depend on weather, deck machinery, deck operations, and frequency of deck washdowns.

The permit requires that vessel operators minimize discharges from deck runoff and implement Best Management Practice's (BMP's) to reduce their potential impact.

BMP's for controlling deck runoff are

- Machinery on deck must have coamings or drip pans to collect any oily water from machinery and prevent spills.
- Containing potential contaminants to keep them from entering the waste stream.
- Properly maintaining the topside surface and other above waterline areas to prevent excess corrosion, leaks, and metal discharges, and
- Using environmentally safe products for cleaning deck areas.



Vessels are required to ensure:

- Decks are kept clear of debris, garbage, residue and spills to prevent them from entering any waste stream going overboard.
- Deck machinery and vent drip trays must be drained to a waste container for proper disposal and/or periodically wiped and cleaned.
- Discharges from deck washdowns must be free from floating solids, visible foam, halogenated phenol compounds, and dispersants, or surfactants. Vessels must minimize deck washdowns while in port.
- Topside surface, maintenance in order 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.
- Deck washdowns must be conducted with non-toxic and phosphate free cleaners and detergents. Furthermore, cleaners and detergents should not be caustic or only minimally caustic and should be biodegradable

Compliance Summary

- 1. Decks to be kept clear of any residue that could be washed overboard by rain, spray or deck washdown.***
- 2. No deck washdown in permit waters***
- 3. Deck surfaces and above water areas to be maintained in good condition***
- 4. Environmentally safe products to be used for cleaning***

Bilgewater (Part 2.2.2)

Bilgewater consists of water and other residue that accumulates in a compartment of the vessel's hull. The source of bilgewater is typically drainage from interior machinery, engine rooms, and from deck drainage. Constituents of bilgewater include seawater, oil, grease, volatile and semi-volatile organic compounds, inorganic salts, and metals

Vessel operators are required to minimize bilgewater generation by practicing proper maintenance of vessels and equipment.

Engine room bilge water must not be discharged in the waters covered by this permit. Bilge water must be retained onboard and discharged as per MARPOL requirements either through the oil/water separator where permitted or to shore facilities. Discharges must be properly recorded in the Oil Record Book.

Bilge water from cargo spaces is not to be discharged in the waters covered by this permit unless in exceptional circumstances. If a discharge is necessary the discharge must not produce any sheen on the water. In addition:

- Vessels may not use dispersants, detergents, emulsifiers, chemicals or other substances to remove the appearance of a visible sheen in their bilgewater discharges.



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- Vessels may not add substances that drain to the bilgewater that are not produced in the normal operation of a vessel.

Vessels greater than 400 gross registered tons shall not discharge treated bilgewater into waters referenced in Part 12.1 unless the discharge is necessary to maintain the safety and stability of the ship. Any discharge of bilgewater into these waters must be documented as part of the recordkeeping requirements in Part 4.2 and vessel operators must document whether this bilgewater discharge was made for safety reasons.

For vessels greater than 400 gross registered tons that regularly sail outside the territorial sea (at least once per month), if treated bilgewater is discharged into waters subject to this permit, it must be discharged when vessels are underway (sailing at speeds greater than 6 knots), unless doing so would threaten the safety and stability of the ship. EPA notes that vessel operators may also choose to dispose of bilgewater on shore where adequate facilities exist. Any discharge which is made for safety reasons must be documented as part of the requirements in Part 4.2.

Compliance Summary

- 1. Minimize bilge water generation using BMP's and proper maintenance***
- 2. Bilgewater from machinery spaces must not be discharged in waters covered by this permit except in an emergency***
- 3. Bilgewater from cargo spaces is not to be discharged in the waters covered by this permit unless in exceptional circumstances. If a discharge is necessary it must not produce any sheen on the water***

Ballast Water (Part 2.2.3)

All discharges of ballast water must comply with USCG regulations (33CFR151).

Ballast water can contain rust inhibitors, flocculent compounds, epoxy coating materials, zinc or aluminum (from anodes), iron, nickel, copper, bronze, silver, and other material or sediment from inside the tank, pipes, or other machinery. Ballast water may also contain marine organisms that originate where the water is collected. When transported to non-native waters, these organisms may upset the environment or food web as "invasive species."

In the United States, the U.S. Coast Guard has requirements for the management of ballast water listed in 33 CFR Part 151, Subparts C and D. These regulations require vessels transiting to U.S. waters with ballast water that was taken on within 200 nautical miles of any shore into waters of the United States after operating beyond the U.S. EEZ to conduct one of the following ballast water management practices:

- Conduct mid-ocean ballast water exchange prior to entering U.S. waters;
- Retain the ballast water on board while in U.S. waters; or



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- Use a Coast Guard approved alternative environmentally sound method to manage the ballast water.

All discharges of ballast water must comply with the Coast Guard regulations found in 33 CFR Part 151. Additionally, owner/operators of all vessels subject to coverage under this permit which are equipped with Ballast Tanks must comply with the additional BMP's in this section.

All discharges of ballast water may not contain oil, noxious liquid substances (NLS's), or hazardous substances in a manner prohibited by U.S. laws, including section 311 of the Clean Water Act.

The Master, operator, person-in-charge, and crew, must be trained on the application of ballast water and sediment management and treatment procedures.

All owner/operators of vessels equipped with ballast water tanks must maintain a ballast water management plan that has been developed specifically for the vessel that will allow those responsible for the plan's implementation to understand and follow the vessel's ballast water management strategy. The Master must make that plan available upon request to any EPA representative.

Vessel owner/operators must assure that the master and crew understand and follow the management strategy laid out in the plan.

Mandatory Ballast Water Management Practices (2.2.3.2)

Masters must:

- Avoid the discharge of ballast water into waters subject to this permit that are within or that may directly affect marine sanctuaries, marine preserves, marine parks, shellfish beds, or coral reefs or other waters listed in Part 12.1.
- Minimize or avoid uptake of ballast water in the following areas and situations:
 - Areas known to have infestations or populations of harmful organisms and pathogens (e.g., algal blooms).
 - Areas near sewage outfalls.
 - Areas near dredging operations.
 - Areas where tidal flushing is poor or when a tidal stream is known to be more turbid.
 - In darkness when bottom dwelling organisms may rise up in the water column.
 - In shallow water or where propellers may stir up the sediment.
 - Areas with pods of whales, convergence zones and boundaries of major currents
- Clean ballast tanks regularly to remove sediments in mid-ocean or under controlled arrangements in port, or at dry dock. No discharge of sediments from cleaning of ballast tanks is authorized in waters subject to this permit.



- Discharge only the minimal amount of ballast water essential for vessel operations while in the waters subject to this permit.

Control measures to minimize the discharge of ballast water include transferring ballast water between tanks within the vessel in lieu of ballast water discharge.

On-shore Treatment of Ballast Water

If onshore treatment for ballast water is available and economically practicable and achievable, a vessel owner/operators must use this treatment for any ballast water discharges, unless they use an onboard ballast water treatment system approved by the Commandant of the Coast Guard.

The following additional BMP's required by the VGP are in addition to the USCG mandatory requirements in 33 CFR 151

Requirements for Ocean Going Voyages While Carrying Ballast Water (2.2.3.5)

Any vessels that carry ballast water that was taken on in areas less than 200 nautical miles from any shore that will subsequently operate beyond the EEZ and more than 200 nm from any shore must carry out an exchange of ballast water for any tanks that will discharge ballast water into waters subject to this permit unless the vessel meets one of the exemptions listed at the end of this section.

This exchange must be conducted in compliance with the following standards prior to discharging ballast water into waters subject to this permit:

- The exchange must occur in waters beyond the U.S. EEZ;
- The exchange must occur in an area more than 200 nautical miles from any shore
- The exchange must occur in waters at least 200 meters deep, and
- The exchange must be commenced as early in the vessel voyage as possible, as long as the vessel is more than 200 nm from any shore.

Vessels Carrying Ballast Water Engaged in Pacific Nearshore Voyages (2.2.3.6)

Unless the vessel meets one of the exemptions listed, any vessel engaged in Pacific nearshore voyages that travels through more than one Captain of the Port Zone (COTP) zone as listed in 33 CFR Part 3 must carry out an exchange of ballast water before discharging from any tanks that carry ballast water into waters subject to this permit.

Vessels engaged in Pacific nearshore voyages include:

- Vessels engaged in the Pacific coastwise trade that travel between more than one Captain of the Port Zones, and
- All other vessels that sail from foreign, Atlantic, or Gulf of Mexico ports, which do not sail further than 200 nm from any shore, and that discharge or will discharge ballast



water into the territorial sea or inland waters of Alaska or of the west coast of the continental United States.

This exchange must occur in waters more than 50 nautical miles from any Pacific (US or otherwise) shore, and in waters more than 200 meters deep, prior to discharging ballast water into waters subject to this permit.

Exchange should occur as far from the shore, major estuary and oceanic river plumes, subsurface physical features (e.g. seamounts), and known fishery habitats as practicable.

Vessels with any Ballast Water Tanks that are Empty or have Unpumpable Residual Water (2.2.3.7)

For vessels that travel between more than one COTP Zone while undertaking ocean going voyages and which either certified No Ballast on Board in accordance with Coast Guard regulations or which have any ballast water tank that is empty or contains unpumpable residual water, you must follow the applicable requirements in Part 2.2.3.5 for those tanks with ballast water.

For those tanks which are empty or contain unpumpable residual water, tanks must either be sealed so that there is no discharge of ballast water within waters subject to this permit or conduct saltwater flushing of such tanks in an area 200 nautical miles from any shore and in waters at least 200 meters deep prior to the discharge or uptake and subsequent discharge of any ballast water to any U.S. waters subject to this permit, unless you meet one of the exemptions in Part 2.2.3.11.

Saltwater flushing means the addition of mid-ocean water to empty ballast water tanks; the mixing of the flush water with residual water and sediment through the motion of the vessel; and the discharge of the mixed water, such that the resultant residual water remaining in the tank must obtain either a minimum salinity of 30 parts per thousand (ppt) or a value equal to the ambient salinity at the location of the flushing, whichever is lower. In order to conduct saltwater flushing, the vessel should take on as much mid-ocean water into each tank as is safe (for the vessel and crew).

For all vessel owner/operators subject to this section that contain some empty ballast water tanks and some full ballast water tanks, if you elect to seal those empty tanks, you must not allow water that will be discharged into waters subject to this permit to commingle with waters from the empty tanks if you have not conducted saltwater flushing as specified above.

Vessels Engaged in Pacific Nearshore Voyages with Unpumpable Ballast Water and Residual Sediment (2.2.3.8)

For owner/operators of vessels engaged in Pacific Nearshore Voyages which either certified No Ballast on Board in accordance with Coast Guard regulations or which have any ballast water Tank that is empty or contains unpumpable residual water, you must follow the applicable requirements in Part 2.2.3.6 for those tanks with ballast water.

For those tanks which are empty or contain unpumpable residual water, the vessel must either seal the tank so that there is no discharge of ballast water within waters subject to this permit or conduct saltwater flushing of such tanks in an area 50 nautical miles from any shore and in



waters at least 200 meters deep prior to the discharge or uptake and subsequent discharge or uptake of any ballast water to or from any waters subject to this permit, unless you meet one of the exemptions.

For these voyages, saltwater flushing means the addition of water from the “coastal exchange zone” to empty ballast water tanks; the mixing of the flush water with residual water and sediment through the motion of the vessel; and the discharge of the mixed water, such that the resultant residual water remaining in the tank must obtain either a minimum salinity of 30 parts per thousand (ppt) or a value equal to the ambient salinity at the location of the flushing. In order to conduct saltwater flushing, the vessel should take on as much coastal exchange zone water into each tank as is safe (for the vessel and crew). These requirements apply to all vessels carrying ballast water that will enter any US Port in the states of Alaska, California, Oregon, or Washington and that travels through more than COTP zone.

Vessels subject to this section that contain some empty ballast water tanks and some full ballast water tanks, that seal the empty tanks, must not allow water from the full tanks to commingle with waters from the empty tanks if it will subsequently be discharged into waters subject to this permit.

Vessels Entering the Great Lakes (2.2.3.9)

In addition to complying with the requirements of this permit, all vessels that are equipped to carry ballast water and enter the Great Lakes must comply with 33 CFR Part 151, Subpart C titled: “Ballast Water Management for Control of Nonindigenous Species in the Great Lakes and Hudson River.”

Vessels that operate outside the EEZ and more than 200 nm from any shore and then enter the Great Lakes via the Saint Lawrence Seaway System must also comply with 33 CFR Part 401.30, which requires oceangoing vessels to conduct saltwater flushing of ballast water tanks 200 nautical miles from any shore before entering either the U.S. or Canadian waters of the Seaway System

Discharge Prohibitions (2.2.3.10)

Vessels referenced in Parts 2.2.3.5, 2.2.3.6, 2.2.3.7, and 2.2.3.8 may not discharge unexchanged or untreated ballast water or sediment in waters subject to this permit referenced in Part 12.1.

Exemptions (2.2.3.11)

The master of a vessel may elect not to exchange ballast water (or not conduct saltwater flushing if applicable) if the vessel meets one of the following conditions:

- The master of the vessel determines, and justifies in writing, and documents in the log or record book, that it is unsafe to do so, in accordance with the Coast Guard Regulations at 33 CFR 151.2030. If this exemption is claimed, the vessel operator must record the date, location, and reason for the claim in its record keeping documentation.



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- The master uses an alternative, environmentally sound method of ballast water management that has been submitted to, and approved by, the Commandant of the Coast Guard prior to the vessel's voyage in accordance with 33 C.F.R. Part 151.
- The vessel is accepted by the U.S. Coast Guard into the shipboard Technology Evaluation Program (STEP), the technology is operated in accordance with requirements of that program, and the acceptance has not been withdrawn.
- The master retains all ballast water on board the vessel for the duration of the vessel's voyage in waters subject to this permit.

Additionally, a vessel is not required to deviate from its voyage, or delay the voyage to conduct Ballast Water Exchange or Saltwater Flushing.

Compliance Summary:

- 1. USCG and State ballast water regulations must be complied with***
- 2. Vessels must ensure V.Ships Ballast Water is properly maintained***
- 3. Exchange carried out as per additional VGP requirements appropriate to the voyage***

Anti-Fouling Hull Coatings (2.2.4)

Vessel hull antifouling coatings are formulated for different conditions and purposes and many contain biocides. Those that contain biocides prevent the attachment of aquatic organisms to the hull by continuously leaching substances that are toxic to aquatic life into the surrounding water. While a variety of different ingredients may be used in these compounds, the most commonly used is copper. Copper can inhibit photosynthesis in plants and interfere with enzyme function in both plants and animals even in low concentrations. Additional releases of these substances are caused by hull cleaning activities, particularly if hulls are cleaned within the first 90 days following application.

A second metal-based biocide, tributyltin (TBT), was historically applied to vessel hulls, but due to its acute toxicity, EPA requires a zero discharge standard for TBT.

All anti-fouling hull coatings subject to registration under FIFRA (see 40 CFR 152.15) must be registered, sold or distributed, applied, maintained, and removed in a manner consistent with applicable requirements on the coatings' FIFRA label.

For anti-fouling hull coatings not subject to FIFRA registration (i.e. not produced for sale and distribution in the United States), hull coatings must not contain any biocides or toxic materials banned for use in the United States. This requirement applies to all vessels, including those registered and painted outside the United States.

At the time of initial application or scheduled reapplication of anti-fouling coatings, vessel operators must give consideration, to the use of hull coatings with the lowest effective biocide release rates, rapidly biodegradable components, or non-biocidal alternatives, such as silicone coatings.



The discharge of Tributyltin (TBT) is prohibited by this permit. Therefore, vessel operators covered by this permit have a zero discharge standard for TBT. Vessels must not use an antifoulant coating containing TBT. If the vessel has previously been covered with a hull coating containing TBT, vessels must be effectively overcoated so that no TBT leaches from the vessel hull or the TBT coating must have been removed from the vessel's hull.

Compliance Summary:

- 1. Vessels must have a certificate onboard stating type of anti-fouling paint and that:***
 - FIFRA standard or meets US standards.***
 - TBT free***
- 2. If TBT coating still on hull, then certificate stating that effective sealing coat applied.***
- 3. Certificate or statement that anti-fouling coatings are maintained and applied in accordance with the permit's requirements.***

Aqueous Film Forming Foam (AFFF) (2.2.5).

AFFF is a synthetic firefighting agent consisting of fluorosurfactants and/or fluoroproteins. It serves as an effective firefighting agent by forming an oxygen-excluding barrier over an area. In order to produce AFFF, a concentrated solution of the foam forming agent is injected into the water stream of a fire hose or monitor. Vessels equipped with AFFF equipment must periodically (annually or semi-annually) test the equipment for maintenance, certification, or training purposes resulting in discharge overboard or onto the deck.

The constituents of AFFF can vary by manufacturer, but can include ingredients that are persistent, bioaccumulative, and nonbiodegradable. EPA recognizes the need of using this type of fire fighting agent for certain classes of fires.

The permit requirements for AFFF do not apply when the discharge occurs during a fire emergency. If such an emergency discharge occurs, an explanation of the emergency and the need to discharge AFFF must be written in the ship's log or other recordkeeping documentation.

For all vessels that sail outside of the territorial sea more than once per month, maintenance and training discharges of AFFF are not authorized within waters subject to this permit. (Any such discharges should be collected and stored for onshore disposal or scheduled when the vessel is outside such waters.) Discharge volumes associated with regulatory certification and inspection must be minimized and a substitute foaming agent (i.e. non-fluorinated) must be used if possible within waters subject to this permit.

For vessels that do not leave the territorial sea more than once per month, if maintenance and training discharges are required, AFFF must be collected and stored for onshore disposal unless the vessel uses non-fluorinated or alternative foaming agent. Training should be conducted as far from shore as is practicable. Maintenance and training discharges are not allowed in port.

For all vessels, AFFF discharges may not occur in or within 1 nm of waters referenced in Part 12.1 unless they are discharged:



V.SHIPS MANAGEMENT SYSTEM (VMS)

- For emergency purposes
- By rescue vessels such as fireboats for firefighting purposes,
- By vessels owned or under contract to do business exclusively in or within 1 nm of those protected areas by the United States government or state or local governments.

If AFFF discharge occurs in waters in Part 12.1 for emergency purposes, a written explanation must be kept in the ship's log or other vessel recordkeeping documentation consistent with Part 4.2 of this permit.

Compliance Summary:

- 1. Discharges of AFFF are authorized for emergency purposes. A record of this discharge must be maintained.***
- 2. Maintenance and training discharges are not permitted within waters covered by the permit for foreign trading vessels***
- 3. Maintenance and training discharges for coastal vessels must be retained onboard for shore disposal.***

Boiler/Economizer Blowdown (2.2.6)

Boiler blowdown occurs on vessels with steam propulsion or a steam generator to control anti-corrosion and anti-scaling treatment concentrations and to remove sludge from boiler systems. The blowdown involves releasing a volume of 1% – 10% of water from the boiler system, usually below the waterline.

It is required to minimize the discharge of boiler/economizer blowdown in port if chemicals or other additives are used to reduce impurities or prevent scale formation. For vessels greater than 400 gross registered tons which leave the territorial sea at least once per week, boiler/economizer blowdown may not be discharged in waters subject to this permit except for safety purposes, and should be discharged as far from shore as possible.

For all vessels, Boiler/Economizer blowdown may not be discharged in or within 1 nm of waters referenced in part 12.1 except for safety purposes.

Compliance Summary:

- 1. For foreign going vessels, discharges of boiler blowdown in waters covered by this permit are prohibited except for safety purposes.***



Cathodic Protection (Part 2.2.7)

Cathodic protection must be maintained to prevent the corrosion of the ship's hull. The constituents of cathodic protection discharges include ionized zinc, magnesium, or aluminum. As an alternative method, Impressed Current Cathodic Protection (ICCP) systems use direct current from a ship-based source in lieu of current supplied from an oxidizing anode (i.e., sacrificial anode). The discharge from either method of cathodic protection is continuous whenever the vessel is waterborne.

ICCP systems are the environmentally preferable method because these systems eliminate the need for sacrificial anodes.

EPA requires vessel operators to utilize the BMP of selecting the least toxic anode material that is practicable, in the order of preference of magnesium, aluminum, then zinc.

However, vessel operators must minimize the flaking of large, corroded portions of these anodes. Sacrificial anodes must not be used more than necessary. Vessel operators must appropriately clean and/or replace these anodes in periods of maintenance (such as drydocking), so that release of these metals to waters is minimized.

Vessel operators should be cognizant that magnesium is less toxic than aluminum, which is less toxic than zinc. If vessel operators use sacrificial electrodes, they must use the metals that are less toxic to the extent technologically feasible and economically practicable and achievable. .

EPA recommends the use of Impressed Current Cathodic Protection (ICCP) in place of sacrificial electrodes. If vessel operators use ICCP, they must maintain dielectric shields to prevent flaking.

Compliance Summary:

- 1. If anodes are used, the least toxic anode material must be used.***
- 2. Sacrificial anodes must not be used more than necessary.***
- 3. During drydock cleaning and replacing to be carried out as required to reduce excessive flaking or releases from the oxidizing anodes or the dielectric coating from ICCP systems***
- 4. A certificate from dry-dock must be onboard confirming that hull and cathodic protection have been inspected, cleaned and are maintained.***

Chain Locker Effluent (Part 2.2.8)

The chain locker can accumulate marine organisms as well as residue from the inside of the locker itself, such as rust, paint chips, grease, and zinc. The chain locker sump is emptied either directly overboard or is drained into the bilge tank for later disposal.

The anchor chain must be carefully and thoroughly washed down (i.e., more than a cursory rinse) as it is being hauled out of the water to remove sediment and marine organisms. In addition, chain lockers must be cleaned thoroughly during dry docking to eliminate accumulated sediments and any potential accompanying pollutants.



V.SHIPS MANAGEMENT SYSTEM (VMS)

For vessels that regularly sail outside waters subject to this permit, if technically feasible, periodically clean, rinse, and/or pump out the space beneath the chain locker prior to entering waters subject to this permit (preferably mid ocean) if the anchor has been lowered into any near shore waters. Furthermore, for vessels that leave waters subject to this permit at least once per month, chain lockers may not be rinsed or pumped out in waters subject to this permit, unless not emptying them would compromise safety. Such a safety claim must be documented in the vessel's record keeping documentation consistent with Part 4.2.

Compliance Summary:

- 1. Anchor chain must be thoroughly washed down after every use.***
- 2. Clean, rinse, and/or pump out the space beneath the chain locker prior to entering waters subject to this permit (preferably mid ocean)***
- 3. Chain lockers must only be pumped out when more than 50 NM from shore.***
- 4. Chain lockers must be cleaned out during dry-dock.***
- 5. Certificate or statement in dry-dock report, confirming that the chain locker has been thoroughly cleaned out***

Controllable Pitch Propeller and Thruster Hydraulic Fluid and other Oil to Sea Interfaces including Lubrication discharges from Paddle Wheel Propulsion, Stern Tubes, Thruster Bearings, Stabilizers, Rudder Bearings, Azimuth Thrusters, Propulsion Pod Lubrication, and Wire Rope and Mechanical Equipment Subject to Immersion. (Part 2.2.9)

The protective seals on controllable pitch propellers, azimuth thrusters, propulsion pods, rudder bearings, or any other oil to sea interfaces must be maintained in good operating order to minimize the leaking of hydraulic oil or other oils.

Whenever possible, maintenance activities on controllable pitch propellers, thrusters and other oil-to-sea interfaces should be conducted when a vessel is in drydock. Similarly minimize maintenance activities on stern tube seals when a vessel is outside of drydock.

If maintenance or emergency repair must occur on stern tubes or other oil-to sea interfaces which have a potential to release oil in quantities, appropriate spill response resources (e.g. oil booms) must be used to contain any oil leakage.

After applying lubrication to wire rope and mechanical equipment subject to immersion, wire ropes and other equipment must be thoroughly wiped-down to remove excess lubricant.

Vessels should use an environmentally preferable lubricant, including vegetable oil, synthetic ester, or polyalkylene glycol as a base for these applications when feasible. Use of an environmentally preferable lubricant does not authorize the discharge of any lubricant in a quantity that may be harmful.



Compliance Summary:

- 1. Seals must be maintained in good condition and checked/replaced as necessary in dry-dock.***
- 2. Dry-dock maintenance report to be retained onboard***
- 3. Wire rope must be free of excess lubricant.***
- 4. For in water maintenance, an oil boom must be used to contain any hydraulic oil leakage. Operators of the vessel must have appropriate equipment such as oil absorbent pads on hand to clean any potential oil spills***

Distillation and Reverse Osmosis Brine (Part 2.2.10)

Onboard distillation and RO systems discharge brine, which is essentially concentrated seawater with the same constituents of seawater, including dissolved and suspended solids and metals. Anti-scaling treatments and anti-foaming and acidic cleaning compounds may be injected into the distillation system.

The effluent constituents from distillation and RO discharge were found to exceed water quality criteria for several metals, nitrogen, and phosphorus but did not exceed thermal mixing zone standards. These constituents are generally present in the receiving water used in the distillation or reverse osmosis process and are merely concentrated in the distillation or osmosis process.

BMP's require vessel operators to keep the reject water from coming into contact with materials, products, or wastes which may contaminate the discharge with potentially environmentally harmful substances.

Compliance Summary

- 1. Brine from the distillation system and reverse osmosis reject water shall not contain or come in contact with machinery or industrial equipment, toxic or hazardous materials, or wastes***

Elevator Pit Effluent (Part 2.2.11)

Elevator pit discharge will have constituents similar to those found in deck runoff and firemain water, which may include lubricants, cleaning solvents, soot, and paint chips.

Tests conducted by EPA discovered that some detected constituents from elevator pit effluent exceeded the most stringent state water quality standards, including total nitrogen, bis(2-ethylhexyl) phthalate, copper, iron, and nickel.

Discharge of elevator pit effluent is not authorized within waters subject to this permit except in cases of emergency. If an emergency discharge is required in waters subject to this permit,



Elevator Pit Effluent must be treated with an oily-water separator and may be discharged with an oil content below 15 ppm as measured by EPA Method 1664.

Emergency discharges must be documented in the ship's log or other vessel record keeping documentation consistent with Part 4.2.

Compliance Summary

- 1. Elevator Pit Effluent must not be discharged overside except in an emergency.***
- 2. Elevator pit effluent must be recovered to ER bilge tank for discharge ashore or through OWS.***
- 3. All discharges must be recorded and logged.***

Firemain Systems (Part 2.2.12)

Firemain's stations can be pressurized or non-pressurized and are used for secondary purposes onboard vessels (e.g., deck and equipment washdowns, machinery cooling water, ballast tank filling). However, when used for secondary purposes that result in other incidental discharges listed in the proposed permit, that discharge is regulated by the relevant effluent limitation associated with that activity (e.g., rinsing off the anchor chain).

Firemain water can contain a variety of constituents, including 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.

BMPs for reducing or eliminating effects from firemain system discharges include minimizing the discharges while the vessel is in shallow or contained water bodies such as ports or protected waters. The use of firemain systems for anchor chain washdowns is likely to result in benefits by reducing the potential transport of invasive species. Therefore, the discharge of firemain systems is allowed when pulling the anchor and anchor chain from protected waters in accordance with the anchor washdown requirements of the permit.

Discharges from firemain systems are authorized for emergency purposes when needed to ensure the safety and security of the vessel and her crew.

Compliance Summary

- 1. Discharges from firemain systems are authorized for emergency purposes.***
- 2. Minimize the discharge from the firemain system while in port.***
- 3. Do not discharge firemain systems in waters listed in Part 12.1 except in emergency***
- 4. Washing down the anchor chain to comply with anchor wash down requirements as per 2.2.8 is permitted. Cable washers must not be left running.***



Freshwater Layup (Part 2.2.13)

Seawater cooling systems condense low pressure steam from propulsion plant or generator turbines on some vessels. When a vessel is in port for more than a few days, the main steam plant is shut down and the condensers do not circulate. This can cause an accumulation of biological growth within the system; consequently, a freshwater layup is carried-out by replacing the seawater in the system with potable water.

Discharges of freshwater layup effluent include the constituents of the potable water along with residual seawater, any residue that may leach from the condenser while the water is being held, and disinfectants like chlorine or chloramine.

The Agency recognizes that disinfectants are necessary to reduce aquatic growth within the condenser system. The permit requires that vessel operators reduce the potential for harmful impacts by minimizing the use of these treatment chemicals to the lowest effective level that will meet the needs of the system.

Compliance Summary

- 1. Minimize the amount of disinfection agents used in freshwater layup to the minimum required to prevent aquatic growth.***

Gas Turbine Wash Water (Part 2.2.14)

Gas turbines occasionally must be cleaned to remove byproducts that can accumulate and affect their operation. These byproducts include salts, lubricants, and combustion residuals.

Rates and concentrations of gas turbine wash water discharge vary according to the frequency of washdown . .

Discharges resulting from gas turbine washdown may include cleaning solvents and substances such as naphthalene and other hydrocarbons. Furthermore, due to the nature of the materials being cleaned, there is a higher probability of heavy metal concentrations.

Washdown water from gas turbines may not be discharged into waters subject to this permit unless it is impossible not to separately collect this washwater or only conduct washes outside 3 nm. If it is impossible to separately collect the water, the washwater must be treated by an oily water separator before discharge.

Under no circumstances may oils, including oily mixtures, from Gas Turbine Wash Water be discharged in waters subject to this permit

Compliance Summary

- 1. Gas turbine wash water must not be discharged within waters subject to this permit***



Graywater (Part 2.2.15)

Graywater is water from showers, baths, sinks, and laundry facilities. Untreated graywater is much more likely to cause environmental impact when it is generated in large volumes (i.e., from cruise ships). Some vessels have the capacity to collect and store graywater for later treatment and disposal. Those that do not have graywater holding capacity continuously discharge it.

Graywater discharges from commercial vessels on the Great Lakes are not regulated by this permit as on the Great Lakes, graywater is classed as sewage

The volume of graywater generated by a vessel is dependent on the number of passengers and crew. It is estimated that, in general, 30 – 85 gallons of graywater is generated per person per day.

Graywater discharges can contain bacteria, pathogens, oil and grease, detergent and soap residue, metals (e.g., cadmium, chromium, lead, copper, zinc, silver, nickel, mercury), solids, and nutrients. Of these constituents EPA has found ammonia, copper, lead, mercury, nickel, silver, and zinc concentrations that exceed water quality criteria in the discharge.

Non-toxic soaps are those that do not exhibit potentially harmful characteristics as defined by the Consumer Product Safety Commission. Products meeting these standards are currently commercially available.

For those vessels that cannot store graywater, the crews must minimize the production of graywater in Port.

All vessels that have the capacity to store graywater shall not discharge that graywater in waters listed in Part 12.1. For vessels that cannot store graywater, vessel operators must minimize the production of graywater while in waters listed in Part 12.1.

For vessels greater than 400 gross registered tons that regularly travel more than 1 nm from shore that have the capacity to store graywater for a sufficient period, graywater must be discharged greater than 1 nm from shore while the vessel is underway.

If graywater will be discharged in waters subject to this permit, the introduction of kitchen oils must be minimized to the graywater system. When cleaning dishes, food and oil residue must be removed as far as practicable before rinsing dishes. Oils used in cooking shall not be added to the graywater system. Oil from the galley and scullery shall not be discharged in quantities that may be harmful.

Vessels must use phosphate free and non-toxic soaps and detergents for any purpose if they will be discharged into waters subject to this permit. These detergents must be free from toxic or bioaccumulative compounds and not lead to extreme shifts in receiving water pH.

If you are underway in a nutrient impaired water, or a water that is impaired as a result of nutrient enrichment (such as waters listed as impaired for phosphorus, nitrogen, or for hypoxia or anoxia (low dissolved oxygen concentrations)) you must follow the following additional steps:

When the vessel has adequate graywater storage capacity, the vessel owner/operator shall not discharge graywater into nutrient impaired waters subject to this permit (e.g., the Chesapeake Bay or Puget Sound). A complete list of such waters can be found at www.epa.gov/npdes/vessels. Where the vessel does not have adequate storage capacity to eliminate such discharges, graywater production and discharge must be minimized in such



waters. Any such discharge must be conducted while the vessel is underway in areas with significant circulation and depth to the extent feasible. Graywater stored while in such waters can later be disposed of on shore or discharged in accordance with the other requirements of this permit.

Compliance Summary

- 1. All vessels must minimize the discharge of graywater while in Port.***
- 2. Graywater must be stored onboard if the vessel has the capacity to do this.***
- 3. Discharge of graywater is not permitted on US Great Lakes***
- 4. Vessels that can store graywater must only discharge this when greater than 1 nm from shore while the vessel is underway.***
- 5. Vessel must use phosphate free and non-toxic soaps and detergents for any purpose. Ensure this is specified when ordering.***
- 6. Cooking oil must not be discharged with graywater.***
- 7. As much food and oil residue as practicable must be removed from plates prior rinsing.***

Motor Gasoline and Compensating Discharge (Part 2.2.16)

Motor gasoline is transported on some vessels to operate vehicles and other machinery. As the fuel is used, ambient water is added to the fuel tanks to replace the weight.

Ambient water is added to fuel tanks as the fuel is used. When gasoline is reloaded to the tanks while in port, the water is discharged. The discharged ambient water may contain traces of gasoline constituents, which generally will 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 water quality criteria in the discharge.

The permit also requires that this discharge be minimized while the vessel is in port, which can be accomplished by disposing of the wastewater onshore.

The discharge of motor gasoline and compensating effluent must have oil concentrations of less than 15 ppm . Vessels shall not discharge motor gasoline and compensating discharge in waters subject to this permit listed in Part 12.1

Compliance Summary

- 1. Vessels must not discharge water used for this purpose in waters under this permit.***
- 2. Water used for this purpose must be returned to an oily bilge tank and be discharged through the oily water separator (OWS) at below 15ppm.***



Non-Oily Machinery Wastewater (Part 2.2.17)

Non-oily machinery wastewater is from machinery that contains no oil. Vessels can have numerous sources of non-oily machinery wastewater, such as distilling plants start-up discharge, chilled water condensate drains, fresh and saltwater pump drains, potable water tank overflows, and leaks from propulsion shaft seals

Non-oily machinery wastewater discharge rates vary by vessel size and operation type,

Constituents of non-oily machinery wastewater discharge include a suite of conventional pollutants, metals, and organics. Many of the specific constituents in the discharge can exceed water quality criteria, including copper, nickel, silver, zinc and a collection of nutrients. Mercury also may be present, but reported concentrations did not exceed the standards.

EPA has determined that non-oily machinery wastewater can be discharged if control measures are instituted to keep the waste stream free of oils and additives that are toxic and bioaccumulative. Alternatively, non-oily machinery wastewater can drain to the bilge.

The discharge must be free from oils and any additives that are toxic or bioaccumulative in nature.

Compliance Summary

- 1. Non-oily machinery wastewater can be discharged if control measures are instituted to keep the waste stream free of oils and additives.***
- 2. Any machinery space waste water is to be regarded as potentially oily and disposed of as required by MARPOL via the OWS where permitted or discharged ashore.***

Refrigeration and Air Condensate Discharge (Part 2.2.18)

Condensation from cold refrigeration or evaporator coils of air conditioning systems drips from the coils and collects in drip trays which typically channel to a drainage system.

This discharge may contain metals from the refrigeration/air conditioning coils and drainage systems, including aluminum, copper, iron, lead, nickel, silver, tin, and zinc. Traces of detergent also may be found in this discharge from the cleaning of refrigerated spaces, as can seawater and freshwater. This waste stream can easily be kept segregated from oily wastes and safely discharged, channeled and collected for temporary holding until disposed of onshore, or drained to the bilge.

You must not allow refrigeration and air condensate discharge to come into contact with oily or toxic materials.

Compliance Summary

- 1. No discharge of this type is allowed in the waters covered by this permit.***



Seawater Cooling Overboard Discharge (Including Non-Contact Engine Cooling Water; Hydraulic System Cooling Water, Refrigeration Cooling Water) (Part 2.2.19)

The water is typically circulated through an enclosed system that does not come in direct contact with oil side of the machinery.

The potential constituents of seawater cooling overboard discharge include entrained or dissolved materials from the system itself, including copper, iron, aluminum, zinc, nickel, tin, titanium, arsenic, manganese, chromium, lead, and oil and grease. Based on existing research copper, nickel, and silver concentrations in the discharge can exceed water quality criteria.

Cooling water also can reach high temperatures with the thermal difference between seawater intake and discharge typically ranging from 5°C to 25°C, with maximum temperatures reaching 140°C. EPA requires vessels to institute the BMP of reducing discharges in ports or enclosed water bodies thus the impact from the heated waters will be reduced.

Discharges of seawater can be reduced by using shore based power when electrical systems on board vessels are compatible with the available shore power.

In addition, mud, biota, and other debris can stick to the strainer plates and require periodic clearing. Vessels must incorporate the regular removal of fouling organisms from seawater piping and cooling systems to prevent possible transport of species to other water bodies. The risk of introducing invasive species is reduced considerably when vessels remove fouling organisms while at sea (greater than 50 nm from any shore). Vessels are required to clean piping while at sea in lieu of cleaning these systems in waters subject to this permit if they frequently sail far from the coast

When possible, seawater cooling overboard should be discharged when the vessel is underway so that any thermal impacts are dispersed.

EPA recommends that vessel owner/operators use shore based power when the vessel is in port if:

- Shore power is readily available for vessel owner/operators from utilities or port authorities;
- Shore based power supply systems are capable of providing all needed electricity required for vessel operations; and
- The vessel is equipped to connect to shore-based power and such systems are compatible with the available shore power.

Maintenance of all piping and seawater cooling systems must meet the requirements of Part 2.2.21 (Seawater-Piping Biofouling Prevention).

Compliance Summary

- 1. Cooling water discharge must be limited to minimum required.***
- 2. Cooling water strainers and filters are to be regularly cleaned when more than 50NM from the shore.***
- 3. Shore power should be considered if available and the vessel has a compatible system.***



Seawater Piping Biofouling Prevention (Part 2.2.20)

Vessels that utilize seawater cooling systems introduce anti-fouling compounds (e.g., sodium hypochlorite) in their interior piping and component surfaces to inhibit the growth of fouling organisms. These anti-fouling compounds are then typically discharged overboard.

Seawater that has been discharged after being treated with chlorinating substances will contain free chlorine and reaction products (halamines, free bromine, and halogenated organics).

Under the permit, biofouling chemicals for seawater piping must be used according to their FIFRA label and are prohibited from discharge if they are banned for use in the U.S.

Vessels must use the minimum amount of biocide needed to keep fouling under control. Using visual observations, vessel operators can determine if they are achieving the desired level of biofouling prevention with lower concentrations of biocide. If an organic biocide is used, it should have a short half-life. If an oxidizing biocide is being used, the total residual oxidant concentration of the effluent should be monitored periodically to ensure that excessive amounts of biocide are not being released into the environment.

No pesticides or chemicals banned for use in the United States may be discharged into waters subject to this permit. Vessels must remove fouling organisms from seawater piping on a regular basis and dispose of removed substances in accordance with local, State, and federal regulations. Removed fouling organisms shall not be discharged into waters subject to this permit and EPA recommends that if discharged into waters, should be discharged more than 50 nm from shore .

Compliance Summary

- 1. Wherever possible foreign trading vessels are not to carry this out in permit waters***
- 2. Biofouling chemicals for seawater piping must be FIFRA approved and used according to their FIFRA label. Products are prohibited from discharge if they are banned for use in the U.S.***
- 3. Vessels must use the minimum amount of biofouling chemicals needed to keep fouling under control.***
- 4. Vessels must remove fouling organisms from seawater piping on a regular basis. These must be discharged greater than 50NM from the shore.***

Small Boat Wet Engine Exhaust (Part 2.2.21)

Some vessels may have a lifeboat or rescue boats onboard which may have engines which produce wet exhaust (exhaust below waterline). Wet exhaust can contain nitrogen oxides, sulfur dioxide, hydrocarbons and other organic compounds, carbon monoxide, and particulates.

The constituents discharged by outboard engines differ from those discharged by inboard engines, due to the different fuel and engine types. For these outboard engines, a handful of organic constituents are estimated to exceed water quality criteria in the discharge.



Inboard engines may produce discharges that exceed water quality criteria for polycyclic aromatic hydrocarbons (PAHs).

Vessels that generate wet exhaust must be maintained in good operating condition and functioning according to manufacturer specifications. Vessel operators are encouraged to consider four-stroke engines in lieu of two-stroke engines to minimize the discharge of pollutants to waters subject to this permit.

Compliance Summary

- 1. These type of engines must be included in vessels planned maintenance system (PMS) and be maintained in according with manufacturer's instructions.***
- 2. Low sulphur fuel is to be used whenever possible.***

Sonar Dome Discharge (Part 2.2.22)

Water is used to maintain the shape and pressure of domes that house sonar detection, navigation, and ranging equipment. Discharges occur when the water must be drained for maintenance or repair or from the exterior of the sonar dome.

Sonar domes are typically found on research vessels and may occasionally be found on other vessels covered by this permit. Maintenance on the sonar dome, while typically (but not always) done while a vessel is in dry dock, can involve the release of the inner sonar dome water. In addition, the components of the outside of the sonar dome can leach into the surrounding waters, including antifouling agents, plastic, iron, and rubber. Along with these materials, tin, zinc, copper, nickel, and epoxy paints may be found on the inside of sonar domes. Some of the discharge concentrations of these components can exceed water quality criteria.

EPA has not identified any available BMP or feasible treatment technology other than zero discharge therefore this permit requires that water from inside the sonar dome may not be discharged. In addition, vessel operators should not use bioaccumulative biocides on the exterior of sonar domes when other viable alternatives are available.

Compliance Summary

- 1. The water inside the sonar dome shall not be discharged within waters subject to this permit for maintenance purposes.***
- 2. Vessel operators should not use biofouling chemicals that are bioaccumulative for the exterior of sonar domes.***



Underwater Ship Husbandry Discharges (Part 2.2.23)

Underwater ship husbandry is the maintenance, and repair activities of hulls or hull appendages completed while the vessel is located in the water, including hull cleaning, hull repair, fiberglass repair, welding, sonar dome repair, non-destructive testing, masker belt repairs, and painting operations. Underwater ship husbandry discharges are considered incidental to the normal operation of a vessel when ships are maintained in proper operating order and the cleaning is done on a reasonable schedule. For drydock and other large cleaning activities, once every few years may be considered a reasonable schedule

Owner/operators must take all precautions to minimize the discharge of raw, toxic, or oily materials while doing any underwater vessel repairs, and these discharges must comply with all applicable federal laws.

Where maintenance required on the hull or hull appendages must occur while the vessel is in port between drydockings. non-toxic anti-foulant paints such as silicon based paints will reduce the discharge of toxic materials into the water column during maintenance.

Whenever possible, hull-cleaning activities should take place in drydock, or another land-based facility where the removal of fouling organisms or spent antifouling coatings paint can be contained. If water-pressure based systems are used to clean the hull and remove old paint, use facilities which treat the washwater prior to discharge to remove the antifouling compound(s) and fouling growth from the washwater.

Vessel owner/operators who remove fouling organisms from hulls while the vessel is waterborne must employ methods that minimize the discharge of fouling organisms and antifouling hull coatings. These shall include:

- Selection of appropriate cleaning brush or sponge rigidity to minimize removal of antifouling coatings and biocide releases into the water column.
- Limiting use of hard brushes and surfaces to the removal of hard growth.
- When available and feasible, use of vacuum control technologies to minimize the release or dispersion of antifouling hull coatings and fouling organisms into the water column.

Cleaning of copper based antifoulant paints must not result in any visible cloud or plume of paint in the water: if a visible cloud or plume of paint develops, shift to a softer brush or less abrasive cleaning technique. Production of a visible cloud or plume of paint containing copper antifoulant paint is a permit violation.

Compliance Summary

- 1. Major hull-cleaning activities should take place in drydock.***
- 2. Maintenance on hulls while the vessel is waterborne must employ methods that minimize the discharge of fouling organisms***
- 3. Cleaning of copper based antifoulant paints must not result in any visible cloud or plume of paint in the water.***



Welldeck Discharges (Part 2.2.24)

Potential constituents of welldeck discharges include fresh water, distilled water, firemain water, graywater, air-conditioning condensate, sea-salt residues, paint chips, wood splinters, dirt, sand, organic debris and marine organisms, oil, grease, fuel, detergents, combustion by-products, and lumber treatment chemicals.

EPA is requiring that vessel operators practice good housekeeping to ensure that no garbage or wastes that can cause a visible sheen are discharged. Should these wastes be present, the vessel operator must retain the discharge for onshore disposal.

Compliance Summary

- 1. Welldeck discharges that contain graywater must not be discharged except in cases of emergency.*
- 2. Welldeck discharges from equipment and vehicle washdowns must be free from garbage and must not contain oil in quantities that may be harmful*
- 3. Good housekeeping required to minimize general waste and debris discharge.*

Discharges of Graywater Containing Sewage (Part 2.2.25)

Some vessel operators mix graywater with sewage discharges. Once these two discharge types are commingled, it is impossible to separate out which constituents within the effluent are from which discharge type. All graywater discharges containing sewage are required to meet the relevant standards contained within this permit for graywater. In addition, discharge minimization requirements, prohibitions, standards, and other requirements applicable to graywater in Part 2 and Part 5 as appropriate are also required for graywater containing sewage.

Though not a requirement of this permit, vessel owner/operators are advised that all discharges commingled with sewage must meet the requirements set forth in section 312 of the Clean Water Act and its implementing regulations.

Compliance Summary

- 1. Graywater that contains sewage must only be discharged through approved treatment plant.*
- 2. Graywater that contain sewage must not be discharged untreated except in cases of emergency.*



Exhaust Gas Scrubber Washwater Discharge (Part 2.2.26)

Exhaust gas scrubber washwater discharge (EGS washwater discharge) occurs as a result of operating or cleaning the exhaust gas cleaning systems (e.g. scrubbers) for marine diesel engines. After the washing solution is returned from the scrubber, the washwater can be either be treated and discharged overboard, or alternatively, it can be piped to a clean bilge water tank or other suitable holding tanks. While many of the captured contaminants (sludge) are transferred to the vessel's sludge tank, the constituents of EGS washwater discharge can include residues of nitrogen oxides (NO_x), sulfur oxides (SO_x) and particulate matter (PM) emissions captured by the scrubbers. EGS washwater discharge can also contain traces of oil, polycyclic aromatic hydrocarbons (PAHs), heavy metals and nitrogen. Depending on the geographic location of the EGS washwater discharge, the pH level and turbidity of the receiving water may be altered

These limits require fuel sulfur content limits, the use of exhaust gas cleaning technology or a combination of the two. .

Vessel owner/operators may also reduce EGS washwater discharges by using low-sulfur distillate fuel. Furthermore, vessel owner/operators must follow all existing regulations, including the prohibition against the discharge of oil, including oily mixtures, in quantities that may be harmful. In addition, sludge generated from exhaust gas scrubber washwater may not be discharged in waters subject to this permit.

Compliance Summary

- 1. Low sulfur fuel to be used when in waters covered by this permit.***
- 2. Exhaust gas scrubber washwater discharge must not contain oil, including oily mixtures, in quantities that may be harmful.***
- 3. Sludge generated from exhaust gas scrubber washwater discharge must not be discharged in waters subject to this permit***



CORRECTIVE ACTIONS (3.0)

EPA or an authorized representative acting on the EPA's behalf, has absolute power to require remedies to bring vessel owner/operators into compliance.

EPA may take enforcement action to require any remedy necessary to achieve compliance as quickly as possible including more stringent timetables than are listed in this section.

Problems Triggering the Need for Corrective Action (3.1)

If any of the following problems are identified, it is necessary take action to ensure that the problem is eliminated and will not be repeated in the future:

- Violation of one or more effluent limits in Part 2 or Part 5 or any other requirement of this permit, or an inspection or evaluation of your vessel by an EPA official or an official agent acting on EPA's behalf determines that modifications to the control measures are necessary to meet the effluent limit;
- Becoming aware, of, or EPA determines, that the vessel control measures are not stringent enough for the discharge to meet applicable water quality standards; or
- Finding out that pollution control measures or best management practices are not being properly operated and maintained, or are not having the intended effect in minimizing pollutant discharges.

Corrective Action Assessment (3.2)

On identifying a violation of this permit (which has not been previously identified), the Master or other designated officer must conduct a corrective action assessment.

A violation can be identified by the Master, an Officer or member of the crew,

Violations can be identified through:

- The routine visual inspections or comprehensive annual inspections required by this permit under Part 4;
- any other inspection or evaluation of your operations by ships staff,
- a government official, or anyone else;
- or through any other means.

Following the identification of any of the problems listed in Part 3.1, a corrective action assessment must be conducted into the nature, cause, and potential options for eliminating these problems.



V.SHIPS MANAGEMENT SYSTEM (VMS)

The assessment must include the following:

- A description of the problem(s) discovered (e.g., the release of untreated ballast water not meeting the effluent limit, spilling oil in quantities that may be harmful), including the date, time and locations on the vessel where it occurred, the types of impacts observed, and the name, title and signature of the person who identified the problem and of the person who recorded the problem;
- An explanation of the cause of the problem(s), if known. If unknown at the time of the assessment, provide an indication of what steps will be taken to determine the cause; and
- A description of the corrective actions to be taken necessary to eliminate the problem(s), and a schedule of activities for completing such actions within the timeframes established in Part 3.3.
- An indication whether the corrective action requires the vessel to be in dry dock and, if so, the next planned date the vessel will be drydocked.
- Once the corrective action is implemented, record the date(s) and time(s) of the action, a description of the corrective action implemented, and the name, title and signature of the person recording this information

The Corrective Action Assessment form (VGP04) must be kept with the Vessel General Permit record book and be signed and certified in accordance with Part 1.7 of this permit.



DEADLINES FOR ELIMINATING PROBLEM (3.3)

Compliance with many permit requirements must be accomplished immediately

Corrective Action	Deadline
These requirements include, but are not limited to: housekeeping, reporting, recordkeeping, inspections, and certain operation and maintenance requirements	The vessel must return to compliance immediately.

Compliance with some permit requirements may require additional time for the vessel owner/operator to reasonably correct the problem.

The following deadlines apply for eliminating the problem identified in Part 3.1 depending on the type of corrective action that must be taken:

Corrective Action	Deadline
Corrective actions that can be accomplished with relatively simple adjustments to control measures, using existing personnel and resources, and not requiring the vessel to be in dry dock	As soon as possible but no later than 2 weeks after the discovery of the problem, or, if leaving waters subject to this permit, before the expiration of the two-week period or before re-entering waters subject to this permit, whichever is later;
Corrective actions that require new parts or the installation of new equipment, not requiring the vessel to be in dry dock.	<p>The underlying cause of the noncompliance must be addressed and return to compliance and/or complete necessary repairs no later than 3 months after the discovery of the problem or, if leaving waters subject to this permit, before the expiration of the three-month period or before re-entering waters subject to this permit, whichever is later.</p> <p>If completing repairs within 3 months is impracticable, repairs must be completed as soon as possible after 3 months. The reason why more time required for corrective action must be documented on form VGP01;</p>
Corrective actions that require large or comprehensive renovations, alterations, or repairs to the vessel that can only be achieved while the vessel is in dry dock	The underlying cause of the noncompliance must be addressed and return to compliance and/or complete necessary renovations or repairs prior to the vessel from departing from next scheduled dry dock



EFFECT OF CORRECTIVE ACTION (3.4)

The initial occurrence of the problem in Part 3.1 constitutes a violation of the permit.

Conducting the Part 3.2 assessment and correcting the problem according to Part 3.3 does not absolve the vessel of liability for the original violation. **However, failure to comply with Parts 3.2 and/or 3.3 constitutes an additional permit violation.**

EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

EPA may impose additional requirements and schedules of compliance, including requirements to submit additional information concerning the condition(s) triggering corrective action or schedules and requirements more stringent than specified in this permit.

Those requirements and schedules will supersede those of Part 3.3 if such requirements conflict. EPA may also notify you that an individual permit application is necessary in accordance with Part 1.8.1.



INSPECTIONS, MONITORING, REPORTING, AND RECORDKEEPING (4.0)

SELF INSPECTIONS AND MONITORING (4.1)

The following vessel inspections must be carried out and documented. (refer V.Ships VGP Record Book)

Routine Visual Inspections (4.1.1)

Weekly

Inspections of all areas addressed in this permit are to be carried out weekly, or per voyage, whichever is more frequent. This inspection must include all deck, machinery, cargo areas and all other accessible areas where chemicals, oils, dry cargo or other materials are stored, mixed, and used, whether or not the areas have been used since the last inspection

The inspection is to verify these areas are clear of debris or other material that could be discharged in any waste stream such as

- Garbage
- Exposed raw materials
- Oil
- any visible pollutant or other constituent of concern

The inspection must also confirm and that pollution prevention mechanisms are in place and in proper working order.

At a minimum, the routine inspection must verify that requirements of section 2.1 are being met and document any instances of non-compliance.

These routine inspections should be conducted on a schedule that coincides with other routine vessel inspections (see Fleet Operations 3.6.5).

The inspection should also verify whether all monitoring, training, and inspections are logged according to permit requirements.

A ship's watch must include visual monitoring of the water around and behind the vessel for visible sheens, dust, chemicals, abnormal discoloration or foaming, and other indicators of pollutants or constituents of concern originating from the vessel. Particular attention should be paid to deck runoff, ballast water, and bilgewater. This requirement is included in the safety management system (SMS).



V.SHIPS MANAGEMENT SYSTEM (VMS)

If you identify or are made aware that pollutants or constituents of concern are originating from your vessel, you must initiate corrective actions as per Part 3.

Quarterly

At least once per quarter, discharge streams not readily visible (if accessible) must be sampled. This will generally apply to discharge such as bilgewater or graywater, discharged below the water line.

The samples are to be inspected for any signs of visible pollutants or constituents of concern, including discoloration, visible sheens, suspended solids, floating solids, foam, or changes to clarity.

If signs of oil, other pollutants, or other constituents of concern are discovered exceeding the applicable effluent limit, the steps taken to prevent the continued discharge of these pollutants or constituents of concern and what corrective actions were taken to remediate the problem(s) must be recorded.

Note: Sampling of readily visible discharges is not required, but is recommended if the inspector cannot easily view their discharge characteristics (such as clarity or discoloration, presence of oily sheens, presence of foams, etc.). All discharges must comply with the effluent limits in Part 2.

Documentation of the Routine Vessel Inspections (4.1.1)

The findings of each routine vessel inspection must be documented in the ship's logbook or as a dedicated recordkeeping documentation referenced in Part 4.2.

The entry must include:

- Date and time of inspection,
- Ship locations inspected
- Personnel conducting the inspection
- Location of any visual sampling and observations,
- Details of any potential problems and sources of contamination found,

The entry must be signed by the person conducting the inspection, if not the Master. The records of routine visual inspections must be made available to EPA upon request. Corrective actions, as required under Part 3 of this permit, must be instituted for problems noted in these inspections.

V.Ships Form VGP01 is provided for this purpose.

Analytical Monitoring (4.1.2)

Analytical monitoring requirements are identified in Part 5 of this permit. There are currently no requirements for vessels managed by V.Ships SMD



Comprehensive Annual Vessel Inspections (4.1.3)

Comprehensive annual vessel inspections must be conducted by qualified personnel. Qualified personnel include the master or operator of the vessel or appropriately trained marine or environmental engineers or technicians or an appropriately trained representative of a vessel's class society.

Comprehensive annual inspections must cover all areas of the vessel affected by the requirements in this permit. Special attention should be paid to those areas most likely to result in a discharge likely to cause or contribute to non-compliance with water quality standards or violate effluent limits established in this permit. Areas that inspectors must examine include, but are not limited to:

- Vessel hull for attached living organisms, flaking antifoulant paint, exposed TBT surfaces or other organotin surfaces,
- Ballast water tanks, as applicable
- Bilges, pumps, and OWS sensors, as applicable,
- Protective seals for lubrication and hydraulic oil leaks,
- Oil and chemical storage issues, cargo areas, and waste storage areas, and
- All visible pollution control measures to ensure that they are functioning properly.

If any of these portions of the vessel are not inspectable without the vessel entering drydock, the vessel owner/operator must inspect these areas during their drydock inspection and their results must be documented in their drydock inspection reports. Furthermore, vessel owner/operators must document which portions of the vessel are not inspectable for the annual inspection in their recordkeeping documentation.

The inspections must also include a review of monitoring data collected in accordance with Part 5 if applicable, and routine maintenance records to ensure that required maintenance is being performed (e.g., PMS for small boats that have wet exhaust). Inspectors must also consider the results of the past year's visual and analytical monitoring when planning and conducting inspections.

When comprehensive vessel inspection schedules overlap with routine inspections required under Part 4.1.1, the annual comprehensive site inspection may also be used as one of the routine inspections, as long as components of both types of inspections are included.

If inspections reveal flaws that would result in a violation of the effluent limits in Parts 2 and 5, or indicate that control measures are not functioning as anticipated or are in need of repair or upgrade, you must take corrective action to resolve such flaws in accordance with Part 3. You must record all results from your annual inspection in your vessel's record keeping documentation or logbook.

V.Ships Form VGP02 is provided for this purpose



Drydock Inspection Reports (4.1.4)

Drydock reports prepared by the Class Society or Coast Guard must be made available to EPA, or an authorized representative of EPA, upon request. If a drydock report from the Class Society or the USCG, is not available a drydock report must be completed onboard and it must be made available to EPA, or an authorized representative of EPA, upon request.

The drydock report must note that:

- The chain locker has been cleaned for both sediment and living organisms,
- The vessel hull, propeller, rudder, thruster gratings, sea chest, and other surface areas of the vessel have been inspected for attached living organisms and those organisms have been removed or neutralized,
- Any antifoulant hull coatings have been applied, maintained and removed consistent with the FIFRA label if applicable; any exposed existing or any new coating does not contain biocides or toxics that are banned for use in the United States,
- For all cathodic protection, anodes or dialectic coatings have been cleaned and/or replaced to reduce flaking, and
- All pollution control equipment is properly functioning.

A [Drydock Inspection Certification Report form](#) is provided for completion in the event that a full dry-dock report is not available (VGP 03)



RECORDKEEPING (4.2)

(A separate log book is provided to meet the record keeping requirements)

All vessels covered by this permit, must keep written records on the vessel that include the following information:

1) Owner/Vessel information

- i) Vessel Name;
- ii) International Maritime Organization (IMO) Number
- iii) Vessel type
- iv) Owner or operator company name;
- v) Owner or operator certifying official's name;
- vi) Address of owner/operator;
- vii) Gross tonnage;
- viii) Call sign; and
- ix) Port of Registry (Flag).

2) Voyage Log must include information on the last and next port:

- i) Dates and ports of arrival
- ii) Vessel agent(s),
- iii) Last port and country of call
- iv) Next port and country (if known)

3) Violation Documentation which must list any violation of any effluent limit. Following must be recorded

:

- A description of the violation,
- Date of the violation,
- Name, title and signature of the person who identified the violation
- Name, title and signature of the person who is recording the violation (if different from person who identified the violation),
- If a Corrective Action Assessment pursuant to Part 3.2 is needed, attach a copy or indicate where the corrective action assessment is stored, and
- If a Corrective Action Assessment was previously conducted pursuant to Part 3.2 (and revisions are not needed for this violation of the effluent limit), a reference to that previous corrective action assessment.

4) Log of findings from routine inspections conducted under Part 4.1.1, including a discussion of any corrective actions required by Part 3 if applicable. Include date, inspectors name, findings, and corrective actions taken.

If no deficiencies or problems are found during a routine inspection, record that the inspection was completed with the inspectors name and date. Routine visual inspections must be recorded as completed according to Part 4.1.1.

5) Analytical results of all monitoring conducted under Part 4.1.2, including sample documentation, results, and laboratory QA documentation.



V.SHIPS MANAGEMENT SYSTEM (VMS)

- 6) Log of findings from annual inspections conducted under Part 4.1.3, including a discussion of any corrective actions required by Part 3. Include date, inspectors name, findings, and corrective actions taken.
- 7) Record of any specific requirements in Part 2.3 given to your vessel by EPA, or clearly posted by state agencies and how you have met those requirements.
- 8) Additional maintenance and discharge information to be recorded and kept in a log on the vessel.
 - i) Deck maintenance. Record dates, materials used, application process, etc. for any significant maintenance of the deck surface(s). (e.g. more than routine activities such as sweeping.
 - ii) Bilgewater. Record dates, location, oil concentration (for MARPOL vessels) or visible sheen observation (non-MARPOL vessels), and estimated volume of bilgewater discharges. Record the same information for bilgewater disposed at onshore locations
 - iii) Paint application. Record dates, materials used, application process, etc. for any antifouling paint applied to the vessel.
 - iv) AFFF. Record dates, estimated volumes, and constituents of any discharges of AFFF.
 - v) Chain locker inspections. Dates of inspections and any rinsing conducted within waters subject to this permit.
 - vi) Controllable pitch propeller, stern tube and other oil to sea interface maintenance. Record dates and locations of any maintenance of controllable pitch propellers that occurs while the vessel is in waters subject to this permit.
 - vii) Any emergencies requiring discharges otherwise prohibited to waters listed in Part 12.1.
 - viii) Gas Turbine Water Wash. Record dates and estimated volume of any discharge of gas turbine wash water within waters subject to this permit. If hauled or disposed onshore, record log hauler and volume.
 - ix) Estimated volume and location of graywater discharged while in waters subject to this permit.
- 9) All other documentation requirements stated in the permit.
- 10) Record of training as required by this permit

All information can be logged with maintenance records, the ship's log, or other additional recordkeeping documentation but must be provided to EPA if requested. Operators may choose how these records will be maintained, but must retain these records on the vessel for a period of 3 years.

Certification of accurate information, pursuant to the certification and signatory requirements referenced in Parts 1.7 of this permit and 40 CFR 122.22. You must retain copies of all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least 3 years from the date that your coverage under this permit expires or is terminated.

The vessel master, owner/operator, or person in charge shall make available to EPA or an authorized representative from EPA all records kept under this section upon request.



Additional Recordkeeping for Vessels Equipped with Ballast Tanks (4.3)

For vessels equipped with ballast tanks that are bound for a port or place in the United States, the recordkeeping requirements of 33 CFR Part 151. must be met.

The Master of a vessel bound for a port or place in the United States must keep written records that include the following information:

- 1) Total ballast water information. Include the total ballast water capacity, total volume of ballast water on board, total number of ballast water tanks, and total number of ballast water tanks in ballast. Use units of measurements such as metric tons (MT), cubic meters (m³), long tons (LT), and short tons (ST).
- 2) Ballast water management. Include the total number of ballast tanks/holds that are to be discharged into the waters of the United States or to a reception facility. If an alternative ballast water management method is used, please note the number of tanks that were managed using an alternative method, as well as the type of method used. Indicate whether the vessel has a ballast water management plan and IMO guidelines on board, and whether the ballast water management plan is used.
- 3) Information on ballast water tanks that are to be discharged into waters subject to this permit or to a reception facility. Include the following:
 - i) The origin of ballast water. This includes date(s), location(s) (including latitude and longitude and port (if relevant)), volume(s), and temperatures(s). If a tank has been exchanged, list the loading port of the ballast water that was discharged during the exchange.
 - ii) The date(s), location(s) (including latitude and longitude), volume(s), method, thoroughness (percentage exchanged if exchange conducted), sea height at time of exchange if exchange conducted, of any ballast water exchanged or otherwise managed.
 - iii) The expected date, location, volume, and salinity of any ballast water to be discharged into the waters of the United States or a reception facility.
- 4) Discharge of sediment. If sediment is to be discharged into a facility within the jurisdiction of the United States include the location of the facility where the disposal will take place.

The ballast water reporting forms must be kept on board the vessel and must be submitted to the National Ballast Information Clearinghouse before arriving to US ports if required by the US Coast Guard. In addition, all vessels which conduct saltwater flushing as required by Part 2.2.3.7 and Part 2.2.3.8 of the permit, but do not report saltwater flushing to the NBIC, must instead keep a record of saltwater flushing to meet the requirements of this permit..



REPORTING (4.4)

Reporting Noncompliance (4.4.1)

All instances of noncompliance with this permit must be reported at least once per year to the regional offices listed in Part 8. Vessel operators must report the noncompliance to the regional office responsible for the waters in which the noncompliance occurred. If vessels have multiple occurrences of non compliance, they must report the noncompliance to the regional office where either 1) the greatest number of noncompliance events occurred, or 2) if the same number of noncompliance events occurred, to the regional office responsible for waters where the vessel spent the most time.

Vessels are to forward their Corrective Action Assessments (3.2) to the appropriate regional office from the next port after the US port where the violation occurred. A copy is to be sent to your Vessel Control Group by email/fax. The date and port sent from to be recorded on the form.

Reportable Quantities of Hazardous Substances or Oil (4.4.2)

If a discharge contains a hazardous substance or oil in any amount, the National Response Center (NRC) must be notified (dial 800-424-8802 or 202-426-2675). **Vessels must follow the requirements of their VRP or NTVRP.**

See also highlighted section in 4.4.3 below.

Also, within 14 calendar days of the release, the date and description of the release, the circumstances leading to the release, responses to be employed for such releases, and measure to prevent reoccurrence of such releases must be recorded in your recordkeeping documentation consistent with Part 4.2 of this permit.

Additional Reporting (4.4.3)

In addition to the reporting requirements stipulated in Part 4, vessels are also subject to the standard permit reporting provisions referenced in Part 1.13.

Where applicable, vessels must submit the following reports to the appropriate EPA Regional Office listed in Part 8 as applicable.

- 24-hour reporting – You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances;
- 5-day follow-up reporting to the 24-hour reporting – A written submission must also be provided within five days of the time you become aware of the circumstances;



When complying with the 24-hour reporting requirement be prepared to communicate the information from the completed CORRECTIVE ACTION ASSESSMENT form for any noncompliance which may endanger health or the environment to meet the 24-hour reporting requirement.

Similarly, submit a copy of the completed CORRECTIVE ACTION ASSESSMENT form within five days of the time you become aware of the circumstances.

One-Time Permit Report (4.4.4)

For each vessel, owner/operators are required to submit a one-time report between 30 months and 36 months after obtaining permit coverage.

Vessels are required to complete the One-Time Permit Report Form (VGP 05) and return to the office. The office will then submit the report electronically.



VESSEL CLASS SPECIFIC REQUIREMENTS (5.0)

Part 5 is vessel-specific requirements associated with various vessel types and is in addition to any requirements specified elsewhere in this permit.

Cruise ships / Ferries (5.1. to 5.3)

Not applicable to V.Ships Ship Management Division (SMD).

Barges (such as Hopper Barges, Chemical Barges, Tank Barges, Fuel Barges, Crane Barges, Dry Bulk Cargo Barges) (5.4)

Barges must comply with Part 5 vessel-specific requirements in this section class in addition to the other requirements specified elsewhere in this permit.

The requirements in Part 5.4 apply to vessel discharges from barges.

Additional Effluent Limits (5.4.1)

Barges must minimize the contact of below deck condensation with oily or toxic materials, and any materials containing hydrocarbon. Whenever barges are pumping water from below deck, the discharge shall not contain oil in quantities that may be harmful. If a visible sheen is noted, vessel operators must initiate corrective action in accordance with Part 3 and meet recordkeeping requirements in Part 4.2 of this permit.

All tank barges must have spill rails and must plug their scuppers before any cargo operations. If any spills result during loading or unloading of cargo, vessel owner/operators must completely clean up spills or residue before scuppers are unplugged. Once all spills and residue have been cleaned, scuppers may be unplugged.

Vessels must clean out cargo residues such that any remaining residue is minimized before washing the cargo compartment or tank and discharging wash water overboard.

Supplemental Inspection Requirements (5.4.2)

After every instance of pumping water from areas below decks, or immediately following washing down the decks, a visual sheen test must be conducted.. The visual sheen test is used to detect free oil by observing the surface of the receiving water for the presence of an oily sheen. The operator should focus the inspection on the area surrounding the vessel where discharges from below deck or deck washings are discharged into the receiving water. A visible sheen is defined in Part 7 of this permit. If a visible sheen is observed, you must initiate corrective actions required in Part 3 of this permit and meet recordkeeping requirements in Part 4.2 of this permit.



5.5. OIL TANKERS OR PETROLEUM TANKERS

The requirements in Part 5.5 apply to vessel discharges from Oil Tankers or Petroleum tankers.

Additional Authorized Discharges (5.5.1)

For vessels which have an inert gas system, the effluent produced from inert gas scrubbers may be discharged into waters subject to this permit.

The discharges of water from deck seals are authorized when such seals are installed as an integral part of an IGS system.

Additional Effluent Limits (5.5.2)

Oil tankers must plug scuppers during cargo loading and unloading operations to prevent the discharge of oil into waters subject to this permit. Any oil spilled must be cleaned with oil absorbent cloths or another appropriate approach.

Vessels must minimize the discharge of effluent produced from inert gas scrubbers if feasible for their vessel design.

Supplemental Inspection Requirements (5.5.3)

After every instance of loading or unloading operations or immediately following washing down the decks, you must conduct a visual sheen test. The visual sheen test is used to detect free oil by observing the surface of the receiving water for the presence of an oily sheen.

The vessel should focus the inspection on the area surrounding the vessel where effluent from loading operations or deck washings discharge into the receiving water. Sheen is defined in Part 7 of this permit. If a visible sheen is observed, you must comply with all requirements contained in Part 4.4 of this permit and initiate corrective actions required in Part 3 of this permit.

Educational and Training Requirements (5.5.4)

The crews of oil tankers play a key role in minimizing the discharge of pollutants from vessel operations. Therefore oil tanker operators are subject to the following requirements:

- The ship's crew must receive training regarding shipboard environmental procedures and must be able to demonstrate proficiency in implementing these procedures.
- Advanced training in shipboard environmental management procedures must be provided for those directly involved in managing specific discharge types or areas of



the ship and these crew must be able to demonstrate proficiency in implementing these procedures.

- Appropriate reprimand procedures must be developed for crew actions that lead to violations of any effluent limit set forth in this permit or procedures established by the vessel operator to minimize the discharge of pollutants.

5.6 -5.8 RESEARCH VESSELS / RESCUE BOATS /VESSELS WITH BALLAST TREATMENT PLANTS

Not applicable to V.Ships Ship Management Division (SMD).



SPECIFIC REQUIREMENTS FOR INDIVIDUAL STATES OR INDIAN COUNTRY LANDS (6.0)

Please refer to Vessel General Permit in Section 6.

Master must check the individual state requirements listed for the port(s) the vessel is heading for.

US States with additional requirements are currently:

- Bishop Paiute Tribe (6.1)
- California (6.2)
- Connecticut (6.3)
- Florida (6.4)
- Georgia (6.5)
- Guam (6.6)
- Hualapai Tribe (6.7)
- Idaho (6.8)
- Illinois (6.9)
- Indiana (6.10)
- Iowa (6.11)
- Kansas (6.12)
- Maine (6.13)
- Massachusetts (6.14)
- Michigan (6.15)
- Minnesota (6.16)
- Missouri (6.17)
- Nebraska (6.18)
- Nevada (6.19)
- New Hampshire (6.20)
- New Jersey (6.21)
- New York (6.22)
- Ohio (6.23)
- Pennsylvania (6.24)
- Rhode Island (6.26)
- Utah (6.26)
- Vermont (6.27)
- Wyoming (6.28)



DEFINITIONS (7.0)

The following definitions apply to this permit. Terms not defined in this Appendix have the meaning given by 40 CFR Part 122.2. When a defined term appears in a definition, the defined term is placed in quotation marks as an aid to readers.

“Appropriate Regional Office” means the regional office listed in Part 8 of the permit responsible for the waters where the vessel spends the most time or is based in a home port.

“Aqueous Film-Forming Foam” means the firefighting foam and seawater mixture discharged during training, testing, or maintenance operations. *[source: 40 C.F.R 1700.4]*

“Atlantic or Gulf Coastwise Trade” means vessels engaged in coastwise trade along the Atlantic coast or Gulf of Mexico coast of the United States, or in between those coasts, operating in and between ports on these coasts.

“Atlantic or Gulf Nearshore Voyages” means voyages by any vessels engaged in the Atlantic or Gulf Coastwise trade and vessels transiting between Atlantic ports (including those in the Caribbean Sea) or Gulf of Mexico ports that travel between more than one Captain of the Port Zone, and all other vessels that sail from foreign, Atlantic, or Gulf of Mexico ports, which do not sail further than 200 nm from any shore, and that discharge or will discharge ballast water into ports on the Atlantic or Gulf coasts.

“Ballast Tank” means any tank or hold on a vessel used for carrying “ballast water”, whether or not the tank or hold was designed for that purpose. *[source: 33 C.F.R. 151.2025]*

“Ballast Water Exchange” see “Exchange”.

“Ballast Water” means any water and suspended matter taken on board a vessel to control or maintain, trim, draught, stability, or stresses of the vessel, regardless of how it is carried. *[source: 33 C.F.R 151.1504]*

“Ballast Water Capacity” means the total volumetric capacity of any tanks, spaces, or compartments for carrying, loading, or discharging “ballast water”, including any multi-use tanks, space or compartment designed to allow carriage of “ballast water”.

“Bilgewater” means the wastewater from a variety of sources that accumulates in the lowest part of the vessel (the bilge).

“Biocide” means a substance or organism, including a virus or a fungus, that is introduced into, or produced by, ballast water treatment systems to kill or eliminate organisms as part of the ballast water treatment process.

“Boat Engine Wet Exhaust” means the seawater that is mixed and discharged with small boat propulsion engine exhaust to cool the exhaust and quiet the engine. *[source: 40 C.F.R 1700.4]*

“Captain of the Port” (COTP) means the Coast Guard officer designated as the COTP, or a person designated by that officer, for the COTP zone covering the U.S. port of destination. These COTP zones are listed in 33 C.F.R. part 3. *[source: 33 C.F.R. 151.2025]*

“Chain Locker Effluent” means the accumulated precipitation and seawater that is emptied from the compartment used to store the vessel's anchor chain. *[source: 40 C.F.R 1700.4]*

“Coastal Exchange Zone” means an area greater than 50 nm from shore and greater than 200 meters in depth.

“Commercial fishing vessel” means any vessel which is documented under the laws of the United States or, if under five net tons, registered under the laws of any State, and used for commercial fishing or activities directly related to commercial fishing. *(source: modified from 50 CFR 296.2)*

“Commercial vessel” means any “vessel” other than a “recreational vessel” or a vessel of the U.S. armed forces.



"Constructed" means a state of construction of a vessel at which—

- "(A) the keel is laid;
- "(B) construction identifiable with the specific vessel begins;
- "(C) assembly of the vessel has begun comprising at least 50 tons or 1 percent of the estimated mass of all structural material of the vessel, whichever is less; or
- "(D) the vessel undergoes a major conversion;" *[patterned after the February 2004 Ballast Water Treaty, regulation A1(4)]*

"Control measure" means any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Controllable Pitch Propeller Hydraulic Fluid" means the hydraulic fluid that discharges into the surrounding seawater from propeller seals as part of normal operation, and the hydraulic fluid released during routine maintenance of the propellers. *[source: 40 C.F.R 1700.4]*

"Cruise ship" means a passenger ship used commercially for pleasure cruises that provides overnight accommodations to passengers.

"Darkness" means sunset to sunrise.

"Deck" means a horizontal surface or part thereof serving as a floor or structural support over the upper section of the hull and which is exposed to weather and sea such as freeboard and superstructure decks from which runoff may originate.

"Deck Runoff" means the precipitation, washdowns, and seawater falling on the weather deck of a vessel and discharged overboard through deck openings.

[source: 40 C.F.R 1700.4]

"Delivered" means the date of the owner/operator's formal acceptance of the ship from the builder or another seller or the point in time when custody or ownership of the vessel officially transfers from the shipbuilder or other seller to the owner/operator.

"Discharge incidental to the normal operation of a vessel" means those discharges that were excluded from the NPDES permitting program by operation of 40 C.F.R. 122.3(a) as in effect on September 29, 2008.

"Distillation and Reverse Osmosis Brine" means the concentrated seawater (brine) produced as a byproduct of the processes used to generate freshwater from seawater. *[source: 40 C.F.R 1700.4]*

"Elevator Pit Effluent" means the liquid that accumulates in, and is discharged from, the sumps of elevator wells on vessels. *[source: 40 C.F.R 1700.4]*

"Exchange" means to replace the water in a ballast tank using one of the following methods:

"Ferry" means a vessel having provisions for deck passengers and/or vehicles operating between two points over the most direct water route, operating on a frequent schedule, and offering a public service of a type normally attributed to a bridge or tunnel. *[modified from: 46 C.F.R. §70.10-1]*

"Flow through exchange" means to flush out "ballast water" by pumping in water from the "mid-ocean" or "coastal exchange zone" (as applicable) into the bottom of the tank and continuously overflowing the tank from the top until three full volumes of water has been changed to minimize the number of original organisms remaining in the tank.

"Empty/refill exchange" means to pump out the "ballast water" taken on in ports, estuarine, or territorial waters until the tank is empty, then refilling it with water from the "mid-ocean" or "coastal exchange zone" (as applicable); masters/operators should pump out as close to 100 percent of the "ballast water" as is safe to do so. *[modified from: 33 C.F.R. 151.2025]*

"Exclusive Economic Zone" (EEZ) means the area established by Presidential Proclamation Number 5030, dated March 10, 1983 (*48 FR 10605*, 3 CFR, 1983 Comp., p. 22) which extends from the base



line of the territorial sea of the United States seaward 200 miles, and the equivalent zone of Canada. [source: 33 C.F.R. 151.2025]

"Firemain Systems" means the seawater pumped through the firemain system for firemain testing, maintenance, and training, and to supply water for the operation of certain vessel systems. [source: 40 C.F.R 1700.4]

"Fouling organisms" means any aquatic flora and/or fauna which attach to, associate with, and/or grow on or in the vessel.

"Freshwater Layup" means the potable water or freshwater taken from surrounding waters that is discharged from the water cooling system while the vessel is in port, and the cooling system is in

lay-up mode (a standby mode where seawater in the system is replaced with potable water for corrosion protection). [modified from: 40 C.F.R 1700.5(d)]

"Gas Turbine Water Wash" means the water released from washing gas turbine components. [source: 40 C.F.R 1700.4]

"Graywater" means galley, bath, and shower water, as well as wastewater from lavatory sinks, laundry, and water fountains. [modified from 40 C.F.R 1700.4 but removed shop sinks]

"Gross Ton" means the size of the vessel as calculated using the formula set by the International Convention on Tonnage Measurement of Ships, 1969. $GT = K * V$ where V = total volume in m^3 and K = a figure from 0.22 up to 0.32, depending on the ship's size (calculated by : $K = 0.2 + .02 * \log_{10}V$).

"Hull Coating Leachate" the constituents that leach, dissolve, ablate, or erode from the paint on the hull into the surrounding seawater. [source: 40 C.F.R 1700.4]

"IMO Guidelines" mean the Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens (IMO Resolution A.868 (20), adopted November 1997). [source: 33 C.F.R. 151.2025]

"In Port" means, for the purposes of this permit, anchored, moored, or otherwise secured while located in waters subject to this permit which are inside the baseline of the US territorial sea.

"Large cruise ship" means a passenger ship, used commercially for pleasure cruises, that provides overnight accommodations to passengers, and is authorized by the Coast Guard to carry 500 or more passengers.

"Large Ferry" means a "ferry" that: a) has a capacity greater than or equal to 100 tons of cargo, e.g., for cars, trucks, trains, or other land-based transportation or b) is authorized by the Coast Guard to carry 250 or more people.

"Major conversion" means a conversion of a vessel, that—

(A) substantially alters the dimensions or carrying capacity of the vessel;

(B) changes the type of the vessel; or

(C) the intent of which, in the opinion of the director, is substantially to prolong its life

[modified from 33 CFR 151.05 with the exception language specific to MARPOL is removed].

"MARPOL 73/78" means the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto. [[source: modified from 40 C.F.R 110.1]

"MARPOL vessel" means a ship subject to Annex I of the International Convention for the Prevention of Pollution from Ships as implemented by the Act to Prevent Pollution from Ships and the oil pollution provisions of U.S. Coast Guard regulations in 33 CFR Part 151, Subpart A.

"Master" means captain, person-in-charge, or other party responsible for operation of the vessel.



"Medium Cruise Ship" means a passenger ship, used commercially for pleasure cruises, that provides overnight accommodations to passengers, and is authorized by the Coast Guard to carry 100 to 499 passengers.

"Mid-Ocean" means waters greater than 200 nm from any shore..

"Mile" means nautical mile as used in this permit, or 6076.1 feet or 1.852 kilometers.

"Motor Gasoline and Compensating Discharge" means the seawater taken into, and discharged from, motor gasoline tanks to eliminate free space where vapors could accumulate. *[source: 40 C.F.R 1700.4]*

"NANPCA" means the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. *[source: 33 C.F.R. 151.2025]*

"NBIC" means the National Ballast Water Information Clearinghouse operated by the Coast Guard and the Smithsonian Environmental Research Center as mandated under NISA. *[source: 33 C.F.R. 151.2025]*

"NISA" means the National Invasive Species Act of 1996, which reauthorized and amended NANPCA. *[source: 33 C.F.R. 151.2025]*

"Non-Oily machinery wastewater" means the combined wastewater from the operation of distilling plants, water chillers, valve packings, water piping, low- and high-pressure air compressors, propulsion engine jacket coolers, fire pumps, and seawater and potable water pumps. *[modified from: 40 C.F.R 1700.4]*

"Non-toxic" soaps, cleaners, and detergents means these materials which do not exhibit potentially harmful characteristics as defined by the Consumer Product Safety Commission regulations found at 16 CFR Chapter II, Subchapter C, Part 1500.

"Noxious Liquid Substance" ("NLS") has the same meaning given that term by 33 CFR Part 151, Subpart A.

"Oil" means oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. *[source: 33 CFR 154.105]*

"Oil in quantities that may be harmful" means any discharge of oil having the effects identified in 40 CFR 110.3, provided that this term does not include those discharges specified in 40 CFR 110.5(a) – (c).

"Oily mixture" means a mixture, in any form, with any oil content, including, but not limited to: (1) slops from bilges; (2) slops from oil cargoes (such as cargo tank washings, oily waste, and oily refuse; (3) oil residue; and (4) oily Ballast Water from cargo or fuel oil tanks. *[source: 33 CFR 151.05]*

"Owner or operator" and "Owner/Operator" mean the owner or operator of any facility or activity subject to regulation under the NPDES program. For purposes of this permit, an "operator" means a party, including a charterer by demise, who:

- (1) has operational control over vessel activities, including the ability to modify those activities; or
- (2) has day-to-day operational control of those activities that are necessary to ensure compliance with the permit or to direct workers to carry out activities required to comply with the permit.

"Pacific Coastwise Trade" means vessels engaged in coastwise trade along the Pacific Coast of the United States, operating in and between ports in Alaska, California, Oregon, and Washington.

"Pacific Nearshore Voyages" means voyages by any vessels engaged in the Pacific Coastwise trade and vessels transiting between Pacific Ports that travel between more than one Captain of the Port Zone, and all other vessels that sail from foreign, non U.S. Pacific, Atlantic, or Gulf of Mexico ports, which do not sail further than 200 nm from any shore, and that discharge or will discharge ballast



water into the territorial sea or inland waters of Alaska or of the west coast of the continental United States.

"Person" means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. *[source – 40 CFR Part 122.2]*

"Phosphate Free" soaps, cleaners, and detergents means these materials which contain, by weight, 0.5% or less of phosphates or derivatives of phosphates.

"Photographic Laboratory Drains" means the drains containing laboratory wastewater resulting from processing of photographic film. *[adapted from: 40 C.F.R 1700.4]*

"Port" see "In Port"

"Port or place of departure" means any port or place in which a vessel is anchored or moored. *[source: 33 C.F.R. 151.2025]*

"Port or place of destination" means any port or place to which a vessel is bound to anchor or moor. *[source: 33 C.F.R. 151.2025]*

"Recreational vessel" means a "vessel" being manufactured or operated primarily for pleasure or leased, rented, or chartered to another for the latter's pleasure. *[source: 46 USC 2101(25)]*

"Saltwater flushing" means the addition of "mid-ocean" (in the case of 2.2.3.7) or "coastal exchange zone" (in Part 2.2.3.8) water to empty ballast water tanks; the mixing of the added water with residual ballast water and sediment through the motion of the vessel; and the discharge of the mixed water until loss of suction, such that the resulting residual water remaining in the tank has either a salinity greater than or equal to 30 parts per thousand (ppt) or a salinity concentration equal to the ambient salinity of the location where the uptake of the added water took place.

"Seawater Cooling Overboard Discharge" means the discharge of seawater from a dedicated system that provides noncontact cooling water for other vessel systems. *[source: 40 C.F.R 1700.4]*

"Seawater Piping Biofouling Prevention" means the discharge of seawater containing additives used to prevent the growth and attachment of biofouling organisms in dedicated seawater cooling systems on selected vessels. *[source: 40 C.F.R 1700.4]*

"Sewage" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels, except that with respect to commercial vessels on the Great Lakes, this term includes galley, bath, and shower water.

"Sonar Dome Discharge" means the leaching of antifoulant materials into the surrounding seawater and the release of seawater or freshwater retained within the sonar dome. *[source: 40 C.F.R 1700.4]*

"Surface Vessel Bilgewater/Oily Water Separator Effluent" means the wastewater from a variety of sources that accumulates in the lowest part of the vessel (the bilge), and the effluent produced when the wastewater is processed by an oil water separator. *[source: 40 C.F.R 1700.4]*

"Technical Water" means water that is collected, generated or managed on board for uses other than potable water.

"Territorial sea" has the meaning assigned by section 502(8) of the Federal Water Pollution Control Act (33 U.S.C. 1362(8)).

"Treated Bilgewater" means bilgewater treated with an oily water separator and having oil concentrations less than 15 ppm and that does not result in a discharge of oil in quantities that may be harmful, pursuant to 40 CFR Part 110.

"Toxic and hazardous materials" means, for purposes of the VGP: any substance identified in 40 CFR 116.4; any toxic pollutant identified in 40 CFR 401.15; and any hazardous material as defined in 49 CFR 171.8"



V.SHIPS MANAGEMENT SYSTEM (VMS)

“United States” means the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands. *[source: 33 C.F.R. 151.2025]*

“Underwater Ship Husbandry Discharges” means the materials discharged during the inspection, maintenance, cleaning, and repair of hulls or hull appendages performed while the vessel is waterborne. *[modified from: 40 C.F.R 1700.4]*

“Untreated Bilgewater” means bilgewater that is not treated.

“Vessel” means every description of watercraft or other artificial contrivance being used as a means of transportation on “waters subject to this permit.” *[modified from CWA § 312(a)]*

“Vessels unable to voyage more than 1 mile from shore” means vessels operating in waters which do not physically allow them to voyage more than 1 nm from shore (e.g. underway on inland river systems) or vessels which do not possess required certifications from the Coast Guard to operate more than 1 nm from shore.

“Visible Sheen” means a “silvery” or “metallic” sheen, gloss, or increased reflectivity; visual color; iridescence, or oil slick on the surface. *[Source: 58 FR 12507].*

“Waters subject to this permit” means “waters of the US” as defined in as 40 CFR 122.2 and extends to the outer reach of the 3 mile territorial sea as defined in section 502(8) of the CWA, unless otherwise excluded from coverage by Part 6 of the permit.

“Welldeck Discharges” means the water that accumulates from seawater flooding of the docking well (welldeck) of a vessel used to transport, load, and unload amphibious vessels, and from maintenance and freshwater washings of the welldeck and equipment and vessels stored in the welldeck. *[source: 40 C.F.R 1700.4]*

“You” means the “owner” or “operator” of a permitted vessel



EPA REGIONAL CONTACTS (8.0)

Refer to VGP - Appendix B

AREAS COVERED (9.0)

This permit is effective in Waters of the United States for any State, Territory, Indian Country, or the District of Columbia listed as covered under Part 6 of this permit. As states or tribes seek authorization to issue vessel permits, areas covered by this permit could change.

NOTICE OF INTENT (NOI) (10.0)

This is completed by Management Office.

NOTICE OF TERMINATION (NOT) (11.0)

This is completed by Management Office.

WATERS FEDERALLY PROTECTED WHOLLY OR IN PART FOR CONSERVATION PURPOSES (12.0)

Refer full list in VGP Section 12.0 (Appendix G)

ONE TIME REPORT (13.0)

Refer VGP Section 13.0 (Appendix H)

DISCHARGE MONITORING REPORT (14.0)

PROCEDURE FOR WHOLE EFFLUENT TOXICITY TESTING OF BALLAST WATER (15.0)

This applies to vessels with ballast treatment plants