VESSEL GENERAL PERMIT FOR DISCHARGES INCIDENTAL TO THE NORMAL OPERATION OF VESSELS (VGP)

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 USC 1251 et seq.), any owner or operator of a vessel being operated in a capacity as a means of transportation who:

- Is eligible for permit coverage under Part 1.2; and
- If required by Part 1.5.1, submits a complete and accurate Notice of Intent (NOI) or completes a Permit Authorization and Record of Inspection (PARI) form and retains it onboard the vessel

Is authorized to discharge in accordance with the requirements of this permit.

General effluent limits for all eligible vessels are given in Part 2. Further vessel class or type specific requirements are given in Part 5 for select vessels and apply in addition to any general effluent limits in Part 2. Specific requirements that apply in individual states and Indian Country Lands are found in Part 6. Definitions of permit-specific terms used in this permit are provided in Appendix A.

This permit becomes effective on December 19, 2013.

This permit and the authorization to discharge expire at midnight December 19, 2018.

Signed and issued this 28th day of March, 2013
Ira W. Leighton, Deputy Regional Administrator
EPA Region 1

Signed and issued this 28th day of March, 2013
Joan Leary Matthews, Director
Clean Water Division, EPA Region 2

Signed and issued this 28th day of March, 2013
Ramon Torres, Acting Director
Caribbean Environmental Protection Division
EPA Region 2

Signed and issued this 28th day of March, 2013
Jon M. Capacasa, Director
Water Protection Division, EPA Region 3

Signed and issued this 28th day of March, 2013
James D. Giattina, Director
Water Protection Division, EPA Region 4

Signed and issued this 28th day of March, 2013
Tinka G. Hyde, Director
Water Division, EPA Region 5

Signed and issued this 28th day of March, 2013
William K. Honker, Director
Water Quality Protection Division,
EPA Region 6

Signed and issued this 28th day of March, 2013
Karen Flournoy, Director
Water, Wetlands and Pesticides Division,
EPA Region 7

Signed and issued this 28th day of March, 2013
Derrith R. Watchman-Moore, Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance, EPA Region 8

Signed and issued this 28th day of March, 2013
John Kemmerer, Acting Director
Water Division, EPA Region 9

Signed and issued this 28th day of March, 2013
Daniel D. Opalski, Director
Office of Water and Watersheds, EPA Region 10

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1. COVERAGE UNDER THIS PERMIT

1.1 Permit Structure

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 A through K include definitions, the NOI form, the Notice of Termination (NOT) form, a list of waters federally protected for conservation purposes, the annual report form, DMR forms, the Permit Authorization and Record of Inspection (PARI) form, and supplemental information.

1.2 Eligibility

You must meet the following provisions to be eligible for coverage under this permit.

1.2.1 General Scope of this Permit

This permit is applicable to discharges incidental to the normal operation of a vessel identified in Part 1.2.2 into waters subject to this permit. These waters are "waters of the United States" as defined in 40 Code of Federal Regulations (CFR) §122.2 (extending to the outer reach of the 3 mile territorial sea as defined in section 502(8) of the CWA). This includes all navigable waters of the Great Lakes subject to the jurisdiction of the United States. Recreational vessels as defined in section 502(25) of the CWA are not subject to this permit. Such vessels are not subject to NPDES permitting under section 402 of the CWA, and are instead subject to regulation under section 312(o) of the CWA. EPA expects that most vessels seeking coverage under this permit will be greater than 79 feet in length; however, commercial fishing vessels and other non-recreational vessels less than 79 feet are also eligible for permit coverage under this permit or those vessels may seek coverage under EPA's small Vessel General Permit (sVGP), as available and appropriate. If auxiliary vessels or craft, such as lifeboats, rescue boats, or barges onboard larger vessels require NPDES permit coverage, they are eligible for coverage under this permit and are covered by submission of the NOI for the larger vessels. For purposes of recordkeeping, inspections, and reporting, auxiliary vessels may be considered as part of the same entity as the larger vessel. Nothing in this permit shall be interpreted to apply to a vessel of the Armed Forces as defined in section 312(a)(14) of the CWA.

1.2.2 Vessel Discharges Eligible for Coverage

Unless otherwise made ineligible under Part 1.2.3, the following discharge types are eligible for coverage under this permit:

1.2.2.1 Deck Washdown and Runoff and Above Water Line Hull Cleaning

1.2.2.2 Bilgewater/Oily Water Separator Effluent

1.2.2.3 Ballast Water

1.2.2.4 Anti-fouling Hull Coatings/Hull Coating Leachate

1.2.2.5 Aqueous Film Forming Foam (AFFF)

1.2.2.6 Boiler/Economizer Blowdown

1.2.2.7 Cathodic Protection

1.2.2.8 Chain Locker Effluent

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

1.2.2.10 Distillation and Reverse Osmosis Brine

1.2.2.11 Elevator Pit Effluent

1.2.2.12 Firemain Systems

1.2.2.13 Freshwater Layup

1.2.2.14 Gas Turbine Washwater

1.2.2.15 Graywater

Except that Graywater from commercial vessels within the meaning of CWA section 312 that are operating in the Great Lakes is excluded from the requirement to obtain an NPDES permit (see CWA section 502(6)), and thus is not within the scope of this permit.

1.2.2.16 Motor Gasoline and Compensating Discharge

1.2.2.17 Non-Oily Machinery Wastewater

1.2.2.18 Refrigeration and Air Condensate Discharge

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

1.2.2.20 Seawater Piping Biofouling Prevention

1.2.2.21 Boat Engine Wet Exhaust

1.2.2.22 Sonar Dome Discharge

1.2.2.23 Underwater Ship Husbandry

1.2.2.24 Welldeck Discharges

1.2.2.25 Graywater Mixed with Sewage from Vessels

1.2.2.26 Exhaust Gas Scrubber Washwater Discharge

1.2.2.27 Fish Hold Effluent

1.2.3 Limitations on Coverage

1.2.3.1 Discharges Not Subject to Former NPDES Permit Exclusion and Vessel Discharges Generated from Vessels when they are Operated in a Capacity Other than as a Means of Transportation

Discharges that are outside the scope of the former exclusion from NPDES permitting for discharges incidental to the normal operation of a vessel as set out in 40 CFR §122.3(a), as in effect on December 18, 2008, are ineligible for coverage under this permit. This permit does not apply to any vessel when it is operating in a capacity other than as a means of transportation. For any discharges identified in this permit, discharges are not eligible if they contain materials resulting from industrial or manufacturing processes onboard or other materials not derived from the normal operations of a vessel.

Vessels when they are being used as an energy or mining facility, a storage facility, a seafood processing facility, or when secured to the bed of waters subject to this permit or to a buoy for the purpose of mineral or oil exploration or development are not eligible for coverage under this permit. Furthermore, "floating" craft that are permanently moored to piers, such as "floating" casinos, hotels, restaurants, bars, etc. are not covered by the former vessel exclusion and would not be covered by this vessel permit.

1.2.3.2 Sewage

Discharges of sewage from vessels, as defined in CWA section 502(6) and 40 CFR §122.2, are not required to obtain NPDES permits. Instead, these discharges are regulated under section 312 of the CWA and 40 CFR Part 140 and 33 CFR Part 159. Under CWA section 312(a)(6), the definition of sewage includes graywater discharges from "commercial vessels" (as defined in CWA section 312(a)(10)) operating on the Great Lakes. If a vessel operating on the Great Lakes is not a "commercial vessel" as defined in CWA section 312(a)(10), the vessel's graywater discharges are eligible for coverage under this permit, and are subject to the additional permit requirements in Part 2.2.15.1.

1.2.3.3 Used or Spent Oil

Discharges of used or spent oil no longer being used for their intended purposes are not eligible for coverage under this permit.

1.2.3.4 Garbage or Trash

Discharges of rubbish, trash, garbage, or other such materials discharged overboard are not eligible for coverage under this permit. "Garbage" includes discharges of bulk dry cargo residues as defined at 33 CFR §151.66(b) (73 Fed. Reg. 56492 (September 29, 2008)) and agricultural cargo residues. Discharges of garbage are subject to regulation under 33 CFR Part 151, Subpart A.

1.2.3.5 Photo-Processing Effluent

Discharges from photo-processing operations are not eligible for coverage under this permit.

1.2.3.6 Effluent from Dry Cleaning Operations

Discharges of spent or unused effluent from dry cleaning operations are not eligible for coverage under this permit. This includes any spent or unused tetrachloroethylene (perchloroethylene) from these operations.

1.2.3.7 Discharges of Medical Waste and Related Materials

Discharges of medical waste as defined in 33 USC 1362(20) are not eligible for coverage under this permit. Discharges of spent or unused pharmaceuticals, formaldehyde, or other biohazards no longer being used for their intended purposes are not eligible for coverage under this permit.

For purposes of this permit, the liquid produced by dialysis treatment of humans is not deemed to be "medical waste," and, like other human body waste, is subject to regulation under CWA §312 if introduced into marine sanitation devices, or under VGP Part 2.2.25 if added to a blackwater system combined with a graywater system. The direct overboard discharge of such liquid without treatment is not eligible for coverage under this permit.

1.2.3.8 Discharges of Noxious Liquid Substance Residues

Discharges of noxious liquid substance residues subject to 33 CFR Part 151, Subpart A or 46 CFR §153.1102 are not eligible for coverage under this permit.

1.2.3.9 Tetrachloroethylene (Perchloroethylene) and Trichloroethylene (TCE) Degreasers

Discharges of tetrachloroethylene (perchloroethylene) and trichloroethylene (TCE) degreasers or other products containing tetrachloroethylene or trichloroethylene are not eligible for coverage under this permit.

1.2.3.10 Discharges Currently or Previously Covered by an another NPDES Permit

The following discharges are not eligible for coverage under this permit:

- Vessel discharges covered, as of the effective date of this permit, under an individual or a general NPDES permit other than the VGP, unless EPA

specifically allows coverage under Part 1.8.2, or otherwise provides written permission to be covered under this permit, or

- Discharges from vessels covered by any NPDES permit that has been or is in the process of being denied, terminated, or revoked by EPA or a state permitting authority (this does not apply to the routine reissuance of permits every five years).

1.3 Reserved

1.4 Permit Compliance

The CWA provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the CWA 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. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act similarly provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the CWA 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 pursuant to 18 USC §1001 or 18 USC §1519.

Permittees have a duty to comply with this permit consistent with 40 CFR §122.41(a), as incorporated by reference in Part 1.13 of this permit. Any noncompliance with the requirements of this permit constitutes a violation of the CWA and grounds for enforcement action consistent with provisions outlined in 40 CFR §122.41(a). 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 limits, constitutes a violation of this permit and the CWA. As such, any time periods specified for remedying noncompliance do not relieve parties of the initial underlying noncompliance. However, EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

To provide clarity for the permittee, 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.

1.5 Authorization under this Permit

1.5.1 How to Obtain Authorization

To obtain authorization to discharge under this permit, you must meet the Part 1.2 eligibility requirements. If your vessel meets the requirements under Part 1.5.1.1, and you were authorized to discharge under the 2008 VGP, you must submit an NOI to receive permit coverage seven days before the effective date of this permit to continue uninterrupted coverage. Vessels authorized to discharge under the 2008 VGP were vessels that had submitted an NOI or were not subject to the NOI requirement by Part 1.5.1.2 of the 2008 VGP. If you were not authorized to discharge under the 2008 VGP and your vessel meets the requirements under Part 1.5.1.1, you must submit an NOI to receive permit coverage at least 7 days or more than 30 days (as applicable) before discharging into waters subject to this permit (see Table 1 below). Owner/operators of vessels that meet the requirements under Part 1.5.1.2 are not required to submit NOIs. Instead these owner/operators must sign and maintain a copy of the PARI form.

1.5.1.1 Vessels Required to Submit Notices of Intent (NOIs)

If your vessel is greater than or equal to 300 gross tons or the vessel has the capacity to hold or discharge more than 8 cubic meters (2,113 gallons) of ballast water, you must submit a signed and certified, complete and accurate NOI in accordance with the requirements of Appendix E to receive coverage under this permit. Submission must be in accordance with the deadlines in Table 1.

If you are required to submit an NOI, you must submit your NOI using EPA's Electronic Notice of Intent (eNOI) system (www.epa.gov/npdes/vessels/eNOI) unless you meet one of the exemptions in Part 1.14 of this permit. EPA will post on the Internet, at www.epa.gov/npdes/vessels/eNOI, all NOIs processed. If you do not have an active NOI, before you commence discharging, you will be in violation of the permit.

Paper NOIs will only be accepted if you meet one of the electronic reporting exemptions found in Part 1.14 of this permit. However, even if accepted, there may be an extended waiting period for your authorization to discharge as compared to the waiting period for electronic submissions. As noted in the footnote to the Table, the Discharge Authorization Date may be delayed by EPA.

Table 1: NOI Submission Deadlines/Discharge Authorization Dates

Category	NOI Deadline	Discharge Authorization Date*
Vessels authorized to discharge under the 2008 Vessel General Permit (VGP)	No later than December 12, 2013 or 7 days prior to discharge into waters subject to this permit, whichever is later	For eNOIs: December 19, 2013 or, if not submitted by December 12, 2013, 7 days after complete NOI processed** by EPA For Paper NOIs: 30 days after complete NOI processed by EPA
New Owner/Operator of Vessel – transfer of ownership and/or operation of a vessel whose discharge is previously authorized under this permit	By date of transfer of ownership and/or operation	Date of transfer or date EPA processes NOI, whichever is later
New vessels delivered to owner or operator after December 19, 2013	For vessels submitting eNOIs: 7 days prior to discharge into waters subject to this permit For vessels submitting Paper NOIs: At least 30 days prior to discharge into waters subject to this permit	For eNOIs: 7 days after complete NOI processed by EPA For Paper NOIs: 30 days after complete NOI processed by EPA
Existing vessels delivered to owner or operator after December 19, 2013 that were not previously authorized under this permit	For vessels submitting eNOIs: 7 days prior to discharge into waters subject to this permit For vessels submitting Paper NOIs: At least 30 days prior to discharge into waters subject to this permit	For eNOIs: 7 days after complete NOI processed by EPA For Paper NOIs: 30 days after complete NOI processed by EPA

* Based on a review of your NOI or other information, EPA may delay the discharge authorization date for further review, or may deny coverage under this permit and require submission of an application for an individual NPDES permit, as detailed in Part 1.8 of the permit. In these instances, EPA will notify you in writing of the delay or the request for submission of an individual NPDES permit application. If EPA requires an individual permit for an existing vessel previously covered by this general permit, EPA will allow the permittee a reasonable amount of time to obtain individual permit coverage before their general permit coverage terminates.

** NOI processing means that a complete electronic NOI has been submitted and successfully signed and certified by the permittee, or in the case of a paper NOI, that EPA has received your NOI and input the information into its electronic system. Submitting a paper NOI may result in processing delays dependent upon the volume of NOIs received by EPA.

1.5.1.2 Vessels Not Required to Submit Notices of Intent (NOIs)

If your vessel is less than 300 gross tons and your vessel does not have the capacity to hold or discharge more than 8 cubic meters (2113 gallons) of ballast water, you do not need to submit an NOI. However, you must complete the PARI form found in Appendix K, and keep a copy of that form onboard your vessel at all times. Provisions for retaining an electronic copy of the PARI form are described in Part 4.2.1.

1.5.2 Continuation of this Permit

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with section 558(c) of the Administrative Procedure Act (5 USC 558(c)) and EPA's implementing regulations at 40 CFR §122.6 and remain in force and effect for discharges that were covered prior to expiration. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissuance or replacement of this permit, following your timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit; or
- Your submittal of a Notice of Termination (NOT); or
- Issuance of a new general permit that covers your vessel discharges or vessel type and provides you coverage without requiring you to submit an NOI to obtain coverage; or
- Issuance or denial of an individual permit for the vessel's discharges; or
- A formal permit decision by EPA not to reissue this general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

1.6 Terminating Coverage

1.6.1 Terminating Coverage for Vessels Required to Submit a Notice of Intent (NOI)

1.6.1.1 Submitting a Notice of Termination (NOT)

If you wish to terminate coverage under this permit, and you were required to file a NOI by Part 1.5.1.1, you must submit your NOT in accordance with Appendix F. Vessels holding a valid NOI are not required to terminate their NOI when they move in and out of waters subject to the VGP, or when they are engaged in industrial activity and subject to another NPDES permit while conducting those activities.

If you were required to file a NOI by Part 1.5.1.1, you may use the eNOI system to file your NOT, available at www.epa.gov/npdes/vessels/eNOI. Your authorization to discharge under this permit terminates at 11:59 pm on the day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/vessels/eNOI). If you submit a NOT without meeting at least one of the conditions identified in Part 1.6.1.2, then your NOT is not valid. You will continue to be responsible for discharges from your vessel until you have submitted a valid NOT and it is posted on EPA's website, unless permit coverage is terminated without a NOT pursuant to Part 1.6.2 or 1.8.

1.6.1.2 When to Submit a NOT

If you were required to submit a NOI pursuant to Part 1.5.1 to be released from the requirements of this permit, you must submit a NOT within 30 days after one or more of the following conditions have been met:

- A new owner or operator has taken over responsibility for the vessel; or
- You have permanently ceased operating the vessel in waters subject to this permit and there are no longer vessel discharges in such waters; or
- You have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit, unless you were directed to obtain this coverage by EPA in accordance with Part 1.8.1.

1.6.2 Terminating Coverage for Vessels not Required to Submit a Notice of Intent (NOI)

For vessels that are not required to submit a NOI under Part 1.5.1.2, termination of coverage is automatic if any of the following conditions are met:

- A new owner or operator has taken over responsibility for the vessel; or
- You have permanently ceased operating the vessel in waters subject to this permit and there are no longer vessel discharges; or
- You have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit.

1.7 Certification

The NOI, NOT, the VGP PARI Form, and any reports (including any monitoring data) submitted to EPA must include the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

All other documentation required under this permit, but not required to be submitted to EPA, must be signed and dated by the person preparing the documentation.

1.8 Alternative Permits

1.8.1 EPA Requiring Coverage under an Alternative Permit

Pursuant to 40 CFR §122.28(b)(3), EPA may require you to apply for an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition EPA to take action under this paragraph. If EPA requires you to apply for an individual NPDES permit, EPA will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will provide application information. In addition, if you are an existing permittee authorized to discharge under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit, or the alternative general permit as it applies to you, coverage under this general permit will terminate. EPA may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application as required by EPA, then your coverage under this permit is terminated at midnight on the day specified by EPA as the deadline for application submittal. In addition, if EPA denies your application for an individual NPDES permit, you are also not authorized to discharge under this general permit. EPA may take enforcement action for any unpermitted discharge.

When an individual NPDES permit is issued to you or you are authorized to discharge under an alternative NPDES general permit, your coverage under this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit. In this case (where EPA requires you to obtain coverage under an individual or alternative general permit), you are not required to file a NOT as discussed above.

1.8.2 Permittee Requesting Coverage under an Alternative Permit

You may request to be excluded from coverage under this general permit by applying for an individual permit per 40 CFR §122.28(b)(3)(iii). In such a case, you must submit an individual permit application in accordance with the requirements of 40 CFR §122.21, with reasons supporting the request, to EPA at the appropriate EPA Regional Office(s) listed in Appendix B of this permit, no later than 90 days after December 19, 2013. The request may be granted by issuance of an individual permit or authorizing coverage under an alternative general permit if your reasons are adequate to support the request. A source excluded from this general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source.

When an individual NPDES permit is issued to you or you are authorized to discharge under an alternative NPDES general permit, your authorization to discharge under this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.9 Permit Reopener Clause

1.9.1 Modification of the VGP

Permit modification or revocation will be conducted according to 40 CFR §§122.62, 122.63, 122.64, and 124.5.This permit is subject to modification in accordance with 40 CFR §§124.5 and 122.62. Grounds for such modification include receipt of new information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of permit issuance. With respect to ballast water discharges, new information that will be considered in determining whether to modify this permit includes, but is not limited to, data or information from permittees, the general public, states, academia, scientific or technical articles or studies, results of monitoring conducted under this permit, and whether the U.S. Coast Guard has received a written extension request pursuant to 33 CFR 151.2036 indicating that:

- Treatment technology has improved such that these improved technologies would have justified the application of significantly more stringent effluent limitations or other permit conditions had they been known at the time of permit issuance;
- Treatment technologies known of at the time of permit issuance perform better than understood at the time of permit issuance such that this improved performance would have justified the application of significantly more stringent effluent limitations or other permit conditions had this been understood at the time of permit issuance;
- Treatment technology for a certain vessel(s) will not be available within the timeframe specified in Part 2.2.3.5.2, Table 6, such that this information would have justified the imposition of a different implementation date had it been known at the time of permit issuance.
- Scientific understanding of pollutant effects or of invasion biology has evolved such that this new information would have justified the application of significantly more stringent effluent limitations or other permit conditions had this been understood at the time of permit issuance; or
- The cumulative effects of any discharge authorized by the VGP on the environment are unacceptable.

Regarding implementation dates of the limits found in Part 2.2.3.5 of the VGP, EPA advises that where the U.S. Coast Guard has granted or denied an extension request pursuant to 33 CFR 151.2036, that information will be considered by EPA, but is not binding on EPA.

1.9.2 Water Quality Protection

EPA may require you to obtain an individual permit in accordance with Part 1.8 of this permit for cause. This may happen, for example, if there is evidence that the discharges authorized by this permit cause or have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard in the receiving water body or downstream waters. Similarly, EPA may modify this permit to include different limitations and/or requirements for cause.

1.10 Severability

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit remains in effect to the extent possible; in the event that any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

1.11 State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.

1.12 Federal Laws

Nothing in this permit shall be construed to affect, supersede, or relieve the vessel owner or operator of any otherwise applicable requirements or prohibitions under other provisions of federal law or regulations.

1.13 Standard Permit Conditions

As provided by the introductory text of 40 CFR §122.41 and the regulation at 40 CFR §122.43(c), all of the standard permit conditions published in federal regulations at 40 CFR §122.41 are hereby incorporated by reference.

1.14 Electronic Reporting Requirement

All vessel owner operators must submit all NOIs, NOTs, annual reports, Discharge Monitoring Reports (DMRs), and other reporting information as appropriate electronically, unless the vessel owner/operator meets one of the following exemptions:

For purposes of the VGP, temporary waivers from electronic reporting may be granted if:

- EPA has not yet implemented such electronic reporting;
- If the owner/operator's headquarters is physically located in a geographic area (i.e., zip code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission and the vessel never travels to any areas with adequate broadband Internet access; or
- If the vessel owner/operator has issues regarding available computer access or computer capability.

You may check www.epa.gov/npdes/vessels to determine whether electronic reporting for the relevant document has been implemented. If that website indicates that electronic reporting for the document to be submitted is not yet available, you do not need to seek a waiver for a paper submission.

If you wish to obtain waiver for submitting your reports electronically, you must submit a request to EPA at the following address:

EPA NPDES Vessels Team
Attn: Vessel Reporting Waiver Requests
Mail Code 4203M
1200 Pennsylvania Ave. NW
Washington DC, 20004

In requesting a waiver from electronic reporting, you must document which exemption you believe you meet, and provide evidence supporting these claims and a copy of your completed NOI or PARI form (as applicable). A waiver may only be considered granted once you receive written confirmation from EPA or its authorized representative.

EPA intends to make any ballast water monitoring information transmitted to the Agency in electronic form available to the public in electronic form.

1.15 Additional Notes

- All requirements in this permit to comply with statutes and regulations, other than CWA section 402 and its implementing regulations, refer to those authorities as codified as of the date of Federal Register notice announcing availability of this final permit. Furthermore, with respect to references to class society or flag state requirements, all references to requirements are to those as of the date of Federal Register notice announcing availability of this final permit.
- All requirements to comply with specified statutes include the requirement to comply with any applicable implementing regulations.
- Provisions stating that "EPA recommends" certain actions, or that you "should" take certain actions, constitute recommendations by the Agency and thus are not mandatory requirements of this permit.
- EPA intends to implement the VGP in accordance with the CWA as well as U.S. international legal obligations, including those obligations associated with a vessel's right to innocent passage as provided for under customary international law.
- EPA notes that vessel masters have the responsibility to ensure the safety and stability of the vessel and the safety of the crew and passengers, and nothing in this permit is intended to interfere with their fulfillment of that responsibility. EPA further notes its regulations at 40 CFR 122.41(m)(4)(A) include a bypass provision which would address the situation of a shipboard emergency that endangers the safety of the vessel or its crew, specifically the provisions regarding the "diversion of waste streams from any portion of the treatment facility" where unavoidable to prevent loss of life, personal injury, or severe property damage. See 40 CFR 122.41(m)(4)(A) and Part 1.13 of this permit. Additionally, EPA has provided targeted safety exemptions to VGP permit requirements in Parts 2.2.3, 2.2.5, 2.2.6, 2.2.13, and 2.2.26 of the permit.

2. EFFLUENT LIMITS AND RELATED REQUIREMENTS

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 may 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 for the purpose of meeting limits set forth in this permit.

2.1 Technology-Based Effluent Limits and Related Requirements Applicable to all Vessels

You are required to meet the following effluent limits, regardless of the type of vessel you own or operate.

2.1.1 Material Storage

For cargoes or 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, you must 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 and consistent 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 (see Part 2.1.5). If water draining from storage areas comes in contact with oily materials, except for naturally occurring fish oils from fishing gear stored on deck, 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 when required by Coast Guard regulations, or if not subject to such requirement, use other effective methods to comply with Part 2.1.4 of this permit to prevent the discharge of any oils, including oily materials, into waters subject to this permit in quantities which may be harmful as defined in 40 CFR Part 110. This permit does not authorize the discharge of any oily water which might otherwise be inconsistent with requirements found in the Act to Prevent Pollution from Ships or under the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the protocol of 1978 (MARPOL 73/78).

2.1.2 Toxic and Hazardous Materials

Where consistent with vessel design and construction, you must locate toxic and hazardous materials in protected areas of the vessel to minimize exposure to ocean spray and precipitation, unless the Master determines this would interfere with essential vessel operations or safety of the

vessel or doing so would violate 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 (see Part 2.1.5). Any discharge made for the foregoing reasons must be documented consistent with Part 4.2. You must ensure 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.

2.1.3 Fuel Spills/Overflows

Fuel spills or overflows must not result in a discharge of oil in quantities that may be harmful, pursuant to 40 CFR Part 110. You must conduct all fueling operations using control measures and practices designed to minimize spills and overflows and ensure prompt containment and cleanup if they occur. Vessel operators must not overfill fuel tanks. For vessels with interconnected fuel tanks, fueling must be conducted in a manner that prevents overfilling and release from the system to the environment.

Vessels with air vents from fuel tanks must use spill containment or other methods to prevent or contain any fuel or oil spills. Large-scale fuel spills or overflows are not incidental to the normal operation of the vessel and are not authorized by this permit.

The following requirements apply to fueling of auxiliary vessels such as lifeboats, tenders or rescue boats deployed from "host" vessels subject to this permit:

- While fueling, examine the surrounding water for the presence of a visible sheen. If a visible sheen is observed, as a result of your fueling, it must be cleaned up immediately.
- It is important to know the capacity of the fuel tanks before you begin fueling in order to prevent unintentionally overfilling the tank.
- Prevent overfilling and do not top off your fuel tanks.
- When possible, fill fuel tanks while boat is on shore or recovered from the water.
- When possible, fill portable tanks on shore or on the host vessel, not on the auxiliary vessel.
- Use an oil absorbent material or other appropriate device while fueling the auxiliary vessel to catch drips from the vent overflow and fuel intake.
- Regularly inspect the fuel and hydraulic systems for any damage or leaks.

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

2.1.4 Discharges of Oil Including Oily Mixtures

All discharges of oil, including oily mixtures, from ships 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 U.S. Coast Guard regulations found in 33 CFR §151.09 (hereinafter

referred to as "MARPOL vessels") must have concentrations of oil less than 15 parts per million (ppm) (as measured by EPA Method 1664 or other appropriate method for determination of oil content as accepted by the International Maritime Organization (IMO) (e.g. ISO Method 9377-2) or U.S. Coast Guard) before discharge. All MARPOL vessels must have a current International Oil Pollution Prevention Certificate (IOPP) issued in accordance with 33 CFR §§151.19 or 151.21. All other discharges of oil including oily mixtures must not contain oil in quantities that may be harmful, pursuant to 40 CFR Part 110.

2.1.5 Compliance with Other Statutes and Regulations

As required by 40 CFR §122.44(p), you 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.

Any discharge from your vessel must comply with sections 311 (33 USC 1321) of the CWA, the Act to Prevent Pollution from Ships (APPS 33 USC §§1905-1915), the National Marine Sanctuaries Act, (16 USC 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 USC §136 et seq.), and the Oil Pollution Act (OPA of 1990, 33 USC §2701-2720).

The US Code of Federal Regulations containing these provisions can be found at: www.gpoaccess.gov/ecfr/.

2.1.6 General Training

All owner/operators of vessels must ensure that the master, operator, person-in-charge, and crew members who actively take part in the management of incidental discharges or who may affect those discharges are adequately trained in implementing the terms of this permit. In addition, all owner/operators of vessels must ensure appropriate vessel personnel be trained in the procedures for responding to fuel spills and overflows, including notification of appropriate vessel personnel, emergency response agencies, and regulatory agencies. This training need not be formal or accredited courses; however, it is the vessel owners/operators' responsibility to ensure these staff are given the necessary information to conduct shipboard activities in accordance with the terms of this permit.

Vessel owners/operators must also meet all training-related recordkeeping requirements of Part 4.2 of this permit.

2.2 Effluent Limits and Related Requirements for Specific Discharge Categories

The requirements in Part 2.2 constitute technology-based effluent limitations and related requirements except where it is specifically noted that the requirements constitute water quality based limits.

2.2.1 Deck Washdown and Runoff and Above Water Line Hull Cleaning

Vessel owner/operators must minimize the introduction of on-deck debris, garbage, residue, and spill into deck washdown and runoff discharges. Before deck washdowns occur, you must broom

clean (or equivalent) exposed decks or use comparable management measures and remove all existing debris. When required by their class societies (e.g., oil tankers), their flag Administrations, or the U.S. Coast Guard, vessels must be fitted with and use perimeter spill rails and scuppers to collect the runoff for treatment. Where feasible, machinery on deck must have coamings or drip pans where necessary to collect any oily discharge that may leak from machinery and prevent spills. The drip pans must be drained to a waste container for proper disposal and/or periodically wiped and cleaned. Additionally, to reduce the risk of any leakage or spills of harmful oils into the aquatic environment, EPA strongly encourages the use of environmentally acceptable lubricants in all above deck equipment. The presence of floating solids, visible foam, halogenated phenol compounds, and dispersants, or surfactants in deck washdowns must be minimized. Vessel owners/operators must minimize deck washdowns while in port.

Vessel owners/operators must maintain their topside surface and other above water line portions of the vessel 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. Furthermore, vessel owners/operators must minimize residual paint droplets from entering waters subject to this permit whenever they are conducting maintenance painting. Possible minimization techniques include, but are not limited to, avoiding paint spraying in windy conditions or avoiding overapplication of paint. This permit does not authorize the disposal of unused paint into waters subject to this permit.

If deck washdowns or above water line hull cleaning will result in a discharge, they must be conducted with "minimally-toxic" and "phosphate free" cleaners and detergents as defined in Appendix A of this permit. Furthermore, cleaners and detergents should not be caustic and must be biodegradable.

2.2.2 Bilgewater/Oily Water Separator Effluent

All bilgewater discharges must be in compliance with the regulations in 40 CFR Parts 110 (Discharge of Oil), 116 (Designation of Hazardous Substances), and 117 (Determination of Reportable Quantities for Hazardous Substances) and 33 CFR §151.10 (Control of Oil Discharges). In addition:

- Vessel operators may not use dispersants, detergents, emulsifiers, chemicals, or other substances that remove the appearance of a visible sheen[1] in their bilgewater discharges. This requirement does not prohibit the use of these materials in machinery spaces for the purposes of maintaining or cleaning equipment.
- Except in the case of flocculants or other required additives (excluding any dispersants or surfactants) used to enhance oil/water separation during processing (after bilgewater has been removed from the bilge), vessel operators may not add substances that drain to the bilgewater that are not produced in the normal

[1] 40 CFR §110.4 states that: "addition of dispersants or emulsifiers to oil to be discharged that would circumvent the provisions of this part is prohibited." 33 CFR §151.10 (g) states that: "No discharge into the sea shall contain chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this regulation.

operation of a vessel. The use of oil solidifiers, flocculants, or other required additives are allowed only as part of an oil water separation system provided they do not alter the chemical make-up of the oils being discharged and any discharge of such materials into waters subject to this permit must be minimized. Routine cleaning and maintenance activities associated with vessel equipment and structures are considered to be normal operation of a vessel if those practices fall within normal marine practice.

- All vessels must minimize the discharge of bilgewater into waters subject to this permit. This can be done by minimizing the production of bilgewater, disposing of bilgewater on shore where adequate facilities exist, or discharging into waters not subject to this permit (i.e., more than 3 nautical miles [nm] from shore) for vessels that regularly travel into such waters. Though not regulated under this permit, EPA notes that discharges of bilgewater outside waters subject to this permit (i.e., more than 3 nm from shore) are regulated under Annex I of the International Convention for the Prevention of Pollution from Ships as implemented by the Act to Prevent Pollution from Ships and U.S. Coast Guard regulations found in 33 CFR part 151.
- Vessels greater than 400 gross tons shall not discharge untreated oily bilgewater (i.e., bilgewater not treated with an onboard separator or bilgewater with a concentration of oil greater than 15 ppm) into waters subject to this permit.
- Vessels greater than 400 gross tons that regularly sail outside the territorial sea (at least once per month) shall not discharge treated bilgewater within 1 nm of shore if technologically feasible (e.g., holding would not impact safety and stability, would not contaminate other holds or cargo, or would not interfere with essential operations of the vessel). Any discharge which is not technologically feasible to avoid must be documented as part of the requirements in Part 4.2 and reported to EPA as part of the vessel's annual report.
- Vessels greater than 400 gross tons shall not discharge treated bilgewater into waters referenced in Appendix G 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 reported to EPA as part of the vessel's annual report.
- For vessels greater than 400 gross 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 the vessel is 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 and reported to EPA as part of the vessel's annual report.

2.2.2.1 Bilgewater Monitoring

"New Build" vessels built after December 19, 2013 greater than 400 gross tons that may discharge bilgewater into waters subject to this permit must monitor (i.e., sample and analyze)

their bilgewater effluent at least once a year for oil and grease content. That monitoring can be conducted as part of the vessel's annual survey.

To demonstrate treatment equipment maintenance and compliance with this permit, the bilgewater sample must be analyzed for oil by either Method ISO 9377-2 (2000) Water Quality–Determination of Hydrocarbon Oil Index–Part 2: Method Using Solvent Extraction and Gas Chromatography (incorporation by reference, see 46 CFR §162.050–4) or EPA Method 1664. At the time of sample collection, the reading on the oil content meter (OCM) must be recorded such that the oil and grease concentration measured by the laboratory can be compared to the OCM.

If your analytical results show oil and grease concentrations of less than 5 ppm for two consecutive years, you need not sample and analyze subsequent years of permit coverage if:

- Your vessel uses an oily water separator capable of meeting a 5 ppm oil and grease limit, or you use an alarm which prevents the discharge of oil and grease above 5 ppm whenever you discharge in waters subject to this permit,
- You calibrate your OCM at least annually (calibrations during a vessel survey meet this requirement), and
- Your OCM never reads above 5 ppm during discharges into waters subject to this permit. If this information is recorded in the oil record book, you need not record these data in other recordkeeping documentation.

Records of monitoring must be retained onboard for at least 3 years in the vessel's recordkeeping documentation and must include:

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The individual(s) who performed the analyses and any meter recalibration;
- The techniques or methods used for sample analyses;
- The results of such analyses and OCM readings.

2.2.2.2 Monitoring Reporting

For those vessels for which monitoring must be conducted, analytical and corresponding OCM monitoring data must be submitted at least once per calendar year no later than February 28 of the year after the data are collected. Additionally, if you have met the requirements in part 2.2.2.1 to waive analytical monitoring after two years, you must note your waiver qualifications on your report. Data may be submitted as part of the vessel's annual report (Appendix H) on the VGP bilgewater DMR.

2.2.3 Ballast Water

All discharges of ballast water must comply with the requirements in this permit as described below. Additionally, owner/operators of all vessels subject to coverage under this permit which are equipped with Ballast Tanks must comply with any additional BMPs in this section.

In addition, as a condition of this permit, all discharges of ballast water must also comply with applicable U.S. Coast Guard regulations found in 33 CFR Part 151.

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

2.2.3.1 Training

All owner/operators of vessels equipped with ballast water tanks must train the master, operator, person-in-charge, and crew members who actively take part in the management of the discharge or who may affect the discharge, on the application of ballast water and sediment management and treatment procedures. As part of Ballast Water Management Plans under 2.2.3.2, a stand-alone training plan, or other recordkeeping documentation, owner/operators must maintain a written training plan describing the training to be provided and a record of the date of training provided to each person trained. Persons required to be trained must be trained promptly upon installation of treatment technology and in the event of a significant change in ballast water treatment practices or technology.

2.2.3.2 Ballast Water Management Plans

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 ensure that those responsible for the plan's implementation understand and follow the vessel's ballast water management strategy. Owner/operators must make that plan available upon request to EPA or its authorized representative. Vessel owner/operators must assure that the master and crew members who actively take part in the management of the discharge or who may affect the discharge understand and follow the management strategy laid out in the plan.

At a minimum, all vessels must have a plan which outlines how they will meet the requirements of Part 2.2.3.3 of this permit. The plan must also include how vessels will comply with training requirements of 2.2.3.1 and meet all requirements in Parts 2.2.3.3 through 2.2.3.8, as applicable. EPA notes that a Ballast Water Management Plan is also required by the United States Coast Guard by 33 CFR Part 151. Provided owner/operators meet the requirements discussed above, EPA expects that vessels will need one ballast water management plan to meet both EPA and USCG requirements.

2.2.3.3 Mandatory Ballast Water Management Practices: Management measures required of all vessel owner/operators

Masters, owners, operators, or persons-in-charge of all vessels equipped with ballast water tanks that operate in waters of the U.S. must:

- Avoid the discharge or uptake of ballast water in areas / into waters subject to this permit within, or that may directly affect, marine sanctuaries, marine preserves, marine parks, or coral reefs or other waters listed in Appendix G waters.
- 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., toxic algal blooms).
  - — Areas near sewage outfalls.
  - — Areas near dredging operations.
  - — Areas where tidal flushing is known to be poor or times when a tidal stream is known to be turbid.
  - — In darkness, when bottom-dwelling organisms may rise up in the water column.
  - — 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 (when not otherwise prohibited by applicable law) or under controlled arrangements in port, or at drydock.
- No discharge of sediments from cleaning of ballast tanks is authorized in waters subject to this permit.
- Where feasible, utilize the high sea suction when the clearance is less than 5 meters (approximately 15 feet) to the lower edge of the seachest or the vessel is dockside to reduce sediment intake.
- When feasible and safe, you must use your ballast water pumps instead of gravity draining to empty your ballast water tanks, unless you meet the treatment limits found in Part 2.2.3.5 of this permit.
- Minimize the discharge of ballast water essential for vessel operations while in the waters subject to this permit.

Suggested control measures to minimize the discharge of ballast water include, but are not limited to, transferring ballast water between tanks within the vessel in lieu of ballast water discharge. Another option is to use public water supply water for ballast or, for vessels not subject to the numeric limits in Part 2.2.3.5 of this permit, use water from a potable water generator as ballast. EPA notes that vessels not subject to the numeric limits in Part 2.2.3.5 of this permit should endeavor to take all reasonable steps to minimize or eliminate the discharge of untreated ballast water.

2.2.3.4 Mandatory Ballast Water Management Practices for "Lakers"

"Lakers" must meet the following additional ballast water management requirements:

- Each owner/operator must perform annual inspections on their vessel to assess sediment accumulations. Removal of sediment, if necessary, must be carried out. Each vessel owner/operator must develop sediment removal policies as part of the Ballast Water Management Plan. Records of sediment removal and disposal (including facility name and location and all invoices) shall be kept onboard the vessel. EPA notes the discharge of sediments from cleaning of ballast tanks is not authorized in waters subject to this permit (see Part 2.2.3.3 of this permit).
- When practical and safe, vessels must minimize the ballast water taken up at dockside. This will typically mean limiting uptake to the amount of ballast water required to safely depart the dock and then complete ballasting in deeper water.

- The vessel sea chest screen is the first line of defense in keeping large living organisms out of the vessel ballast water tanks. Owner/operators of Laker vessels must perform annual inspections of their sea chest screens to assure that they are fully intact. The inspection must assure that there is no deterioration which has resulted in wider openings or holes in the screen. If the screen has deteriorated such that there are wider openings than the screen design, the vessel owner operator must repair or replace the screen. Any repairs must be of sufficient quality that they are expected to last at least one year.

If a Laker meets the permit limits found in Part 2.2.3.5 of this permit, the vessel owner/operator is not required to conduct the additional management measures found in Part 2.2.3.4, but must still comply with Part 2.2.3.3.

2.2.3.5 Ballast Water Numeric Discharge Limitations

Owners/operator must meet the following ballast water discharge limits (expressed as instantaneous maximum) consistent with the schedule found in Part 2.2.3.5.2, unless you are excluded from these requirements by Parts 2.2.3.5.3 or 2.2.3.8 of this permit:

1. For organisms greater than or equal to 50 micrometers in minimum dimension: discharge must include fewer than 10 living organisms per cubic meter of ballast water.
2. For organisms less than 50 micrometers and greater than or equal to 10 micrometers: discharge must include fewer than 10 living organisms per milliliter (mL) of ballast water.
3. Indicator microorganisms must not exceed:
   (i) For Toxicogenic *Vibrio cholerae* (serotypes O1 and O139): a concentration of less than 1 colony forming unit (cfu) per 100 mL.
   (ii) For *Escherichia coli*: a concentration of fewer than 250 cfu per 100 mL.
   (iii) For intestinal enterococci: a concentration of fewer than 100 cfu per 100 mL.

These limits may be met by using one of the ballast water management measures in Parts 2.2.3.5.1.1, 2.2.3.5.1.2, 2.2.3.5.1.3, or 2.2.3.5.1.4.

Note: EPA will continue to explore new technologies with industry and states, and when warranted, will make this numeric limit more stringent in the future (see discussion in section 4.4.3.5.1 of the fact sheet). Additionally, EPA encourages and anticipates, as part of this process, that states will continue to work with industry to test and provide opportunities for new technologies.

2.2.3.5.1 Ballast Water Management Measures

In addition to the other requirements of this permit, owner/operators of vessels subject to the numeric discharge limits in Part 2.2.3.5 of this permit must meet those limits. Vessel owner/operators may use one of the four following ballast water management methods to meet the numeric discharge limits in Part 2.2.3.5:

2.2.3.5.1.1 Ballast Water Management using a Ballast Water Treatment System

Vessel owner/operators utilizing a ballast water treatment system (BWTS) must use a system which has been shown to be effective by testing conducted by an independent third party laboratory, test facility or test organization. A system that has been type approved by the U.S. Coast Guard under 46 CFR Part 162.060 or received "Alternative Management System" designation by the U.S. Coast Guard under 33 CFR 151.2026 will be deemed to meet this "shown to be effective" provision. Once the effluent limits in Part 2.2.3.5 become applicable to a vessel (see part 2.2.3.5.2 for applicability timeframes for specified categories of vessels), owners/operators of vessels utilizing a ballast water treatment system to meet the requirements of Part 2.2.3.5 of this permit must meet those limits as an instantaneous maximum.

Additionally, following installation of a BWTS, the master, owner, operator, agent, or person in charge of the vessel must maintain the BWTS in accordance with all manufacturer specifications. Furthermore, all treatment must be conducted in accordance with the BWTS manufacturer's instructions. The BWTS must be used prior to any discharge of ballast water to waters of the U.S, either at uptake, in tank, or during discharge according to the treatment system manufacturer's instructions. EPA notes that compliance with these provisions does not ensure compliance with applicable Coast Guard regulations found in 33 CFR Part 151.

2.2.3.5.1.1.1 Monitoring From Vessels Using Ballast Water Treatment Systems

The monitoring requirements in Part 2.2.3.5.1.1 apply to ballast water discharges from vessels employing ballast water treatment systems that are used to achieve the effluent limitations of Part 2.2.3.5. The monitoring is divided into three components. The first, in Part 2.2.3.5.1.1.2, is required of all vessels and generally requires monitoring equipment performance to assure the system is fully functional. Vessels conducting this monitoring also must adequately calibrate their equipment as required in Part 2.2.3.5.1.1.3. The second component, in Part 2.2.3.5.1.1.4 requires monitoring from all ballast water systems for selected biological indicators. The third component, in part 2.2.3.5.1.1.5 requires monitoring of the ballast water discharge itself for biocides and residuals to assure compliance with the effluent limitations established in part 2.2.3.5 of the permit, as applicable.

2.2.3.5.1.1.2 Ballast Water System Functionality Monitoring

Ballast water treatment systems use physical and/or chemical processes, or a combination thereof, to achieve reductions in living organisms. The use of physical/chemical indicators of treatment performance verifies that the ballast water treatment system is operating according to the manufacturers' operating specifications. To assess the BWTS functionality, monitoring indicators of the BWTS functionality is required at least once per month for specific parameters that are applicable to your system. The required parameters to be monitored, with appropriate monitoring approaches are contained in Appendix J. For example, if your system uses a filter and chlorine dioxide, you must meet the requirements for systems using both filters and chlorine dioxide. If your system uses cavitation, UV, and hypochlorite generation, you must monitor conditions for all three treatment units. EPA expects that most ballast water treatment systems will make use of at least two physical and/or chemical processes.

Most ballast water treatment systems have control and self diagnostic equipment such as sensors that continuously measure treatment parameters to verify performance. The metrics to be monitored are based on common approaches used in ballast water treatment systems. As new approaches become commonly available, EPA will develop new monitoring parameters as appropriate.

2.2.3.5.1.1.3 Ballast Water monitoring equipment calibration

At a minimum, all applicable sensors and other equipment must be calibrated annually. Additionally, all applicable sensors and other control equipment must be calibrated no less frequently than recommended by the sensor or other equipment manufacturer, or by the ballast water treatment system manufacturer or when warranted based on device drift from a standard or calibrated setting. EPA expects many sensor types (e.g., pH probes, TRO sensors, turbidity sensors) will need to be calibrated on a more frequent basis. Calibration of the sensors and equipment can be conducted on-board the vessel or they can be removed and shipped to the manufacturer or other vendor for calibration. During the period when the sensors are not installed (or otherwise inoperable thus significantly compromising the performance of the ballast water treatment system), the vessel must not discharge ballast water.

2.2.3.5.1.1.4 Effluent Biological Organism Monitoring

Once a ballast water treatment system is required to be installed onboard a vessel (see part 2.2.3.5.2 for applicability and timeframe for installation of such vessels), any ballast water discharges from such vessels will be subject to the effluent limitations in Part 2.2.3.5 of this permit. To ascertain compliance with the effluent limitation in that section, EPA is establishing the following biological indicator compliance monitoring. These samples can be taken by collecting a small volume sample from the ballast water discharge (consistent with the sampling guidance found in EPA's Generic Protocol for the Verification of Ballast Water Treatment Technology) and analyzing the sample for concentrations of certain biological indicator parameters. Analysis of concentrations of indicator organisms must include monitoring for the parameters in Table 2 below utilizing the methods in that table, or other EPA Part 136 methods as applicable.

Table 2: Indicator Organism Monitoring Parameters

Measurement	Instrument or Analysis	EPA Method	Standard Method	ASTM	ISO	Other
Total heterotrophic bacteria	Plate counts		SM 9215	ASTM D5465	ISO 6222:1999	
E. coli	Selective substrate	EPA Method 1103.1 and 1603	SM 9223B	ASTM D5392 – 93	ISO 9308-1:2000	Colilert®
Enterococci	Selective substrate	EPA Method 1106.1 and 1600	SM 9230C	ASTM D5259 – 92(2006)	ISO 7899-2:2000	Enterolert®

Biological indicator compliance monitoring sampling of ballast water effluent must be conducted 2 times during the first year the system is installed or used for vessels with devices for which

high quality data are available. For vessels with high quality data, if sampling results are below permit limits for two consecutive events, the vessel owner/operator may reduce monitoring to one time per year after the first year. However, if the vessel owner/operator exceeds a permit limit on any sampling event, they must return to monitoring two times per year until they have two additional results below permit limits. For vessels for which high quality data are not available, monitoring must be conducted 4 times per year. For all vessels, one of those samples may be conducted as part a vessel's annual or other survey, and during the first year, one of those sampling events may be conducted as part of the installation of the system to ensure it is functioning properly. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation consistent with Part 4.2. Each sample must be tested independently and the individual results must be reported and not averaged. Monitoring must be conducted at least 14 days apart from different discharge events.

Devices for which high quality data are available means either:

a) any ballast water treatment system type approved by the United States Coast Guard under 46 CFR Part 162.060 or granted alternate management system status by the US Coast Guard under 33 CFR 151.2026; or

b) any ballast water treatment system:

(i) type approved by a foreign administration;

(ii) for which efficacy testing was conducted by an independent third party testing organization, either in accordance with the ETV protocol or in a manner consistent with the ETV protocol with respect to QA/QC procedures, the use of validated methods including appropriate volumes of representative samples, and full description and documentation of test procedures, results and analyses; and

(iii) all Active Substance or Biocide data (e.g., the full data package as submitted to the International Maritime Organization for approval) have all been made available to the US EPA.

2.2.3.5.1.1.5 Requirements and Effluent Limitations for BWTS that use Active Substances (e.g., biocides)

2.2.3.5.1.1.5.1 Authorization of Residual Biocides Associated with Ballast Water Treatment Systems

Many ballast water treatment systems produce or use biocides as an agent to reduce living organisms present in the ballast water tank. In order to be eligible for coverage under this permit, any ballast water treatment system must not use any biocide that is a "pesticide" within the meaning of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C §136 *et seq*.) unless that biocide has been registered for use in ballast water treatment under such Act. The requirement in the preceding sentence does not apply if such biocide is generated solely by the use of a "device" on board the same vessel as the ballast water to be treated by the biocide, as the term "device" is defined in the Federal Insecticide, Fungicide, and Rodenticide Act. In addition, if the ballast water treatment system uses or generates biocides and you will discharge ballast

water treated with biocides into waters subject to this permit, you must meet one of the following conditions to be eligible for permit coverage.

The discharge of biocides or residuals may not exceed the following instantaneous maximum limits expressed as micrograms per liter (µg/l).

Table 3: Maximum Ballast Water Effluent Limits for Residual Biocides

Biocide or Residual	**Limit** ***(instantaneous maximum)***
Chlorine Dioxide	200 µg/l
Chlorine (expressed as Total Residual Oxidizers (TRO as TRC))	100 µg/l
Ozone (expressed as Total Residual Oxidizers (TRO as TRC))	100 µg/l
Peracetic Acid	500 µg/l
Hydrogen Peroxide (for systems using Peracetic Acid)	1,000 µg/l

Any other biocides or derivatives may not exceed acute water quality criteria listed in EPA's 2009 National Recommended Water Quality Criteria, and any subsequent revision, at the point of ballast water discharge. This document can be found at: http://water.epa.gov/scitech/swguidance/standards/criteria/current/upload/nrwqc-2009.pdf. Tables summarizing the subsequent revisions can be found at: http://water.epa.gov/scitech/swguidance/standards/criteria/current/. Discharges of biocide residuals or derivatives must also meet monitoring requirements under Part 2.2.3.5.1.1.1, and reporting and recordkeeping requirements in Part 2.2.3.5.1.1.6.

If the biocide used or produced by your system and its derivatives is not listed in the previous table or found in EPA's National Recommended Water Quality Criteria, you must notify EPA at least 120 days in advance of its use and provide any associated aquatic toxicity data for that biocide or its derivatives of which you are aware. EPA may impose additional limitations on a treatment system-specific basis, or require you to obtain coverage under an individual permit, if necessary. EPA may inform the vessel owner/operator of specific requirements. You may also seek coverage under an individual NPDES permit pursuant to Part 1.8.2 of this permit. You may not discharge the biocide at issue until you receive a response from EPA to your notification.

2.2.3.5.1.1.5.2 Residual Biocide and Derivative Monitoring

For vessels subject to Part 2.2.3.5.1.1.1, you must conduct monitoring of the vessel ballast water discharge for any residual biocides or derivatives used in the treatment process, in part to demonstrate compliance with the conditions in Part 2.2.3.5.1.1.5.1. For instance, if chlorine is the biocide used in the ballast water treatment, you must test for residual chlorine in the vessel ballast water discharge to see if it complies with the standards in Part 2.2.3.5.1.1.5.1.

In order to demonstrate that residual biocides or derivatives are in compliance with this permit, that substantial quantities of harmful byproducts are not produced, and provide EPA with needed information about system functionality, the vessel operator initially must take samples according to the following:

Table 4: Monitoring Schedule for Residual Biocides or Derivatives of the Residual Biocide

	Devices for which high quality type approval data are available	Devices for which high quality data are not available
Initial Monitoring	3 times in the first 10 discharge events (not to exceed a 180 day period)	5 times in the first 10 discharge events (not to exceed a 180 day period)
Maintenance monitoring	2 times per year	4 times per year

Devices for which high quality data are available means either:

a) any ballast water treatment system type approved by the United States Coast Guard under 46 CFR Part 162.060 or granted alternate management system status by the US Coast Guard under 33 CFR 151.2026; or

b) any ballast water treatment system:

(i) type approved by a foreign administration;

(ii) for which efficacy testing was conducted by an independent third party testing organization, either in accordance with the ETV protocol or in a manner consistent with the ETV protocol with respect to QA/QC procedures, the use of validated methods including appropriate volumes of representative samples, and full description and documentation of test procedures, results and analyses; and

(iii) all Active Substance or Biocide data (e.g., the full data package as submitted to the International Maritime Organization for approval) have all been made available to the US EPA.

Each sample must be tested independently and the individual results must be reported and not averaged. Samples must be tested as soon as possible after sampling, and may not be held longer than recommended for each tested constituent as given in 40 CFR Part 136. Sampling and testing shall be conducted using a sufficiently sensitive method according to 40 CFR Part 136 or may use an alternate method if allowed in Table 5 below.

Table 5: Residual Biocides and Biocide Derivative Monitoring Requirements

Biocide	Analyte	Analytical Methods	Minimum Sample Volume	Sample Holding Time	MDL	Effluent Limit or Action	Limit Type
Alkylamines	Alkylamines	EPA Method 8360B and 8270D	25 mL (8260B)	14 days (8260B)	Varies by compound (8260D); 10 µg/L (8270C)	Report	NA

Chlorine or Chlorine dioxide	Chlorine dioxide	EPA Method 327.0-1; SM 4500 ClO_2 E	16 mL (327.0-1)	4 hours (327.0-1); As soon as possible (SM)	Varies (327.0-1); 10 to 100 mg/L (SM)	200 µg/L	Instantaneous Maximum
	Total Residual Oxidizers (TRO) as Cl_2	SM 4500-Cl G; ISO 7393/2	50 mL	15 minutes	10 µg/L, under ideal conditions	100 µg/L	Instantaneous Maximum
	Chlorite*	EPA Method 300.1	250 mL	14 days	Varies	Report	NA
	Chlorate*	EPA Method 300.1	250 mL	28 days	Varies	Report	NA
	Total trihalomethanes[a*]	EPA Method 8260	25 mL	14 days	Varies	Report	NA
	Haloacetic acids[b*]	EPA Method 552.2	40 mL	14 days	Varies by compound	Report	NA
Menadione	Menadione	NA				Report	NA
Ozone	Total Residual Oxidizers (TRO) as Cl_2	SM 4500-Cl G; ISO 7393/2	50 mL	15 minutes	10 µg/L, under ideal conditions	100 µg/L	NA
	Bromate*	EPA Method 317 ; EPA Method 300.1; ASTM D 6581-00	250 mL	28 days (317; 300.1)	Varies (317; 300.1)	Report	NA
	Bromoform*	EPA Method 8260	25 mL	14 days	Varies	Report	NA
	Total trihalomethanes[a*]	EPA Method 8260	25 mL	14 days	Varies	Report	NA
	Haloacetic acids[b*]	EPA Method 552.2	40 mL	14 days	Varies by compound	Report	NA
Peracetic Acid	pH	SM 4500 H+	25 mL	As soon as possible		6.5 – 9 s.u.	Instantaneous Maximum
	Peracetic acid	Photometric analysis (Pinkernell, 1997; EMD Chemicals, 2011; CHEMetrics 2010)	25 mL	As soon as possible	500 µg/L	Report	NA

	Hydrogen peroxide/	Titimetric analysis (JIS K 1463:2007; EMD Chemicals, 2011; CHEMetrics 2010))	25 mL	As soon as possible	500 µg/L	Report	NA

* Potential byproduct or derivative

a. Total trihalomethanes is the sum of the concentrations of chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

b. Haloacetic acids is the sum of the concentrations of mono-, di-, and trichloroacetic acids and mono- and dibromoacetic acids.

ISO: International Organization for Standardization
SM: Standard Methods
MDL: Method detection limit
NA: Not applicable

2.2.3.5.1.1.6 Ballast Water Treatment System Recordkeeping and Reporting

Records of sampling and testing results required under Part 2.2.3.5.1.1 must be retained onboard for a period of three years in the vessel's recordkeeping documentation. Vessels must also submit the testing results to EPA as part of the vessel's annual report (Appendix H) on the VGP ballast water DMR.

Records of monitoring information shall include:

- The ballast water treatment system used, any type approval certificate, and records of whether the system meets the high quality data criteria as stated in part 2.2.3.5.1.1.4 (a) or (b);
- The individual(s) who performed the sampling, measurements, and/or inspections;
- The date(s) analyses and/or inspections were performed;
- Any sensor or other control equipment calibration and functional tests conducted during the inspection as applicable;
- The techniques or methods used for any sensor or other control equipment calibration and functional tests as applicable;
- The date and time of all monitoring results (monitoring in Parts 2.2.3.5.1.1.2, 2.2.3.5.1.1.4, and 2.2.3.5.1.1.5, as applicable);
- The analytical techniques or methods used as applicable, and
- The results of such analyses.

You must submit your monitoring data as part of your annual report. For systems already in use as of the effective date of this permit, initial sampling data must be submitted with the first annual report. For systems which are not already in use as of the effective date of this permit, initial sampling data must be submitted on the annual report following the calendar year of the system's first use. Data must be submitted on the Ballast Water Treatment System Report form attached to the annual report available in Appendix H of this permit or electronically submitted to EPA: the system is scheduled to be available at www.epa.gov/npdes/vessels/eNOI.

2.2.3.5.1.2 Onshore Treatment of Ballast Water

For those vessels whose design and construction safely allows for the transfer of ballast water to shore, if compatible onshore treatment for ballast water is available, the vessel owner/operator may use onshore treatment for any ballast water discharges to meet the requirements of 2.2.3.5. EPA notes that the lack of availability of adequate reception facilities is not an acceptable reason to discharge ballast water which does not meet the treatment requirements found in Part 2.2.3.5.1.1 into waters subject to this permit, and such discharges would therefore constitute a permit violation.

Any vessel owner/operator utilizing onshore treatment must ensure that all piping and supporting infrastructure up to the last manifold or valve immediately before the dock manifold connection of the receiving facility or similar appurtenance on a reception vessel are fully free from any leaks or other avenues whereby untreated ballast may be discharged into waters subject to this permit.

EPA notes that transferring ballast water to a treatment barge for eventual treatment and discharge could constitute "on-shore treatment" for purposes of Part 2.2.3.5.1.2 The discharge of treated ballast water (transferred from other vessels) from a treatment barge is not eligible for coverage under the VGP as this is a discharge from an industrial operation, not a discharge incidental to the normal operation of a vessel. Instead, these vessels must apply for individual NPDES permit coverage from the appropriate NPDES permitting authority, generally the State in which they are operating.

2.2.3.5.1.3 Use of Public Water Supply Water

Vessels may meet the requirements of Part 2.2.3.5 by using only water from a U.S. public water system or Canadian drinking water system (both referred to as "PWS" in this permit), as defined in a) 40 CFR 141.2 and subject to the requirements of 40 CFR parts 141 and 143 or b) Health Canada's "Guidelines on Canadian Drinking Water Quality," as ballast water. Vessels using water from a PWS as ballast must maintain a record of which PWS they received the water and a receipt, invoice, or other documentation from the PWS indicating that water came from that system.

To avoid contamination of the ballast water tank, vessels using PWS water in any given tank as ballast must have:

- Previously cleaned the ballast tank (including removing all residual sediments) and not subsequently introduced ambient water;
- Never introduced ambient water to the tank and supply lines

Vessels utilizing water from a PWS as ballast water must certify in their recordkeeping documentation that they have met all the requirements of this section, including maintaining certification by the master or NOI certifier that one of the above conditions are met regarding contamination. For vessels that use PWS water in some ballast water tanks, but ambient treated water as ballast in others, records must clearly indicate which tanks use PWS water as ballast

versus those that use ambient treated water (or both), and indicate what measures the vessel operator has implemented to avoid cross contamination between tanks.

In the event a vessel that normally uses PWS water as ballast is forced for purposes of vessel safety to take on untreated ballast water from a sea, estuary, lake or river source, such vessel may not return to using PWS water until the tanks and supply lines have been cleaned, including removal of all residual sediments.

2.2.3.5.1.4 No Discharge of Ballast Water

Vessels may meet the requirements of Part 2.2.3.5 of this permit by not discharging any ballast water into waters subject to this permit. EPA notes that any discharge of untreated ballast water, including for reasons of unscheduled voyages, loading of unexpected cargo, etc., do not qualify as an acceptable reason to discharge untreated ballast water into waters subject to this permit, and therefore constitute a permit violation. EPA notes that in the case of a shipboard emergency that endangers the safety of the vessel or its crew, ballast water may need to be pumped out quickly by bypassing the BWTS. In such cases, the provisions regarding the prohibition of bypassing treatment where unavoidable to prevent loss of life, personal injury of severe property damage may be applicable. See 40 CFR 122.41(m)(4)(A) and Part 1.13 of this permit.

2.2.3.5.2 Schedule for when Ballast Water Treatment Becomes BAT (and Therefore Required)

Table 6 describes when BWTS will become the Best Available Technology Economically Achievable (BAT). Vessels must meet the requirements in Part 2.2.3.5.1 according to the schedule below in Table 6.

Table 6: Ballast Water Treatment to BAT Schedule

	Vessel's Ballast Water Capacity	**Date Constructed**	**Vessel's Compliance Date**
New vessels		After December 1, 2013	On delivery
Existing vessels	Less than 1500 m^3	Before December 1, 2013	First scheduled drydocking after January 1, 2016
	1500-5000 m^3	Before December 1, 2013	First scheduled drydocking after January 1, 2014
	Greater than 5000 m^3	Before December 1, 2013	First scheduled drydocking after January 1, 2016

2.2.3.5.3 Vessels Not Required to Meet Part 2.2.3.5 Treatment Standards

The following vessel types are not required to meet Part 2.2.3.5 ballast water management measures (however, note that these vessels must meet all other requirements of Part 2.2.3 of the permit). Additionally, EPA encourages vessels in these categories to use additional management measures to reduce the number of living organisms in their ballast water discharges, including use of any of the measures found in Part 2.2.3.5, use of potable water generators, or other measures to reduce the volume of their ballast water discharges:

2.2.3.5.3.1 Vessels Engaged in Short-Distance Voyages

Vessels engaged in short distance voyages means vessels that:

- Operate or take on and discharge ballast water exclusively in one Coast Guard Captain of the Port (COTP) Zone, or
- Vessels which do not travel more than 10 nm and cross no physical barriers or obstructions (e.g., locks), whether or not they operate within one U.S. Coast Guard COTP zone.

2.2.3.5.3.2 Unmanned, Unpowered Barges

Unmanned, unpowered barges such as hopper barges are not required to meet the ballast water management measures of Part 2.2.3.5.

2.2.3.5.3.3 Vessels That Operate Exclusively on the Laurentian Great Lakes (Commonly Known as Lakers) Built Before January 1, 2009

Existing Lakers built before January 1, 2009 confined exclusively to the Laurentian Great Lakes (i.e., existing vessels that operates upstream of the waters of the St. Lawrence River west of a rhumb line drawn from Cap de Rosiers to West Point, Anticosti Island, and west of a line along 63 W. longitude from Anticosti Island to the north shore of the St. Lawrence River) are not required to meet the requirements of Part 2.2.3.5.

Lakers built on or after January 1, 2009 must meet the treatment limits found in Part 2.2.3.5 of the permit.

2.2.3.5.3.4 Inland and Seagoing Vessels less than 1600 Gross Registered Tons (3000 Gross Tons)

Inland and Seagoing Vessels less than 1600 Gross Registered Tons (3000 Gross Tons) are not required to meet the numeric treatment limits in Section 2.2.3.5. Seagoing Vessels are defined in 33 CFR 151.2005. EPA encourages inland and seagoing vessels in this size class to use alternate measures to reduce the number of living organisms in their ballast water discharges.

2.2.3.6 Interim requirements for vessels not meeting the ballast water management measures in Part 2.2.3.5

Vessel owner/operators not subject to the requirements of Part 2.2.3.5 of the permit must meet the exchange and flushing requirements of this part as applicable. Ballast water exchange may not be used in lieu of meeting the numeric effluent limits in Part 2.2.3.5 of the permit once a vessel is required to meet these limits. Conversely, vessel owner/operators meeting the numeric effluent limits in Part 2.2.3.5 before they are required to do so by the implementation schedule in Part 2.2.3.5.2 are not required to meet the exchange and flushing requirements of Part 2.2.3.6.

2.2.3.6.1 Requirements for Oceangoing Voyages While Carrying Ballast Water

Any vessel that carries ballast water that was taken on in areas less than 200 nautical miles from any shore that will subsequently operate beyond the Exclusive Economic Zone (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 in Part 2.2.3.6.6.

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; 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.

2.2.3.6.2 Vessels Carrying Ballast Water Engaged in Pacific Nearshore Voyages

Unless the vessel meets one of the exemptions in Part 2.2.3.6.6, any vessel engaged in Pacific nearshore voyages that carries ballast water that was taken on in areas less than 50 nautical miles from any shore must carry out an exchange of ballast water in accordance with this Part before discharging from any tanks that carry ballast water into waters subject to this permit if the vessel travels through more than one COTP zone as listed in 33 CFR Part 3 or the vessel crosses international boundaries.

Vessels engaged in Pacific nearshore voyages are:

- 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 (including the Caribbean Sea), 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 off the west coast of the continental United States.

Ballast water exchange for vessels subject to this part must occur in waters more than 50 nautical miles from any shore (US or otherwise), 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 engaged in voyages that take them further than 200 nm from any shore and who will remain outside 200 nm for a sufficient period to conduct exchange, are not allowed to exchange ballast water between 50 and 200 nm from shore to meet the requirements of Part 2.2.3.6.1 (unless the master determines that exchange farther than 200 nm from shore would interfere with essential vessel operations or safety of the vessel but the master determines that the vessel is able to safely exchange more than 50 nm from shore) and instead, must conduct exchange more than 200 nm from shore in accordance with Part

2.2.3.6.1 of this permit. Vessels engaged in Pacific Nearshore Voyages who are not outside 200 nm for a sufficient period to conduct exchange may conduct exchange outside 50 nm (even if they voyage beyond 200 nm) to meet the requirements of this part.

2.2.3.6.3 Vessels with any Ballast Water Tanks that are Empty or have Unpumpable Residual Water

For vessels that travel between more than one COTP Zone while undertaking voyages described in Part 2.2.3.6.1 and which either reported No Ballast on Board (NOBOB) 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 2.2.3.6.1 for those tanks with ballast water. EPA notes that when the term "empty" tank is used, the Agency is also referring to tanks that contain unpumpable residual water. For those tanks which are empty or contain unpumpable residual water, you must either seal the tank so that there is no discharge or uptake and subsequent discharge of ballast water within waters subject to this permit or conduct saltwater flushing of such tanks in an area 200 nm from any shore prior to the discharge or uptake and subsequent discharge of any ballast water to any waters subject to this permit, unless you meet one of the exemptions in Part 2.2.3.6.6. For the purposes of Part 2.2.3.6.3, saltwater flushing means the addition of mid-ocean 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 or a salinity concentration equal to the ambient salinity of the location where the uptake of the added water took place. 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.

2.2.3.6.4 Vessels Engaged in Pacific Nearshore Voyages with Unpumpable Ballast Water and Residual Sediment (including NOBOBs)

Unless the vessel meets one of the exemptions in Part 2.2.3.6.6, any vessel engaged in Pacific Nearshore Voyages as defined in Part 2.2.3.6.2 which the owner/operator has reported as having 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, must follow the applicable requirements in Part 2.2.3.6.2 for those tanks with ballast water and Part 2.2.3.6.4.1 for those tanks which are empty or contain unpumpable residual water.

2.2.3.6.4.1 Nearshore Saltwater Flushing Requirements

For those tanks which are empty or contain unpumpable residual water, you must either seal the tank so that there is no discharge or uptake and subsequent discharge of ballast water within waters subject to this permit or conduct saltwater flushing of such tanks in an area 50 nm 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 or from any waters subject to this permit. For purposes of Part 2.2.3.6.4, 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 resulting residual water remaining in the tank has either a salinity greater than or equal to 30 parts per thousand or a salinity concentration equal to the ambient salinity of the location where the uptake of the added water took place. 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).

Vessels engaged in voyages that take them further than 200 nm from any shore and who will remain outside 200 nm for a sufficient period to flush ballast water, are not allowed to exchange ballast water between 50 and 200 nm from shore to meet the requirements of Part 2.2.3.6.3 (unless the master determines that flushing farther than 200 nm from shore would interfere with essential vessel operations or safety of the vessel but the master determines that the vessel is able to safely flush more than 50 nm from shore) and instead, must conduct flushing more than 200 nm from shore in accordance with Part 2.2.3.6.3 of this permit. Vessels engaged in the coastwise trade who are not outside 200 nm for a sufficient period to conduct flushing may flush outside 50 nm (even if they voyage beyond 200 nm) to meet the requirements of this permit.

For all vessel owner/operators subject to this part 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 from the full tanks to commingle with waters from the empty tanks if it will subsequently be discharged into waters subject to this permit.

2.2.3.6.5 Discharge Prohibitions

Vessels referenced in Parts 2.2.3.6.1, 2.2.3.6.2, 2.2.3.6.3, and 2.2.3.6.4 may not discharge unexchanged or untreated ballast water or sediment in waters subject to this permit referenced in Appendix G. These waters include all National Parks and National Marine Sanctuaries.

2.2.3.6.6 Exemptions

The operator or 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 Part 151. If this exemption is claimed, the vessel operator must record the date, location, and reason for the claim in its recordkeeping documentation. Furthermore, the vessel owner/operator must report this information to EPA as part of its annual report.
- The master uses an alternative, environmentally sound method of ballast water management that has been approved by the Commandant of the Coast Guard prior to the vessel's voyage in accordance with 33 C.F.R. Part 151.
- The master retains all ballast water on board the vessel for the duration of the vessel's voyage in waters subject to this permit.

- The vessel is not engaged in an international voyage and does not traverse more than one U.S. Coast Guard COTP Zone.

Additionally, except for vessels entering the Great Lakes or into Appendix G waters, a vessel is not required to deviate from its voyage, or delay the voyage to conduct ballast water exchange or saltwater flushing.

2.2.3.7 Vessels Entering the Great Lakes

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. 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. Vessels that are unable, due to weather, equipment failure, or other extraordinary condition, to effect a BWE before entering the EEZ prior to entering the Great Lakes, must employ another method of ballast water management listed in 33 CFR 151.1510 or otherwise comply with the provisions of 33 CFR 151.1515.

Additionally, vessels utilizing a ballast water treatment system (see Part 2.2.3.5.1.1 of the permit) must also conduct ballast water exchange or saltwater flushing (as applicable) in addition to treating their ballast water if they meet the following requirements:

- The vessel operates outside the EEZ and more than 200 nm from any shore and then enters the Great Lakes via the Saint Lawrence Seaway System, and
- The vessel has taken on ballast water that has a salinity of less than 18 parts per thousand from a coastal, estuarine, or freshwater ecosystem within the previous month (30 days).

If a vessel affected by these requirements has not taken on ballast water with a salinity of less than 18 parts per thousand in the previous month, the master of the vessel must certify to this effect in their ballast water recordkeeping requirements before entering the Great Lakes.

2.2.3.8 Vessels in the U.S. Coast Guard Shipboard Technology Evaluation Program (STEP)

Owner/operators of vessels are not required to meet the requirements of Parts 2.2.3.5 (except Parts 2.2.3.5.1.1.5 and 2.2.3.5.1.1.6) and 2.2.3.6 of this permit if either:

- 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.

Owner/operators of these vessels are required to meet the requirements of Parts 2.2.3.5.1.1.5 and 2.2.3.5.1.1.6 of this permit.

2.2.4 Anti-Fouling Hull Coatings/ Hull Coating Leachate

- All anti-fouling coatings subject to this permit must meet the requirements of the Clean Hull Act of 2010 (33 U.S.C. §§ 3801 *et seq*.).
- 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 (including those on EPA's List of Banned or Severely Restricted Pesticides). This requirement applies to all vessels subject to this permit, including those registered and painted outside the United States.

At the time of initial application or scheduled reapplication of anti-fouling coatings, you must give consideration, as appropriate for vessel class and vessel operations, to the use of hull coatings with the lowest effective biocide release rates, rapidly biodegradable components (once separated from the hull surface), or non-biocidal alternatives, such as silicone coatings.

Some ports and harbors are impaired by copper, a biocide used commonly in anti-foulant paints. These waters include Shelter Island Yacht Basin in San Diego, California, and waters in and around the ports of Los Angeles/Long Beach. A complete list of such waters may be found at www.epa.gov/npdes/vessels. When vessels spend considerable time in these waters (defined as spending more than 30 days per year), or use these waters as their home port (i.e., house boats, ferries or rescue vessels), vessel owners/operators shall consider using anti-fouling coatings that rely on a rapidly biodegradable biocide or another alternative rather than copper-based coatings. If after consideration of alternative biocides, vessel operators continue to use copper-based antifoulant paints, they must document in their recordkeeping documentation how this decision was reached.

The discharge of Tributyltin (TBT) from any source (whether used as a biocide or not) or any other organotin compound used as a biocide is prohibited by this permit. Therefore, vessel owners/operators covered by this permit have a zero discharge standard for TBT (whether or not used as a biocide) or any other organotin compound used as a biocide. You may not use an antifoulant coating containing TBT or any other organotin compound used as a biocide. If the vessel has previously been covered with a hull coating containing TBT (whether or not used as a biocide) or any other organotin compound used as a biocide, vessels must be effectively overcoated so that no TBT or other organotin leaches from the vessel hull or the TBT or other organotin coating must have been removed from the vessel's hull.

When used as a catalyst, an organotin compound other than TBT (e.g., dibutyltin) is not to be present above 2500 mg total tin per kilogram of dry paint. Furthermore, the coating shall not be designed to slough or otherwise peel from the vessel hull. Incidental amounts of coating discharged by abrasion during cleaning or after contact with other hard surfaces (e.g., moorings) are not prohibited.

2.2.5 Aqueous Film Forming Foam (AFFF)

Discharges of AFFF are authorized for emergency purposes when needed to ensure the safety and security of the vessel and crew.

For vessels that sail outside of the territorial sea more than once per month, maintenance and training discharges of fluorinated AFFF are not authorized within waters subject to this permit (i.e., 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 vessel maintenance and training discharges are required, AFFF must be collected and stored for onshore disposal unless the vessel uses a 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 a water referenced in Appendix G unless they are discharged:

- For emergency purposes;
- By rescue vessels such as fireboats for firefighting purposes; or
- 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 emergency AFFF discharges occur in waters referenced in Appendix G, a written explanation must be kept in the ship's log or other vessel recordkeeping documentation consistent with Part 4.2 of this permit.

2.2.6 Boiler/Economizer Blowdown

You must 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 tons which leave the territorial sea at least once per week, boiler/economizer blowdown may not be discharged in waters subject to this permit, unless:

- The vessel remains within waters subject to this permit for a longer period than the necessary duration between blowdown cycles;
- The vessel needs to conduct blowdown immediately before entering drydock; or
- For safety purposes.

For all vessels, boiler/economizer blowdown may not be discharged in waters referenced in Appendix G except for safety purposes. Furthermore, boiler/economizer blowdown should be discharged as far from shore as practicable.

2.2.7 Cathodic Protection

Cathodic protection must be maintained to prevent the corrosion of the ship's hull. The discharge of zinc, magnesium, and aluminum are expected from properly functioning cathodic protection sacrificial electrodes. However, vessel operators must minimize the flaking of large, corroded portions of these anodes. Sacrificial anodes must not be used more than necessary to adequately prevent corrosion of the vessel's hull, sea chest, rudder, and other exposed areas of the vessel. Vessel operators must appropriately clean and/or replace these anodes during periods of maintenance (such as drydocking), so that release of these metals to waters is minimized. Furthermore, when feasible, sacrificial anodes should be flush-fitted to the hull, or vessel operators must fill the space between the anode and hull backing to remove the potential for hotspots for fouling organisms.

Vessel operators should note that magnesium is less toxic than aluminum and aluminum is less toxic than zinc. If vessel operators use sacrificial electrodes, they must select electrode devices with metals that are less toxic to the extent technologically feasible and economically practicable and achievable. For vessels that spend the majority of their time in freshwater, if aluminum or zinc is selected, the vessel owner/operator must document in their recordkeeping documentation why the use of magnesium is not appropriate. Likewise, for vessels that spend the majority of their time in saltwater, if vessel zinc is selected, the vessel owner/operator must document why aluminum is not selected. The documentation requirement is applicable after the vessel's first drydocking after December 19, 2013 (e.g., if the vessel drydocks in 2015, the requirement is applicable for that vessel starting in 2015).

EPA recommends, particularly for new vessels, the use of Impressed Current Cathodic Protection (ICCP) in place of or to reduce the use of sacrificial electrodes when technologically feasible (e.g., adequate power sources, appropriate for vessel hull size and design), safe, and adequate to protect against corrosion. If vessel operators use ICCP, they must maintain dielectric shields to prevent flaking.

2.2.8 Chain Locker Effluent

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. For vessels that regularly sail outside waters subject to this permit (at least once per month), 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 nearshore waters. Furthermore, for vessels that leave waters subject to this permit at least once per month, chain lockers shall 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 recordkeeping documentation consistent with Part 4.2.

2.2.9 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

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. The vessel owner/operator must not discharge oil in quantities that may be harmful as defined in 40 CFR Part 110 from any oil-to-sea interface. If possible, maintenance activities on controllable pitch propellers, thrusters, and other oil-to-sea interfaces should be conducted when a vessel is in drydock.

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 that may be harmful as defined in 40 CFR Part 110, appropriate spill response equipment (e.g., oil booms) must be used to contain any oil leakage. Operators of the vessel must have ready access to spill response resources to clean up any oil spills.

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 unless doing so is deemed unsafe by the Master of the vessel.

All vessels must use an EAL in all oil to sea interfaces, unless technically infeasible. "Environmentally acceptable lubricants" means lubricants that are "biodegradable" and "minimally-toxic" and are "not bioaccumulative" as defined in Appendix A of this permit. For purposes of requirements related to EALs, technically infeasible means that no EAL products are approved for use in a given application that meet manufacturer specifications for that equipment, products which come pre- lubricated (e.g., wire ropes) have no available alternatives manufactured with EALs, products meeting a manufacturers specifications are not available within any port in which the vessel calls, or change over and use of an EAL must wait until the vessel's next drydocking.

If a vessel is unable to use an EAL, you must document in your recordkeeping documentation consistent with Part 4.2 why you are unable to do so, and must report the use of a non-environmentally acceptable lubricant to EPA in your Annual Report. Use of an environmentally acceptable lubricant does not authorize the discharge of any lubricant in a quantity that may be harmful as defined in 40 CFR Part 110.

EPA recommends that all new build vessel operators endeavor to use seawater-based systems for their stern tube lubrication to eliminate the discharge of oil from these interfaces to the aquatic environment.

2.2.10 Distillation and Reverse Osmosis Brine

Brine from the distillation system and reverse osmosis reject water shall not contain or come in contact with machinery or industrial equipment (other than that necessary for the production of potable water), toxic or hazardous materials, or wastes.

2.2.11 Elevator Pit Effluent

Discharges of untreated elevator pit effluent are not authorized within waters subject to this permit except in cases of emergency. Elevator pit effluent may be discharged into waters subject to this permit if it is managed with the vessel's bilgewater and meets all the requirements of Part 2.2.2 of this permit. Otherwise, it must be treated with an oily-water separator and discharged with an oil content below 15 ppm for existing vessels, as measured by EPA Method 1664 or other appropriate method for determination of oil content as accepted by the IMO (e.g., ISO Method 9377) or U.S. Coast Guard. Emergency discharges must be documented in the ship's log or other vessel recordkeeping documentation consistent with Part 4.2.

2.2.12 Firemain Systems

Discharges from firemain systems are authorized for emergency purposes to ensure the safety and security of the vessel and her crew, other emergency situations, and testing and inspections of the firemain systems in order to assure its operability in an emergency. Firemain systems may be discharged in port for certification, maintenance, and training requirements if the intake comes directly from the surrounding waters or potable water supplies and there are no additions (e.g., AFFF) to the discharge. Furthermore, firemain systems may be used for deck washdown or other secondary uses if the intake comes directly from the surrounding waters or potable water supplies and the discharge meets all relevant effluent limitations associated with that activity. When feasible, maintenance and training should be conducted outside port and/or outside waters subject to this permit.

The vessel owner/operator shall not discharge firemain systems in waters listed in Appendix G except in emergency situations or when washing down the anchor chain to comply with anchor wash down requirements in Part 2.2.8.

2.2.13 Freshwater Layup

Minimize the amount of disinfection or biocidal agents used in freshwater layup to the minimum required to prevent aquatic growth.

2.2.14 Gas Turbine Washwater

Gas turbine washwater must not be directly discharged within waters subject to this permit. Where feasible, gas turbine washwater must be prevented from commingling with bilgewater that will be discharged in waters subject to this permit, for example by collecting it separately and properly disposing of it at an onshore facility. Under no circumstances may oils, including oily mixtures, from gas turbine washwater be discharged into waters subject to this permit in quantities that may be harmful as determined in accordance with 40 CFR Part 110.

2.2.15 Graywater

All vessels must minimize the discharge of graywater while in port. For those vessels that cannot store graywater, the owner or operator and their crews must minimize the production of graywater in port. Examples of ways to minimize production of graywater include delaying laundry, scullery activities, and restricting length of showers while in port, and using high efficiency faucets and showerheads. All vessels that have the capacity to store graywater shall not discharge it in waters listed in Appendix G. For vessels that cannot store graywater, vessel operators must minimize the production of graywater while in waters listed in Appendix G.

For vessels greater than 400 gross 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, unless the vessel meets the treatment standards and other requirements contained under Parts 5.1.1 and 5.1.2 or 5.2.1 and 5.2.2 of this permit. Additional specific requirements for graywater apply to cruise ships (Parts 5.1 and 5.2) and large ferries (Part 5.3).

Vessels that do not travel more than 1 nm from shore shall minimize the discharge of graywater and, provided the vessel has available graywater storage capacity, must dispose of graywater onshore if appropriate facilities are available and such disposal is economically practicable and achievable unless the vessel meets the treatment standards and other requirements contained under Parts 5.1.1 and 5.1.2 or 5.2.1 and 5.2.2 of this permit. You must also minimize the discharge of graywater when the vessel is not underway.

If graywater will be discharged in waters subject to this permit, the introduction of kitchen oils to the graywater system must be minimized. When cleaning dishes, you must remove as much food and oil residue as practicable before rinsing dishes. Excess oils used in cooking, including animal fats and vegetable oils, shall not be added to the graywater system. Under no circumstances may oil from the galley and scullery be discharged in quantities that may be harmful as defined in 40 CFR Part 110.

Vessel owners/operators must use phosphate-free and minimally-toxic soaps and detergents, as defined in Appendix A of this permit, for any purpose if graywater will be discharged into waters subject to this permit. Soaps and detergents must be free from toxic or bioaccumulative compounds and not lead to extreme shifts in receiving water pH. For purposes of this part, extreme shifts means causing pH to fall below 6.0 or rise above 9.0 as a direct result of the discharge.

If your vessel is 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 these additional requirements:

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). 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 onshore or discharged in accordance with the other requirements of this permit.

2.2.15.1 Additional Graywater Requirements for Certain VGP Vessels Operating in the Great Lakes

Any vessel operating on the Great Lakes that is not a "commercial vessel" as defined in CWA section 312(a)(10) must meet one of the following requirements for graywater management:

(i) The vessel must hold all graywater for onshore discharge to an appropriate shoreside facility (an appropriate shoreside facility is either an NPDES permitted facility or an entity that delivers wastewater directly to an NPDES permitted facility); or

(ii) The graywater discharge must not exceed 200 fecal coliform forming units per 100 milliliters and contain no more than 150 milligrams per liter of suspended solids.

Vessels subject to this part must conduct monitoring required under Part 2.2.15.2 to demonstrate treatment equipment maintenance and compliance with the limits of this part. Records of the sampling and analysis results must be retained onboard for at least 3 years in the vessel's recordkeeping documentation consistent with Part 4.2 of this permit.

2.2.15.2 Graywater Monitoring

The following monitoring requirements are applicable to vessels which discharge graywater into waters subject to this permit and meet one of the following conditions:

- The vessel is a new build vessel constructed on or after December 19, 2013, has a maximum crew capacity greater or equal to 15, and provides overnight accommodations to those crew; or
- The vessel is subject to Part 2.2.15.1 of this permit.

Vessel owners/operators must collect and analyze two samples per year, collected at least 14 days apart, and report the results of those samples as part of their Annual Report. Samples must be taken for Biochemical Oxygen Demand (BOD), fecal coliform, suspended solids, pH, and total residual chlorine. Vessel owner/operators may choose to conduct monitoring for *e. coli* in lieu of fecal coliform. Fecal Coliform or *e. coli* must only be analyzed once per year if vessels have difficulty analyzing the results within recommended holding times. Sampling and testing shall be conducted according to 40 CFR Part 136. If the vessel is subject to Part 2.2.15.1, measured samples must meet the standards specified in that part.
Records of monitoring information shall include:

- The date, exact place, time, and sampling port location(s) of sampling or measurements;

- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- Proportions of wastestreams being treated and sampled (such as mixed graywater, mixed graywater and blackwater, and galley. If actual amounts are not available, the estimated proportions should be provided).

Vessels subject to this part must note whether the graywater effluent is treated or untreated, and also note whether the effluent is graywater alone or if it is mixed with another effluent type (e.g., graywater mixed with sewage). Records of the sampling and testing results must be retained onboard for at least 3 years in the vessel's recordkeeping documentation consistent with Part 4.2.

Vessels which do not enter waters subject to this permit for the calendar year need not conduct monitoring for that year, but must clearly indicate on their Annual Report that they did not enter waters subject to this permit during that year.

2.2.16 Motor Gasoline and Compensating Discharge

The discharge of motor gasoline and compensating effluent must not have oil in quantities that may be harmful as defined in 40 CFR §110.3, which includes discharges resulting in a visible sheen, or an oil concentration that exceeds 15 ppm. Determination of oil concentration may be measured by EPA Method 1664 or other appropriate method for determination of oil content as accepted by the IMO (e.g., ISO Method 9377) or U.S. Coast Guard. Compliance with the 15 ppm oil concentration limitation may be established with visual monitoring for an oily sheen. Minimize discharge of motor gasoline and compensating discharge in port. If an oily sheen is observed, the vessel operator must deploy appropriate oil containment practices. Vessels shall not discharge motor gasoline and compensating discharge in waters subject to this permit listed in Appendix G.

2.2.17 Non-Oily Machinery Wastewater

If discharged directly overboard, non-oily machinery wastewater, technical water, or potable water must be free from oils in quantities that may be harmful pursuant to 40 CFR Part 110 and any additives that are toxic or bioaccumulative in nature. Non-oily machinery wastewater may also be drained to the bilge.

Any discharge of packing gland or stuffing box effluent must not contain oil, including oily materials, in quantities that may be harmful. These discharges must not produce a visible sheen of oil or oily materials.

2.2.18 Refrigeration and Air Condensate Discharge

You must not allow refrigeration and air condensate discharge to come into contact with oily or toxic materials if it is discharged directly overboard. Refrigeration and air conditioning condensate that is collected and plumbed for internal recycling (e.g., recycled as "technical

water") is allowed to commingle with oily water; however, the commingled discharge must meet all requirements of Part 2.1.4 of this permit and Part 2.2.2 of this permit if applicable.

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

When possible, non-contact engine cooling water, hydraulic system cooling water, refrigeration cooling water and other seawater cooling overboard discharges should occur when the vessel is underway to minimize any thermal impacts to the receiving water.

To reduce the production and discharge of seawater cooling overboard discharge, 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 2.2.20 (Seawater-Piping Biofouling Prevention).

2.2.20 Seawater Piping Biofouling Prevention

Seawater piping biofouling chemicals subject to FIFRA registration (see 40 CFR §152.15) must be used in accordance with their FIFRA label. No pesticides or chemicals banned for use in the United States may be discharged into waters subject to this permit.

Vessel owner/operators must use the minimum amount of biofouling chemicals needed to keep fouling under control. Discharges containing active agents must contain as little chlorine as possible.

Vessel owner/operators 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 any waters, should be discharged more than 50 nm from shore. Vessel owner/operators should remove any organisms while at sea where technically feasible to reduce the risk of invasive species introduction in ports.

2.2.21 Boat Engine Wet Exhaust

Vessel engines generating wet exhaust must be maintained in good operating order, well tuned, and function according to manufacturer specifications to decrease pollutant contributions to wet exhaust. Vessel owner/operators should use low sulfur or alternative fuels for their vessels to reduce the concentration of pollutants in discharges from boat engine wet exhaust.

EPA encourages vessel operators to consider four stroke engines instead of two stroke engines for vessels generating wet exhaust that are covered under this permit. Use of a four stroke engine may minimize the discharge of pollutants to waters subject to this permit. Where vessels utilize two stroke engines, environmentally acceptable lubricants (as defined in Appendix A of this permit) must be used unless technologically infeasible. If technologically infeasible, the vessel owner/operator must document in their recordkeeping documentation why they are not using environmentally acceptable lubricants.

2.2.22 Sonar Dome Discharge

The water inside the sonar dome shall not be discharged into waters subject to this permit for maintenance purposes. Vessel operators should not use biofouling chemicals that are bioaccumulative for the exterior of sonar domes when non-bioaccumulative alternatives are available.

2.2.23 Underwater Ship Husbandry and Hull Fouling Discharges

Vessel owners/operators must minimize the transport of attached living organisms when traveling into U.S. waters from outside the U.S. economic zone or between Captain of the Port (COTP) zones. Management measures to minimize the transport of attached living organisms include selecting an appropriate anti-foulant management system and maintaining that system, in water inspection, cleaning, and maintenance of hulls, and thorough hull and other niche area cleaning when a vessel is in drydock.

Whenever possible, rigorous hull-cleaning activities should take place in drydock, or at a 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, you must use facilities which treat the washwater prior to discharging to waters subject to this permit in order to remove the antifouling compound(s) and fouling growth from the washwater. If mechanical means (scraping, etc.) are used to clean the hull and remove old paint, the materials removed from the hull during that process must be collected and disposed of properly (e.g., onshore). These materials must not be allowed to contaminate nearby waters.

Vessel owners/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:

- Use 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; and
- When available and feasible, use of vacuum or other control technologies to minimize the release or dispersion of antifouling hull coatings and fouling organisms into the water column.

Vessel owners/operators must minimize the release of copper-based antifoulant paints during vessel cleaning operations. Cleaning of hull surfaces coated with copper-based antifoulant paint 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. A plume or cloud of paint can be noted by the presence of discoloration or other visible indication that is distinguishable from hull growth or sediment removal. Production of a plume or cloud of sediment or hull growth is normal in some cases during vessel hull cleaning, but this plume or cloud must be substantially paint free (e.g., paint should not be clearly identifiable in the plume or cloud). When feasible, attempts must be made to minimize the release of fouling organisms and antifouling systems (including copper-based coatings) into surrounding waters.

Vessels that use copper-based anti-fouling paint must not clean the hull in copper-impaired waters within the first 365 days after paint application unless there is a significant visible indication of hull fouling. EPA maintains a list of copper-impaired waters on its webpage at www.epa.gov/npdes/vessels. If you clean before 365 days after paint application in copper-impaired waters, you must document in your recordkeeping documentation why this early cleaning was necessary.

2.2.24 Welldeck Discharges

Welldeck discharges that contain graywater from smaller vessels should not be discharged within waters subject to this permit except in cases of emergency. Welldeck discharges from washdown of gas turbine engines may not be discharged within waters subject to this permit. Welldeck discharges from equipment and vehicle washdowns must be free from garbage and must not contain oil in quantities that may be harmful as defined in 40 CFR Part 110.

2.2.25 Graywater Mixed with Sewage from Vessels

The commingled discharge of graywater mixed with sewage from vessels must comply with the effluent limits for graywater discharge in Part 2.2.15 or Part 5 of this permit if applicable. 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 CWA and its implementing regulations found at 40 CFR Part 140 and 33 CFR Part 159. Hence, discharges of graywater mixed with sewage must meet both standards to be in compliance with the CWA.

2.2.26 Exhaust Gas Scrubber Washwater Discharge

Exhaust gas scrubber washwater discharge must not contain oil, including oily mixtures, in quantities that may be harmful as determined in accordance with 40 CFR Part 110. Sludge or residues generated in treating exhaust gas scrubber washwater discharge must not be discharged in waters subject to this permit and must be delivered ashore to adequate reception facilities.

In addition, owner/operators of vessels with exhaust gas cleaning systems that result in washwater discharges must meet the numeric effluent limits found in Part 2.2.26.1 and the monitoring requirements found in Part 2.2.26.2 this permit. These limits are consistent with the IMO washwater guidelines set forth in section 10 for Exhaust Gas Cleaning (EGC) Systems (resolution MEPC.184(59)). Among other things, these guidelines recommend the establishment of limits for concentrations of pollutants in the effluent.

2.2.26.1 Exhaust Gas Scrubber Washwater Discharge Standards

2.2.26.1.1 pH

The discharge of washwater from the exhaust gas scrubber treatment system must have a pH of no less than 6.0 measured at the ship's overboard discharge, with the exception that during maneuvering and transit, the maximum difference between inlet and outlet of 2.0 pH units is allowed. This difference is to be measured at the ship's inlet and overboard discharge.

2.2.26.1.2 PAHs (Polycyclic Aromatic Hydrocarbons)

The maximum continuous PAH concentration in the washwater must not be greater than 50 µg/L PAHphe (phenanthrene equivalence) above the inlet water PAH concentration for washwater flow rates normalized to 45 t/MWh. MWh refers to the maximum continuous rating (MCR) or 80 percent of the power rating of the fuel oil combustion unit. For the purposes of this criterion, the PAH concentration in the washwater must be measured downstream of the water treatment equipment, but upstream of any washwater dilution or other reactant dosing unit, if used, prior to discharge.

The 50-µg/L limit is adjusted upward for lower washwater flow rates per MWh, and vice-versa, and the applicable permit limits are contained in Table 7.

Table 7: PAH Permit Limits in Exhaust Gas Scrubber Discharge

Flow Rate (t/MWh)	Discharge Concentration Limit (µg/L PAH_{phe} equivalents)	Measurement Technology
0 - 1	2,250	Ultraviolet Light
2.5	900	Ultraviolet Light
5	450	Fluorescence[2]
11.25	200	Fluorescence
22.5	100	Fluorescence
45	50	Fluorescence
90	25	Fluorescence

For a 15-minute period in any 12-hour period, the continuous PAH concentration limit may exceed the limit described above by 100 percent. This is to allow for an abnormal start up of the exhaust gas scrubber unit.

2.2.26.1.3 Turbidity

The washwater treatment system must be designed to minimize suspended particulate matter, including heavy metals and ash. The maximum turbidity (monitored continuously) in washwater must not be greater than 25 FNU (formazin nephelometric units) or 25 NTU (nephelometric turbidity units) or equivalent units, above the inlet water turbidity. However, during periods of

[2] For any flow rate greater than 2.5 t/MWh fluorescence technology should be used.

high inlet turbidity, the precision of the measurement device and the time lapse between inlet measurement and outlet measurement are such that the use of a difference limit is unreliable. Therefore, all turbidity difference readings must be a rolling average over a 15-minute period to a maximum of 25 FNU or NTU. For the purposes of this criterion, the turbidity in the washwater must be measured downstream of the water treatment equipment but upstream of washwater dilution (or other reactant dosing) prior to discharge. For a maximum of one 15-minute period within any 12-hour period, the continuous turbidity discharge limit may be exceeded by 20 percent.

2.2.26.1.4 Nitrates +Nitrites

The washwater treatment system must prevent the discharge of nitrates, plus nitrites beyond that associated with a 12 percent removal of NO_x from the exhaust, or beyond 60 mg/l normalized for washwater discharge rate of 45 tons/MWh, whichever is greater. MWh refers to the MCR or 80 percent of the power rating of the fuel oil combustion unit. For the purposes of this criterion, the nitrate concentration in the washwater must be measured downstream of the water treatment equipment, but upstream of any washwater dilution or other reactant dosing unit, if used, prior to discharge.

The 60-mg/L limit is adjusted upward for lower washwater flow rates per MWh, and vice-versa, and the applicable permit limits are contained in Table 8.

Table 8: Nitrates + Nitrites Permit Limits in Exhaust Gas Scrubber Discharge

Flow Rate (t/MWH)	Discharge Concentration Limit (mg/L nitrate + nitrite)
0 - 1	2,700
2.5	1,080
5	640
11.25	240
22.5	120
45	60
90	30

2.2.26.2 Exhaust Gas Scrubber Analytical Monitoring Requirements

2.2.26.2.1 Continuous Monitoring

The data recording system must comply with the guidelines in sections 7 and 8 of MEPC.184(59) and must continuously record pH, PAH (as available), and turbidity. The vessel owner/operator must continuously monitor for PAH discharges where continuous monitoring technologies (e.g., probes/analyzers) are available (availability should include the technology's robustness, reliability and ability to perform over for a minimum of two years). When the EGC system is operated in waters subject to this permit, the washwater monitoring and recording must be continuous. The values monitored and recorded must include pH, PAH (as available), turbidity, and temperature.

The pH electrode and pH meter must have a resolution of 0.1 pH units and temperature compensation. The electrode must comply with the requirements defined in BS 2586 or of equivalent or better performance and the meter should meet or exceed BS EN ISO 60746-2:2003.

The PAH monitoring equipment must be capable of monitoring PAH in water in a range of at least twice the discharge concentration limit given in the table above. A demonstration must be made that the equipment operates correctly and does not deviate more than 5 percent in washwater with turbidity within the working range of the application. For those applications discharging at lower flow rates and higher PAH concentrations, ultraviolet light monitoring technology or equivalent should be used due to its reliable operating range.

The turbidity monitoring equipment must meet requirements defined in ISO 7027:1999 or USEPA 180.1.

All continuous monitoring equipment must be calibrated as recommended by probe manufacturers or Exhaust Gas scrubber manufacturers. At a minimum, all probes must be calibrated at least annually. EPA expects many probe types (e.g., turbidity probes) will need to be calibrated on a more frequent basis.

2.2.26.2.2 Analytical Monitoring

In addition to the continuous monitoring found in Part 2.2.26.2.1 of this permit, vessel owner/operators must collect and analyze two samples in the first year of permit coverage or system operation, whichever is first, for each of the constituents analyzed in Part 2.2.26.2.3 to demonstrate treatment equipment maintenance, probe accuracy, and compliance with this permit. Samples must not be collected within 14 days of each other. Samples must be collected for inlet water (for background), water after the scrubber (but before any treatment system), and discharge water. For all vessels, one of those samples may be conducted as part a vessel's annual or other survey, and during the first year, one of those sampling events may be conducted as part of the installation of the system to ensure it is functioning properly.

After the first year, samples must be collected at least once per calendar year for inlet water (for background), water after the scrubber (but before any treatment system), and discharge water, and may be collected as part of the vessel's annual survey as appropriate. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation consistent with Part 4.2.

2.2.26.2.3 Analytes for Analytical Monitoring

Vessels conducting monitoring as required by Part 2.2.26.2.2 must monitor for the following parameters, choosing either sufficiently sensitive EPA Part 136 methods or other methods if specifically allowed:

- Dissolved and Total Metals, including, Arsenic, Cadmium, Chromium, Copper, Lead, , Nickel, Selenium, Thallium, Vanadium, and Zinc (recommend using EPA Methods 200.8 or 200.9. Because matrix interference is a known issue for arsenic and selenium in saltwater samples, the Agency strongly recommends operators

using Octopole Reaction Cell ICP-MS, Dynamic Reaction Cell ICP-MS, hydride generation with a graphite furnace, or other appropriate approach consistent with 200.8 or 200.9 to minimize this interference);

- PAHs including Acenaphthylene, Acenaphthene, Anthracene Benz[*a*]anthracene, Benzo[*ghi*]perylene, Benzo[*a*]pyrene, Benzo[*b*]fluoranthene +, benzo[k]fluoranthene, Chrysene, Dibenz[*a,h*]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3,*c,d*]pyrene, Naphthalene, Phenanthrene, and Pyrene (recommend using EPA Methods 550.1, 610, 625, 8100, 8270c, 8310);
- Nitrate-Nitrite (recommend using EPA Method 353.2);
- pH (using Standard Methods (SM) 4500-H B);

2.2.26.2.4 Monitoring Reporting

Vessel owners/operators must submit all monitoring data to EPA electronically, unless exempted from electronic reporting consistent with Part 1.14 of this permit. Monitoring data must be submitted at least once per calendar year no later than February 28 of the following year on the vessel annual report. Data must be submitted on or attached to the exhaust gas scrubber DMR available in Appendix H of this permit or submitted to EPA electronically. The system is scheduled to be available at www.epa.gov/vessels/eNOI. Data may be submitted as part of the vessel's annual report.

2.2.27 Fish Hold Effluent

All reasonable steps must be taken to prevent the discharge of excess fish hold water and ice while the vessel is stationary at the pier. If large solid pieces of fish waste are contained in the fish hold effluent (e.g., fish heads, internal organs) the fish hold effluent may not be discharged while the vessel is pierside and stationary, unless a physical separation method is used (e.g., ½ inch coarse screens or smaller, a screened hose having ½ inch screen openings or smaller, filters, or other methods to remove large solids).

Solid fish waste must be disposed of shoreside on land or at sea (but outside of harbors or other protected and enclosed coastal waters, and other areas where EPA has found that such deposits could endanger health, the environment, or ecological systems in a specific location under the Marine Protection, Research and Sanctuaries Act, 33 U.S.C 1412(d)).

Except for discharges from holding tanks for the sole purpose of keeping the catch alive during transit by pumping continuous "once through" ambient water into and through the tank prior to immediate discharge (e.g., crabbing/lobster vessels), if you are unloading your catch at a shore-based seafood processor or other pier and a shore-based discharge facility is available and economically achievable, you must discharge your effluent (including dirty ice) to that shore-based facility instead of discharging to surrounding waters if:

- Its use is economically achievable, and
- The facility has a valid NPDES permit, or
- That facility discharges to an NPDES-permitted sewage treatment facility.

Do not discard any unused live bait overboard, unless you caught that bait in that waterbody or watershed. Unused live bait purchased from a bait shop or dealer may not be discharged overboard unless the vessel operator has documentation from the dealer that the bait was caught in that waterbody.

2.3 Additional Water Quality-Based Effluent Limits

The requirements in Part 2.3 constitute the water quality-based effluent limitations in this permit. These water quality-based effluent limitations supplement this permit's effluent limitations in Parts 2.1, 2.2, 2.3.2 and 5 of this permit.

2.3.1 Water Quality-Based Effluent Limitations

Your discharge must be controlled as necessary to meet applicable water quality standards in the receiving water body or another water body impacted by your discharges.

EPA generally expects that compliance with the other conditions in this permit, including Parts 2.1, 2.2, and 5, will control discharges as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge causes or contributes to an exceedance of applicable water quality standards, you must take corrective actions as required in Part 3; you must also report the exceedance(s) to EPA as required in Parts 1.14 and 4.4.1.

EPA may impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI (if applicable), required reports, or from other sources indicates that, after meeting the water quality-based limitations in this part, your discharges are not controlled as necessary to meet applicable water quality standards, either in the receiving water body or another water body impacted by your discharges. EPA or an authorized representative of EPA may inform vessel owner/operators of specific requirements.

2.3.2 Discharges to Water Quality Impaired Waters

Impaired waters or "water quality limited segment[s]" are those which have been identified by a state or EPA pursuant to section 303(d) of the CWA as not meeting applicable state water quality standards. Impaired waters may include both waters with EPA-approved or EPA-established Total Maximum Daily Loads (TMDLs), and those for which EPA has not yet approved or established a TMDL.

2.3.2.1 Discharges to Impaired Waters without an EPA-Approved or Established TMDL

If you discharge to an impaired water without an EPA-approved or established TMDL, you are required to comply with the requirements in Part 2.3.1, including any additional requirements that EPA may impose pursuant to that part. Note that this provision also applies to situations where EPA determines that your discharge is not controlled as necessary to meet water quality standards in another water body, even if your discharge is to a receiving water that is not specifically identified on a section 303(d) list of impaired waters.

2.3.2.2 Discharges to Impaired Waters with an EPA-Approved or Established TMDL

If you discharge to an impaired water with an EPA-approved or established TMDL and EPA or state TMDL authorities have informed you that a Waste Load Allocation (WLA) has been established that applies specifically to your vessel's discharges, to discharges from vessels in your vessel class or type, or to discharges from vessels in general, your discharge must be consistent with the assumptions and requirements of that WLA. If such a WLA exists, EPA will inform you if any additional limits or controls are necessary for your discharge to be consistent with the assumptions of any available WLA in the TMDL, or whether an individual permit application is necessary in accordance with Part 1.8.1. Note that this provision also applies to situations where EPA determines that your discharges are covered by the WLA in an EPA-approved or established TMDL for another water body, even if your discharge is to a receiving water that is not specifically identified on a section 303(d) list.

If an applicable TMDL exists either individually or categorically for your vessel or vessel class (including disallowing discharges from your vessel), EPA and/or state TMDL agencies will inform vessel owners/operators of specific requirements.

3. CORRECTIVE ACTIONS

The corrective action requirements in Part 3 in no way impair EPA's or an authorized representative acting on EPA's behalf to require remedies to bring a vessel owner/operator into compliance with this permit as soon as possible. On a case-by-case basis, EPA may take enforcement action to require any remedy or corrective action necessary to achieve compliance as quickly as possible, including more stringent time tables than those listed in this part.

3.1 Problems Triggering the Need for Corrective Action

If any of the following problems are identified, you must take action to ensure that the problem is eliminated and will not be repeated:

- You violate 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 limits;
- You become aware, or EPA determines, that your measures do not control discharges as stringently as necessary to meet applicable water quality standards; or
- You find, or EPA determines, that your 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.

Problems might 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 you, a government official, or anyone else; or through any other means.

3.2 Corrective Action Assessment

Following the identification of any of the problems listed in Part 3.1, you must conduct a corrective action assessment into the nature, cause, and potential options for eliminating these problems. 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 as defined in 40 CFR Part 110), 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.
- 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 of whether the corrective action requires the vessel to be in drydock and, if so, the next planned date the vessel will be dry-docked.
- 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.

You must retain the findings of your corrective action assessment in your recordkeeping documentation or in your ship's log (pursuant to Part 4.2), signed and certified in accordance with Part 1.7 of this permit.

3.3 Deadlines for Eliminating Problem

Corrective action with respect to many permit requirements can be accomplished immediately. These requirements include, but are not limited to, housekeeping and certain operation and maintenance requirements. In these situations, you must return to compliance immediately.

Restoring 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 actions that can be accomplished with relatively simple adjustments to your control measures, using existing personnel and resources, and not requiring the vessel to be in drydock: you must address the underlying cause of the noncompliance and return to compliance and/or complete necessary adjustments or repairs 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 2-week period or before reentering waters subject to this permit, whichever is later.
- Corrective actions that require new parts, require equipment or parts that are not onboard the vessel or readily available, or require the installation of new equipment, not requiring the vessel to be in drydock: you must address the underlying cause of the noncompliance 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 3-month period or before reentering waters subject to this permit, whichever is later. However, if completing repairs within 3 months is impracticable, you must complete repairs as soon as possible after 3 months and document the reason why more time is needed as part of your corrective action assessment.
- For corrective actions that require large or comprehensive renovations, alterations, or repairs to the vessel that can only be achieved while the vessel is in drydock: you must address the underlying cause of the noncompliance and return to compliance and/or complete necessary renovations or repairs prior to re-launching the vessel from drydock or prior to reentering waters subject to this permit following the next drydock, whichever is later.

3.4 Effect of Corrective Action

If 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 you of liability for this 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.

4. INSPECTIONS, MONITORING, REPORTING, AND RECORDKEEPING

4.1 Self Inspections and Monitoring

You must conduct the following inspections of your vessel. Please see the accompanying Fact Sheet for guidance on how these requirements apply to vessels frequently outside waters subject to this permit.

4.1.1 Routine Visual Inspections

Except as provided below, a routine visual inspection must be conducted at least once per week or per voyage, whichever is more frequent, unless the vessel meets the requirements for extended unmanned period inspections in Part 4.1.1.2 of this permit, or unless multiple voyages occur in a single day. If vessel owners/operators engage in multiple voyages per day, they need not conduct inspections on every voyage, but must conduct inspections at least once per day. The term "voyage" for purposes of the VGP is defined in Appendix A of this permit.

Routine visual inspections should be conducted on a schedule that coincides with other routine vessel inspections if feasible. Conduct routine visual inspections of all accessible areas addressed in this permit, including, but not limited to cargo holds, boiler areas, machinery storage areas, welldecks, and other deck areas. Ensure these areas are clear of garbage, exposed raw materials, oil, any visible pollutant or constituent of concern that could be discharged in any waste stream, that pollution prevention mechanisms are in proper working order, and pollution prevention procedures are in place to minimize the addition of pollutants to any waste stream. At a minimum, the routine visual inspection must verify to the extent feasible that requirements of Part 2.1 are being met and document any instances of noncompliance. Your routine visual inspection must also include a visual inspection of safely accessible deck and cargo areas and all 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. 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. If you identify or are made aware that pollutants or constituents of concern are originating from your vessel in a manner that violates the limitations in this permit, you must initiate corrective actions, as described in Part 3 of this permit. Vessel owners/operators may conduct these inspections as part of meeting their existing (or updated) international safety management code (ISM) safety management system (SMS) plan obligations, provided that those inspections meet the minimum requirements discussed above.

In situations where multiple voyages occur within a one-week period, you may choose to conduct a limited visual inspection addressing only those areas that may have been affected by activities related to the docking and cargo operations conducted during each voyage instead of conducting a full routine visual inspection per voyage (or per day, if there are multiple voyages in one day). If you employ such an approach, you must conduct a full visual inspection of the vessel at least once per week.

4.1.1.1 Documentation of the Routine Visual Inspection

You must document the findings of each routine visual inspection in the official ship logbook or as a component of other recordkeeping documentation referenced in Part 4.2. You must document the date and time of inspection, ship locations inspected, personnel conducting the inspection, location of any visual sampling and observations, note any potential problems and sources of contamination found, and it must be signed by the person conducting the inspection, if not the Master. For limited visual inspections, you need only initial that the inspections were conducted as an addendum to the documentation of the full "weekly" visual inspection, unless additional potential problems or contamination is found.

The person conducting the inspection must be a signatory under 40 CFR §122.22. A signatory includes the person in charge (e.g., the Master), or his or her duly authorized representative. The records of routine visual inspections must be made available to EPA or its authorized representative upon request. Vessel operators must initiate corrective actions, as required under Part 3 of this permit, for any of the conditions listed in Part 3.1 that are identified in their inspections.

4.1.1.2 Extended Unmanned Period (EUP) Inspections

A vessel is considered to be in an extended unmanned period (EUP) if the vessel is temporarily (e.g., for storage or repair) unmanned, fleeted, jacked-up, or otherwise has its navigation systems and main propulsion shut down (e.g., a vessel in drydock or extended lay-up) for 13 days or greater. During an EUP, a vessel owner/operator may elect to either continue conducting routine inspections of the vessel consistent with Part 4.1.1 of this permit, or he or she may conduct an EUP Inspection. The EUP inspection is an alternative inspection for fleeted, jacked-up, or similarly situated vessels, which routinely go into temporary or extended periods of lay-up.

Vessel owners/operators may conduct EUP inspections in lieu of routine visual inspections if they are up-to-date with all other inspection and reporting requirements found in Part 4 of this permit (including routine and annual inspections) and the vessel owner/operator must not have received any VGP-related notices of violation or faced any VGP-related enforcement action from EPA within the previous 24 months.

The EUP inspection consists of three primary components: a pre lay-up inspection, a periodic external observation of the vessel and surrounding waters, and a post lay-up routine visual inspection. Each is explained in greater detail below.

Immediately before a vessel is placed in an EUP, the vessel operator must conduct the pre lay-up inspection, which will consist of:

- A routine visual inspection consistent with Part 4.1.1 of this permit.
- Ensuring Part 2.1.1, material storage and Part 2.1.2, toxic and hazardous material requirements are met.
- Ensuring all oils and oily machinery are properly secured, covered, and protected. Any spilled or leaked oils must be cleaned up immediately. If machinery or

equipment is leaking oil, the leaks must be stopped or appropriate containment must be in place to capture any leaking oil.

- Documenting whether automatic bilge water pump(s) will be engaged on the vessel during the EUP.
- Documenting the amount of fuel on board.
- Documenting the amount of ballast water on board.
- Documenting the date the EUP began.

While a vessel is in EUP, the owner/operator or an authorized representative must examine the outside of the vessel and surrounding waters at least once every two weeks for any evidence of leaks, loss of cargo, or any other spills which might result in an unauthorized discharge. If any deficiencies are observed while the vessel is in EUP, the vessel owner/operator must document those deficiencies and the corrective actions taken to resolve those deficiencies. If a visible sheen is noted on the surface of the surrounding water, the source of the oil must be identified and corrective action must be taken immediately. Furthermore, EPA must be notified of the visible sheen in accordance with Part 4.4 of this permit. If these inspections are conducted as part of the routine operations of a fleeter or similar vessel caretaker, the vessel owner/operator does not need to keep recordkeeping documentation onboard the vessel if the owner/operator has electronic access to all records (including records of a fleeter or other caretaker kept in a central office), and those records are made immediately available to EPA or its authorized representative upon request. See Part 4.2.1 of this permit for electronic recordkeeping requirements.

While a vessel is in EUP, the only applicable monitoring and inspection requirements are those specified in this Part 4.1.1.2. Once a vessel reenters service and is no longer considered to be in EUP, it must comply with all previously applicable monitoring and inspection requirements.

Before a vessel reenters service, the vessel owner/operator must conduct a post lay-up routine visual inspection. As part of this inspection, the owner/operator must document the date the EUP ended, whether fluids (e.g., fuel, ballast water) are at their pre-EUP levels, and whether any spills or leaks of oily materials are observed. Any deficiencies noted must be corrected before the vessel reenters service.

4.1.2 Analytical Monitoring

Analytical monitoring requirements for specific discharge types are identified in Parts 2.2.2, 2.2.3, 2.2.15, and 2.2.26 of this permit, and for specific vessel types in Part 5 of this permit.

4.1.3 Comprehensive Annual Vessel Inspections

Comprehensive vessel inspections must be conducted by qualified personnel at least once every 12 months. Qualified personnel include the Master or owner/operator of the vessel, if appropriately trained, or appropriately trained marine or environmental engineers or technicians or an appropriately trained representative of a vessel's class society acting on behalf of the owner/operator.

Comprehensive annual inspections must cover all areas of the vessel affected by the requirements in this permit that can be inspected safely and without forcing a vessel into

drydock. Special attention should be paid to those areas most likely to result in a discharge, likely to cause or contribute to exceedances of water quality standards in the receiving waterbody or another water body impacted by your discharges, or violate effluent limits established in this permit. Areas that inspectors must examine include, but are not limited to:

- The vessel hull, including niche areas, for fouling organisms, flaking anti-foulant paint, exposed TBT or other organotin surfaces;
- Ballast water tanks, as applicable;
- Bilges, pumps, and oily water separator (OWS) sensors, as applicable;
- Oil discharge monitoring system and electronic valve switching function, as applicable;
- Protective seals for lubrication and hydraulic oil;
- Oil and chemical storage areas, cargo areas, and waste storage areas; and
- All visible pollution control measures to ensure that they are functioning properly.

If any portions of the vessel are not inspectable without the vessel entering drydock, the vessel owner/operator must inspect these areas during their drydock inspection. For areas not accessible during the annual inspection, vessel owner/operators must document that these areas of the vessel were not accessible and inspectable in their recordkeeping documentation.

The annual 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., annual tune-ups for small boats that have wet exhaust). Vessel owner/operators must also consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Furthermore, the inspection must verify whether all monitoring, training, and inspections are logged and documented according to permit requirements.

When a comprehensive annual vessel inspection schedule overlaps with a routine visual inspection required under Part 4.1.1 of this permit, the comprehensive annual vessel inspection may also be used to meet the requirement of conducting the routine visual inspection, provided that all conditions of both types of inspections described in this permit are met.

If any inspection reveals deficiencies that would result in a violation of the effluent limits in Parts 2 and 5, or indicates that a control measure is not functioning as anticipated or is in need of repair or upgrade, you must take corrective action to resolve such deficiencies in accordance with Part 3. You must record all findings and results from your annual inspection in your vessel's recordkeeping documentation or logbook.

4.1.4 Drydock Inspection Reports

Vessel owner/operators must make any dry-dock reports prepared by the class society or their flag administrations available to EPA or an authorized representative of EPA upon request. If you do not have a dry-dock report from either of these entities, you must prepare your own dry-dock report and it must be made available to EPA or an authorized representative of EPA upon request. The dry-dock report must note that:

- The chain locker has been cleaned and/or flushed in accordance with the requirements of Part 2.2.8 of this permit (to remove sediment, living organisms, and other constituents of concern as applicable);
- The vessel hull, propeller, rudder, thruster gratings, sea chest, and other surface and niche 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 under the Clean Hull Act of 2010 (33 U.S.C. §§ 3801 *et seq*.);
- 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.

4.2 Recordkeeping

Vessels covered by this permit must keep records on the vessel or accompanying tug that include the following information (as applicable):

1. Owner/Vessel information:
   a. Name,
   b. Owner and Vessel IMO Number (official number if IMO number not issued),
   c. Vessel type,
   d. Owner or operator company name,
   e. Owner or operator certifying official's name,
   f. Address of owner/operator,
   g. Gross tonnage,
   h. Call sign, and
   i. Port of Registry (Flag).

2. Voyage Log. Include the dates and ports of arrival, vessel agent(s), last port and country of call, and next port and country of call (when known).

3. If you have any violation of any effluent limit, you must document the violation. You must also record:
   a. A description of the violation,
   b. Date of the violation,
   c. Name, title, and signature of the person who identified the violation,
   d. Name, title, and signature of the person who is recording the violation (if different from person who identified the violation),
   e. 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
   f. 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 and any deficiencies and problems identified during routine visual inspections and extended unmanned inspections (if applicable) conducted under Part 4.1.1, including a discussion of any corrective actions taken as required by Part 3, if applicable. Include date, inspector's name, findings, and corrective actions planned or taken. If no deficiencies or problems are found during a routine visual inspection, the vessel owner/operator shall record that the inspection was completed with the inspector's name and date. Routine visual inspections and extended unmanned inspections (if applicable) must be recorded as completed according to Part 4.1.1.

5. Analytical results of all monitoring referenced in Part 4.1.2, including sample documentation, results, and laboratory quality assurance (QA) documentation.

6. Log of findings from comprehensive annual vessel inspections conducted under Part 4.1.3, including a discussion of any corrective actions planned or taken required by Part 3. Include date, inspector's name, findings, and a description of the corrective actions taken.

7. Log of findings from drydock inspections conducted under Part 4.1.4 including a discussion of any corrective actions planned or taken required by Part 3. Include date, inspector's name, findings, and a description of the corrective actions taken.

8. Record of any specific water quality based requirements in Part 2.3 given to your vessel by EPA or its authorized representative and how you have met those requirements.

9. Additional maintenance and discharge information to be recorded and kept in a log on the vessel:
    a. Deck maintenance. Record dates, materials used, application process, etc. for any significant maintenance of the deck surface(s) (e.g., more than routine, daily cleaning activities, such as cleaning, sweeping, scraping, or touch-up paint).
    b. 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 of at onshore locations.
    c. Paint application. Record dates, materials used, application process, etc. for any antifouling paint applied to the vessel.
    d. AFFF. Record dates, estimated volumes, and constituents of any discharges of AFFF.
    e. Chain locker inspections. Record dates of inspections and any rinsing conducted within waters subject to this permit.
    f. 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.

g. Any emergencies requiring discharges otherwise prohibited to waters listed in Appendix G.

h. Gas Turbine Water Wash. Record dates and estimated volume of any discharge of gas turbine washwater within waters subject to this permit. If hauled or disposed of onshore, record log hauler and volume.

i. Estimated volume and location of graywater discharged while in waters subject to this permit.

j. Technical data sheets (MSDS) for all EALs used in Oil-to-Sea interfaces onboard the vessel. Document whether the EAL registered under a labeling program (e.g., DfE, Blue Angel). If it is technically infeasible to use an EAL in an Oil-to-Sea application, include documentation as to the reason.

10. All other documentation required pursuant to this permit.

11. Record of training completed as required by this permit, and where applicable, strategy for passenger training. For purposes of this part, if vessel owners/operators include their training plans as part of their ISM or similar environmental management plans, and they can document that they fully implement those plans, they will meet the recordkeeping requirements of this part.

Vessel owner/operators may keep paper or electronic records on the vessel or accompanying tug. All electronic recordkeeping must meet the requirements found in Part 4.2.1 of this permit.

Owners/operators of unmanned, unpowered barges need not maintain records for numbers 2, 5, 9, and 11 above. However, owners/operators of unmanned, unpowered barges must provide a history of areas where the vessel has operated and applicable general maintenance records to EPA upon request. If barge operators are unable to make applicable general maintenance records and a history of where the vessel has been available to EPA upon request (e.g., promptly retrieve those data from the vessel owner), they must maintain the records for numbers 2, 5, 9, and 11 on the vessel or accompanying tug.

It is not the intention of this permit to require separate records for the Coast Guard and EPA. Rather, vessels can harmonize their recordkeeping practices, where appropriate, so that records are not unnecessarily duplicative. For example, information can be logged with maintenance records, the ship's log, in existing ISM/SMS plans or recordkeeping, the oil record book, shipboard oil pollution emergency plan, or other additional recordkeeping documentation as appropriate but must be provided to EPA or its authorized representative 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 is required for all NOIs, NOTs, the PARI form, and any report (including any monitoring data) submitted to EPA, pursuant to Parts 1.7 of this permit and 40 CFR §122.22. The vessel owner/operator must retain copies of all reports, certifications, records, monitoring data, and other information required by this permit, 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 part upon request.

4.2.1 Electronic Recordkeeping

For purposes of the VGP, records may be kept electronically if the records are:

- In a format that can be read in a similar manner as a paper record,
- Legally dependable with no less evidentiary value than their paper equivalent, and
- Accessible to the inspector during an inspection to the same extent as a paper copy stored on the vessel would be, if the records were stored in paper form.

4.3 Additional Recordkeeping for Vessels Equipped with Ballast Tanks

Except for vessels operating exclusively within one Captain of the Port Zone, for vessels equipped with ballast tanks that are bound for a port or place in the United States, you must meet the recordkeeping requirements of 33 CFR Part 151.

The master, owner, operator, or person in charge 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 (m^3), 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. 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:
   a. The origin of ballast water. This includes date(s), locations(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.
   b. 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.
   c. Specific records pertaining to treated ballast water (see Part 2.2.3.5 of the permit).

d. 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 (NBIC) before arriving to U.S. ports as required by the U.S. Coast Guard. In addition, crude oil tankers engaged in the Coast Wise trade are also required to submit their ballast water reporting forms to the NBIC as a requirement of this permit. In addition, all vessels which conduct saltwater flushing as required by Part 2.2.3.6.3 and Part 2.2.3.6.4 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.

4.4 Reporting

4.4.1 Annual Report

For each vessel, owners/operators are required to submit an Annual Report for each year that they have active permit coverage. For vessels which must file NOIs, this means for as long as they have an active NOI. For vessels which need not file an NOI, they maintain active coverage as long as they are operating in waters subject to this permit, provided they have signed and maintain a copy of the PARI form. Annual Reports must be completed each calendar year and submitted by February 28 of the following year (e.g., the 2014 annual report will be due by February 28, 2015). A separate 2013 annual report will not be required; instead, any relevant information from December 19, 2013 – December 31, 2013 (if applicable) must be included in the annual report for the 2014 calendar year. Permittees covered under the 2008 VGP must submit reports of all instances of noncompliance which occur before December 18, 2013 to EPA consistent with the terms of that permit.

All analytical monitoring results must be submitted to EPA as part of the Annual Report.

The vessel owner/operator shall complete the Annual Report form provided in Appendix H of this permit and submit it to EPA electronically. It can be completed online by accessing EPA's main NPDES vessel webpage (available via www.epa.gov/npdes/vessels or through EPA's eNOI system (www.epa.gov/npdes/vessels/eNOI).

The vessel owner/operator shall respond to all questions accurately and completely, and provide the necessary information and/or data to support each response. Unless one of the exceptions in Part 1.14 is met, the vessel owner/operator must submit each Annual Report electronically in accordance with the procedures described in Part 1.14 of this permit.

If you are eligible to submit a hard copy of the Annual Report, you must send your completed annual report to EPA HQ (Attn: Vessel Annual Report, Mail Code 4203M, 1200 Pennsylvania Ave. NW, Washington, DC 20460). Hard copy reports must be postmarked by February 21 of

the following calendar year (i.e., the 2014 annual report must be postmarked by February 21, 2015).

The Annual Report replaces the annual noncompliance report and one-time report requirements found in the 2008 VGP. All instances of noncompliance must be reported as part of the Annual Report.

4.4.2 Combined Annual Reports for Unmanned, Unpowered Barges or Vessels less than 300 Gross Tons

Operators of unmanned, unpowered barges or other vessels less than 300 gross tons (e.g., small tug boats) may submit a single annual report (referred to as the Combined Annual Report) for multiple vessels and/or barges, provided all of the following conditions are met:

- The answers for each barge or vessel for which the report is to be submitted are the same;
- Each barge or vessel was not required to conduct any analytical monitoring;
- The Combined Annual Report is submitted electronically;
- There were no instances of noncompliance for any barge or vessel and no instances of identified deficiencies by EPA or its authorized representatives during any inspections during the previous 12 months; and
- Each barge or vessel has an NOI permit number or, if not required to submit an NOI, a commonly used unique identifier (e.g., registration number) so EPA can identify the vessel. For vessels less than 300 gross tons which have not submitted an NOI, the unique identifier numbers must be entered on the combined annual report.

Vessel owners/operators of unmanned, unpowered barges or vessels less than 300 gross tons may submit a Combined Annual Report for some or most of their fleet, or submit individual Annual Reports if they prefer. Individual Annual Reports are required for any barges or other vessels which are not eligible for the Combined Annual Report, as specified above.

4.4.3 Reportable Quantities of Hazardous Substances or Oil

Although not a requirement of this permit, if a discharge contains oil or a hazardous substance in an amount equal to or in excess of a harmful or reportable quantity established under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, during a 24-hour period, the National Response Center (NRC) must be notified (dial 800-424-8802 or 202-426-2675 in the Washington, DC area). Also, within 14 calendar days of knowledge of the release, the date and description of the release, the circumstances leading to the release, responses to be employed for such releases, and measures to prevent recurrences of such releases must be recorded in your recordkeeping documentation consistent with Part 4.2 of this permit.

Where a discharge of hazardous substances or oil in excess of reportable or harmful quantities occurs, such discharge is not authorized by this permit and may also be a violation of section 311 of the CWA, 33 USC §1321. Note that these spills must be reported as described above. Also applicable are of the CWA and certain provisions of sections 301 and 402 of the CWA.

4.4.4 Additional Reporting

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

Where applicable, you must submit the following information to the appropriate EPA Regional Office listed in Appendix B for the location in which the instance(s) of noncompliance occurred:

- 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.

If you report to the NRC as referenced in Part 4.4.3 of the permit, you do not need to complete reporting under this part.

5. VESSEL-CLASS-SPECIFIC REQUIREMENTS

You must comply with the requirements of Part 5 of this permit, Vessel-Class-Specific Requirements, associated with your vessel class in addition to any applicable requirements that apply to all vessels specified elsewhere in this permit.

5.1 Large Cruise Ships (authorized to carry 500 people or more for hire)

The requirements in Part 5.1 apply to vessel discharges from cruise ships providing overnight accommodations (i.e., cruise ships with onboard sleeping facilities) to passengers and authorized to carry 500 people or more for hire.

5.1.1 Additional Effluent Limits

5.1.1.1 Graywater Management

5.1.1.1.1 Graywater Discharge Location and Rate

Pierside Limits – While pierside, appropriate onshore reception facilities for graywater must be used unless the vessel treats graywater with a device to meet the standards in Part 5.1.1.1.2. If such facilities are not reasonably available and you do not have the capacity to treat graywater to meet the standards in Part 5.1.1.1.2, you must hold the graywater until the vessel is underway and not in waters subject to this permit. Appropriate reception facilities are those authorized for use by the port authority or local municipality and that treat the discharge in accordance with its NPDES permit.

Operational Limits – You must meet the following restriction:

- While operating within 3 nm from shore, discharges of graywater are prohibited unless they meet the effluent standards in Part 5.1.1.1.2.

Limits Applicable to Operation in Nutrient Impaired Waters – If you operate in nutrient-impaired waters including, but not limited to, the Chesapeake Bay or the territorial sea surrounding the mouth of the Mississippi River in the Gulf of Mexico, you must:

- Not discharge any graywater in nutrient-impaired waters subject to this permit unless the length of voyage in that water exceeds the vessel's holding capacity for graywater; and
- Minimize the discharge of any graywater into nutrient-impaired waters subject to this permit, which may require minimizing the production of graywater; and
- If your vessel's holding capacity for graywater is exceeded, treat such excess graywater (above the vessel holding capacity) by a device meeting the standards in Part 5.1.1.1.2 prior to discharge into nutrient-impaired waters subject to this permit; or
- Dispose of the graywater at an onshore facility which will discharge the effluent under a valid NPDES permit.

A list of nutrient impaired waters is available at www.epa.gov/npdes/vessels.

5.1.1.1.2 Graywater Treatment Standards

The discharge of treated graywater must meet the following standards:

1. The discharge must satisfy the minimum level of effluent quality specified in 40 CFR §133.102;

2. The geometric mean of the samples from the discharge during any 30-day period may not exceed 20 fecal coliform/100 milliliters (ml) and not more than 10 percent of the samples may exceed 40 fecal coliform/100 ml; and

3. Concentrations of total residual chlorine may not exceed 10.0 micrograms per liter (µg/l).

5.1.1.1.3 Sculleries and Galleys

Cruise ship owners/operators must use soaps and detergents that are phosphate-free, minimally-toxic, and biodegradable. Degreasers must be minimally-toxic if they will be discharged as part of any waste stream.

5.1.1.1.4 Other Materials

Waste from mercury-containing products, dry cleaners or dry cleaner condensate, photo processing labs, medical sinks or floor drains, chemical storage areas, and print shops using traditional or non-soy-based inks and chlorinated solvents must be prevented from entering the ship's graywater, blackwater, or bilgewater systems if water from these systems will be discharged into waters subject to this permit. Preventing these wastes from entering these systems can be accomplished by plugging all drains that flow to the graywater, blackwater, or bilge systems in areas where these wastes are produced and creating alternate waste receptacles or replumbing drains to appropriate holding tanks.

Vessel owners/operators must not discharge any toxic materials, including products containing acetone, benzene, or formaldehyde into salon and day spa sinks or floor drains if those sinks or floor drains lead to any system which will be discharged into waters subject to this permit. This includes using these materials on passengers (or crew) and rinsing residuals into these sinks. Alternate waste receptacles or holding tanks must be used for these materials. Addition of these materials to any systems which will discharge into waters subject to this permit is a permit violation.

5.1.1.2 Pool and Spa Discharges

Discharges of pool or spa water to waters listed in Appendix G are not authorized under this permit. Discharges from pools and spas are authorized into non-Appendix G waters subject to this permit, provided pool and spa water to be discharged is dechlorinated and/or debrominated, and discharge occurs while the vessel is underway. To be considered dechlorinated, the total residual chlorine in the pool or spa effluent must be less than 100 µg/l if the pool or spa water is

discharged without going through an Advanced Wastewater Treatment System (AWTS). To be considered debrominated, the total residual oxidant in the pool or spa effluent must be below 25 µg/l if the pool or spa water is discharged without going through an AWTS. Pool and spa water may be added to the graywater treatment systems; however, any resultant discharge must meet all standards and requirements found in Part 5.1.1.1 and must be dechlorinated and/or debrominated as applicable.

5.1.2 Monitoring Requirements

5.1.2.1 Untreated Graywater

The discharge of untreated graywater by large cruise ships is not authorized in waters subject to this permit. Any discharge of untreated graywater within waters subject to this permit must be reported to EPA as an incidence of noncompliance on the vessel's Annual Report.

5.1.2.2 Treated Graywater

Prior to entering waters of the United States, vessel operators must demonstrate that they have an effective treatment system that complies with the standards in Part 5.1.1.1.2 if they will discharge graywater within 3 nm of shore.

5.1.2.2.1 Initial Monitoring

In order to demonstrate the effectiveness of the treatment system, the vessel operator must take at least five (5) samples from the vessel on different days over a 30-day period that are representative of the treated effluent to be discharged. A vessel owner/operator that submitted data to EPA for a vessel's discharge from an AWTS under the 2008 VGP requirements or has already received certification for continuous discharges from an AWTS and submitted data to the U.S. Coast Guard to meet the requirements of Section 1411(b) of Title XIV, Pub. L. 106-554 (Dec. 31, 2000, 114 Stat. 2763) [Certain Alaska Cruise Ship Operations] (codified at 33 USC 1901 note) does not need to conduct initial monitoring, and may instead immediately commence maintenance monitoring consistent with Part 5.1.2.2.2 of this permit.

Initial monitoring must be done within the first 90 days of permit coverage, within 90 days of AWTS installation onboard the vessel, or before vessels discharge into waters subject to this permit, whichever is later. Samples must be taken for BOD, fecal coliform, suspended solids, pH, and total residual chlorine. Furthermore, samples must be taken for *E. coli*, total phosphorus (TP), ammonia, nitrate/nitrite, and Total Kjeldahl Nitrogen (TKN). Sampling and testing shall be conducted according to 40 CFR Part 136. If the measured samples meet the standards specified in Part 5.1.1.1.2, then the owner/operator has demonstrated the effectiveness of their treatment system for controlling their graywater discharge. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation. Records of monitoring information shall include:

- The date, exact place, time, and sampling port location(s) of sampling or measurements;
- The individual(s) who performed the sampling or measurements;

- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- Proportions of wastestreams being treated and sampled (such as mixed graywater, mixed graywater and blackwater, and galley. If actual amounts are not available, the estimated proportions should be provided).

Analytical results for total residual chlorine below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 10.0 µg/L under ideal conditions. EPA recommends Method SM4500-CL G (DPD Colorimetric Method) for these purposes as it is able to reach 10 µg/L under ideal conditions and so meets these requirements. SM4500-Cl G is typically the method that Alaska Department of Environmental Conservation (ADEC)/U.S. Coast Guard uses for compliance monitoring.

Testing and reporting for total residual chlorine is not required if chlorine is not used as disinfectant in the wastewater treatment works process and no water is drained to the graywater system from water with onboard chlorine additions (e.g., swimming pools, spas).

5.1.2.2.2 Maintenance Monitoring

After demonstrating the effectiveness of their system, vessel owners/operators must collect and analyze one sample per quarter for each of the constituents listed in Part 5.1.2.2.1 to demonstrate treatment equipment maintenance and compliance with this permit for any quarter the vessel discharges graywater into waters subject to this permit. Furthermore, samples must be taken for *E. coli*, total phosphorus (TP), ammonia, nitrate/nitrite, and Total Kjeldahl Nitrogen (TKN). Regardless of whether a vessel has discharged into waters subject to this permit, maintenance monitoring must be conducted at least once per year or vessels must re-conduct initial monitoring in accordance with Part 5.1.2.2.1 before discharging into waters subject to this permit. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation.

5.1.2.2.3 Monitoring Reporting

The owner/operator must submit data showing that the graywater standards are achieved by their treatment system to EPA electronically or to EPA, ATTN: VGP Cruise Ship Monitoring Results, 1200 Pennsylvania Ave., MC 4203M, Washington, DC 20460 if they are eligible for a waiver under part 1.14 of this permit. Initial sampling data must be submitted at least 7 days before entering waters subject to this permit, within 90 days of obtaining permit coverage, or within 90 days of AWTS installation onboard the vessel, whichever is later. Maintenance monitoring data must be submitted at least once per calendar year no later than February 28 of the following year (e.g., 2014 data must be submitted by February 28, 2015). Data must be submitted on DMRs available in Appendix H and/or Appendix I of this permit or submitted to EPA electronically: the system is scheduled to be available at www.epa.gov/vessels/eNOI. Maintenance monitoring data may be submitted as part of the vessel's annual report (Appendix H) .

5.1.2.2.4 Reserved Authority

Even if owners/operators have demonstrated their systems meet the standards in Part 5.1.1.1.2, if EPA, its authorized representative, or the U.S. Coast Guard sample their graywater effluent and find that they are not meeting these standards, the cruise ship owners/operators are liable for violating their effluent limits.

5.1.2.2.5 Treated Graywater Records

The owner/operator must maintain records estimating the quantity and quality of all discharges of treated graywater into waters subject to this permit, including date, location and volume discharged, and pollutant concentrations monitored in their recordkeeping documentation. These records shall be maintained as part of or in combination with the vessel's sewage and graywater discharge record book required under 33 CFR §159.315.

5.1.2.3 Treated Pool and Spa Discharges

Vessel owners/operators must monitor chlorine or bromine concentrations (as applicable) in pool or spa water before every discharge event using sufficiently sensitive 40 CFR Part 136 methods if they will discharge these streams directly into waters subject to this permit to ensure that the dechlorination/debromination process is complete. If vessel owners/operators are monitoring bromine concentrations, they may use a field test kit which uses the colorimetric method in lieu of 40 CFR Part 136 methods to ensure waters have been debrominated, provided that test kit has a method detection limit no higher than 50 µg/l. You must record the location of the discharge, the estimated volume of the discharge, and the concentration of chlorine or bromine (as applicable). Records of this monitoring must be kept with other graywater monitoring records.

For chlorine, analytical results below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 10.0 µg/L under ideal conditions. EPA recommends Method SM4500-CL G (DPD Colorimetric Method) for these purposes as it is able to reach 10 µg/L under ideal conditions and so meets these requirements. SM4500-Cl G is typically the method that ADEC/USCG uses for compliance monitoring. For bromine, analytical results below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 50.0 µg/l.

5.1.3 Educational and Training Requirements

The crews of cruise ships play a key role in minimizing the discharge of pollutants from cruise ship operations and passengers. Therefore, cruise ship operators must provide the following educational and training requirements to ship personnel:

- The ship's crew members who actively take part in the management of a discharge or who may affect any discharge 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 members must be able to demonstrate proficiency in implementing these procedures; and

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

Cruise ships must also educate passengers on their potential environmental impacts. The goals of these education efforts must include preventing trash from entering any waste stream, eliminating the addition of unused soaps, detergents, and pharmaceuticals to the graywater or blackwater systems, and minimizing production of graywater. This can be accomplished in a variety of ways including, but not limited to, posting signage and informational material in guestrooms and common areas, incorporating environmental information passenger orientation presentations or packages at the start of cruises, incorporating this information into additional lectures and seminars, or broadcasting information via loudspeakers.

Vessel owners/operators must also meet all training-related recordkeeping requirements of Part 4.2 of this permit.

5.2 Medium Cruise Ships (authorized to carry 100 to 499 people for hire)

The requirements in Part 5.2 apply to vessel discharges from cruise ships providing overnight accommodations (i.e., cruise ships with onboard sleeping facilities) to passengers and authorized to carry between 100 and 499 people for hire.

5.2.1 Additional Effluent Limits

5.2.1.1 Graywater Management

All medium cruise ships must meet all requirements of this part, including the requirements of Parts 5.2.1.1.1, unless they are a vessel unable to voyage more than 1 nm from shore and were constructed before December 19, 2008. Medium cruise ships unable to voyage 1 nm from shore and constructed before December 19, 2008 must meet the requirements in Parts 5.2.1.1.3, 5.2.1.1.4, 5.2.1.1.5, 0, 5.2.2.1, 5.2.2.3, and 5.2.3.

5.2.1.1.1 Graywater Discharge Location and Rate

Pierside Limits – While pierside, appropriate onshore reception facilities for graywater must be used, unless the vessel treats graywater with a device to meet the standards in Part 5.2.1.1.2. If such facilities are not reasonably available and you do not have the capacity to treat graywater to meet the standards in Part 5.2.1.1.2, you must hold the graywater until the vessel is underway and not in waters subject to this permit. Appropriate reception facilities are those authorized for use by the port authority or local municipality and that treat graywater in accordance with its NPDES permit.

Operational Limits – You must meet the following restrictions: while operating within 3 nm from shore, discharges of graywater are prohibited unless they meet the effluent standards in Part 5.2.1.1.2.

Limits Applicable to Operation in Nutrient Impaired Waters – If you operate in nutrient-impaired waters including, but not limited to, the Chesapeake Bay or the territorial sea surrounding the mouth of the Mississippi River in the Gulf of Mexico, you must:

- Not discharge any graywater in nutrient-impaired waters subject to this permit unless the length of voyage in that water exceeds the vessel's holding capacity for graywater; and
- Minimize the discharge of any graywater into nutrient-impaired waters subject to this permit, which may require minimizing the production of graywater; and
- If your vessel's holding capacity for graywater is exceeded, treat such excess graywater (above the vessel-holding capacity) by a device meeting the standards in Part 5.2.1.1.2 prior to discharge into nutrient-impaired waters subject to this permit; or
- Dispose of the graywater at an onshore facility which will discharge the effluent under a valid NPDES permit.

A list of nutrient-impaired waters is available at www.epa.gov/npdes/vessels.

5.2.1.1.2 Graywater Treatment Standards

The discharge of treated graywater must meet the following standards:

1. The discharge must satisfy the minimum level of effluent quality specified in 40 CFR §133.102;

2. The geometric mean of the samples from the discharge during any 30-day period may not exceed 20 fecal coliform/100 milliliters (ml) and not more than 10 percent of the samples exceed 40 fecal coliform/100 ml; and

3. Concentrations of total residual chlorine may not exceed 10.0 micrograms per liter (µg/l).

5.2.1.1.3 Sculleries and Galleys

Cruise ship owners/operators must use soaps and detergents that are minimally-toxic, phosphate free, and biodegradable. Degreasers must be minimally-toxic if they will be discharged as part of any waste stream.

5.2.1.1.4 Other Materials

Waste from mercury-containing products, dry cleaners or dry cleaner condensate, photo processing labs, medical sinks or floor drains, chemical storage areas, and print shops using traditional or non-soy based inks and chlorinated solvents must be prevented from entering the ship's graywater, blackwater, or bilgewater systems if water from these systems will ever be discharged into waters subject to this permit. Preventing these wastes from entering these systems can be accomplished by plugging all drains that flow to the graywater, blackwater, or

bilge systems in areas where these wastes are produced and creating alternate waste receptacles or replumbing drains to appropriate holding tanks.

Vessel owners/operators must not discharge any toxic materials, including products containing acetone, benzene, or formaldehyde into salon and day spa sinks or floor drains if those sinks or floor drains lead to any system which will be discharged into waters subject to this permit. This includes using these materials on passengers (or crew) and rinsing residuals into these sinks. Alternate waste receptacles or holding tanks must be used for these materials. Addition of these materials to any systems which will discharge into waters subject to this permit is a permit violation.

5.2.1.1.5 Graywater Discharge Location and Rate for Vessels Built before December 19, 2008 unable to voyage 1 nm from shore

While pierside, appropriate onshore reception facilities for graywater must be used if available and their use is economically achievable (unless the vessel treats graywater with a device to meet the standards in Part 5.2.1.1.2). Appropriate reception facilities are those authorized for use by the port authority or local municipality and that treat the discharge in accordance with its NPDES permit.

If such facilities are not available and you do not have the capacity to treat graywater to meet the standards in Part 5.2.1.1.2, you must hold the graywater unless the vessel is underway and sailing at a speed of at least 6 knots in a water that is not listed in Appendix G. When operating in nutrient impaired waters subject to this permit, you must not discharge any graywater into those waters subject unless the length of voyage in that water exceeds the vessel's holding capacity for graywater, and minimize the discharge of any graywater into nutrient-impaired waters subject to this permit, which may require minimizing the production of graywater.

5.2.1.2 Pool and Spa Discharges

Discharges of pool or spa water to waters listed in Appendix G are not authorized under this permit. Discharges from pools and spas are authorized into non-Appendix G waters subject to this permit, provided pool and spa water to be discharged is dechlorinated and/or debrominated, and discharge occurs while the vessel is underway. To be considered dechlorinated, the total residual chlorine in the pool or spa effluent must be less than 100 µg/l if the pool or spa water is discharged without treatment through an AWTS. To be considered debrominated, the total residual oxidant in the pool or spa effluent must be below 25 µg/l if the pool or spa water is discharged without going through an AWTS. Pool and spa water may be added to the graywater treatment systems; however, any resultant discharge must meet all standards and requirements found in Part 5.2.1.1 and must be dechlorinated and/or debrominated as applicable.

5.2.2 Monitoring Requirements

5.2.2.1 Untreated Graywater

The owner/operator must maintain records estimating all discharges of untreated graywater into waters subject to this permit, including date, location, and volume discharged in their

recordkeeping documentation. These records can be maintained as part of the vessel's sewage and graywater discharge record book required under 33 CFR §159.315.

5.2.2.2 Treated Graywater

Prior to entering waters of the United States, vessel operators must demonstrate that they have an effective treatment system that complies with the standards in Part 5.2.1.1.2 if they will discharge graywater within 1 nm of shore.

5.2.2.2.1 Initial Monitoring

In order to demonstrate the effectiveness of the treatment system, the vessel operator must take at least five (5) samples taken from the vessel on different days over a 30-day period that are representative of the treated effluent to be discharged. A vessel owner/operator that submitted data to EPA for a vessel's discharge from an AWTS under the 2008 VGP requirements or submitted such data to the U.S. Coast Guard to meet the requirements of Section 1411(b) of Title XIV, Pub. L. 106-554 (Dec. 31, 2000, 114 Stat. 2763) [Certain Alaska Cruise Ship Operations] (codified at 33 USC 1901 note) does not need to conduct initial monitoring, and may instead immediately commence maintenance monitoring consistent with Part 5.2.2.2.2 of this permit.

Initial monitoring must be done within the first 90 days of permit coverage, within 90 days of AWTS installation onboard the vessel, or before vessels discharge into waters subject to this permit, whichever is later. Samples must be taken for BOD, fecal coliform, suspended solids, pH, and total residual chlorine. Furthermore, samples must be taken for *E. coli*, TP, ammonia, nitrate/nitrite, and TKN. Sampling and testing shall be conducted according to 40 CFR Part 136. If the measured samples meet the standards specified in Part 5.2.1.1.2, then the owner/operator has demonstrated the effectiveness of their treatment system for controlling their graywater discharge. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation.
Records of monitoring information shall include:

- The date, exact place, time, and sampling port location(s) of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- Proportions of wastestreams being treated and sampled (such as mixed graywater, mixed graywater and blackwater, and galley. If actual amounts are not available, the estimated proportions should be provided).

Analytical results for total residual chlorine below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 10.0 µg/L under ideal conditions. EPA recommends Method SM4500-CL G (DPD Colorimetric Method) for these purposes as it is able to reach 10 µg/L under ideal

conditions and so meets these requirements. SM4500-Cl G is typically the method that ADEC/U.S. Coast Guard uses for compliance monitoring.

Testing and reporting for total residual chlorine is not required if chlorine is not used as disinfectant in the wastewater treatment works process and no water is drained to the graywater system from water with onboard chlorine additions (e.g., swimming pools, spas).

5.2.2.2.2 Maintenance Monitoring

After demonstrating the effectiveness of their system, vessel owners/operators must collect and analyze one sample per quarter for each of the constituents listed in Part 5.2.2.2.1 to demonstrate treatment equipment maintenance and compliance with this permit. Records of the sampling and testing results must be retained onboard for a period of 3 years in the vessel's recordkeeping documentation.

5.2.2.2.3 Monitoring Reporting

The owner/operator must submit data showing that the graywater standards are achieved by their treatment system to EPA electronically or to EPA, ATTN: VGP Cruise Ship Monitoring Results, 1200 Pennsylvania Ave., MC 4203M, Washington, DC 20460 if the vessel owner/operator is eligible for waiver under part 1.14 of this permit. Initial sampling data must be submitted at least 7 days before entering waters subject to this permit, within 90 days of obtaining permit coverage, or within 90 days of AWTS installation onboard the vessel, whichever is later. Maintenance monitoring data must be submitted at least once per calendar year no later than February 28 of the following year (e.g., 2014 data must be submitted by February 28, 2015). Data must be submitted on DMRs available in Appendix H and/or Appendix I of this permit or submitted to EPA electronically. The system is scheduled to be available at www.epa.gov/vessels/eNOI. Maintenance monitoring data may be submitted as part of the vessel's Annual Report.

5.2.2.2.4 Reserved Authority

Even if owners/operators have demonstrated their system meets the standards in Part 5.2.1.1.2, if EPA, its authorized representative, or the U.S. Coast Guard sample their graywater effluent and find that they are not meeting these standards, the cruise ship owners/operators are liable for violating their effluent limits.

5.2.2.2.5 Treated Graywater Records

The owner/operator shall maintain records estimating the quantity and quality of all discharges of treated graywater into waters subject to this permit, including date, location, and volume discharged, and pollutant concentrations monitored in their recordkeeping documentation. These records shall be maintained as part of or in combination with the vessel's sewage and graywater discharge record book required under 33 CFR §159.315.

5.2.2.3 Treated Pool and Spa Discharges

Vessel owners/operators must monitor chlorine or bromine concentrations (as applicable) in pool or spa water before every discharge event using sufficiently sensitive 40 CFR Part 136 methods

if they will discharge these streams directly into waters subject to this permit to ensure that the dechlorination/debromination process is complete. If vessel owners/operators are monitoring bromine concentrations, they may use a field test kit which uses the colorimetric method in lieu of 40 CFR Part 136 methods to ensure waters have been debrominated, provided that test kit has a method detection limit no higher than 50 µg/l. You must record the location of the discharge, the estimated volume of the discharge, and the concentration of chlorine or bromine (as applicable). Records of this monitoring must be kept with other graywater monitoring records.

For chlorine, analytical results below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 10.0 µg/L under ideal conditions. EPA recommends Method SM4500-CL G (DPD Colorimetric Method) for these purposes as it is able to reach 10 µg/l under ideal conditions and so meets these requirements. SM4500-Cl G is typically the method that ADEC/U.S. Coast Guard uses for compliance monitoring. For bromine, analytical results below the method detection limit shall be deemed compliant with the effluent limits, provided the permittee uses a testing method with a detection limit no higher than 50.0 µg/l.

5.2.3 Educational and Training Requirements

The crews of cruise ships play a key role in minimizing the discharge of pollutants from cruise ship operations and passengers. Therefore, cruise ship operators are responsible for providing the following educational and training requirements to ship personnel:

- The ship's crew members who actively take part in the management of the discharge or who may affect the discharge 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 members must be able to demonstrate proficiency in implementing these procedures; and
- Appropriate reprimand procedures must be developed for crew whose actions lead to violations of any effluent limit set forth in this permit or procedures established by the cruise ship operator to minimize the discharge of pollutants.

Cruise ships must also educate passengers on their potential environmental impacts. The goals of these education efforts must include preventing trash from entering any waste stream, eliminating the addition of unused soaps, detergents, and pharmaceuticals to the graywater or blackwater systems, and minimizing production of graywater. This can be accomplished in a variety of ways including, but not limited to, posting signage and informational material in guestrooms and common areas, incorporating environmental information passenger orientation presentations or packages at the start of cruises, incorporating this information into additional lectures and seminars, or broadcasting information via loudspeakers.

Vessel owner/operators must also meet all training-related recordkeeping requirements of Part 4.2 of this permit.

5.3 Large Ferries

Ferries are vessels for hire that are designed to carry passengers and/or vehicles between two ports, usually in inland, coastal, or near-shore waters. "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 U.S. Coast Guard to carry 250 or more people. All large ferries authorized to carry 100 or more tons of cars, trucks, trains, or other land-based transportation must meet the requirements in Part 5.3.1.1 (Deck Water) and Part 5.3.2 (Education and Training). Large ferries authorized by the Coast Guard to carry 250 or more people must also meet the requirements of Part 5.3.1.2 (Graywater Management) and Part 5.3.2 (Education and Training Requirements).

5.3.1 Additional Effluent Limits

5.3.1.1 Deck Water

Large ferries may not discharge untreated below deck water from parking areas or other storage areas for motor vehicles or other motorized equipment into waters subject to this permit without first treating the effluent with an oily water separator or other appropriate wastewater treatment system. Large ferry operators must use oil absorbent cloths or other appropriate spill response resources to clean oily spills or substances from deck surfaces. Any effluent created by washing the decks may not be discharged into the waters subject to this permit listed in Appendix G.

5.3.1.2 Graywater Management

5.3.1.2.1 Graywater Discharge Location and Rate

Pierside Limits – While pierside, appropriate onshore reception facilities for graywater must be used, if available and their use is economically achievable, unless the vessel treats graywater to the limits found in Part 5.1.1.1.2 of the permit. If such facilities are not available, you must hold the graywater if the vessel has the holding capacity and discharge the effluent while the vessel is underway. Appropriate reception facilities are those authorized for use by the port authority or municipality and that treat the discharge in accordance with its NPDES permit.

Operational Limits – You must also meet the following restriction: if you operate within 3 nm from shore, discharges of graywater may only be released while the ferry is sailing at a speed of at least 6 knots if feasible. If not feasible, you must document why in your recordkeeping documentation.

5.3.2 Educational and Training Requirements

The crews of ferries play a key role in minimizing the discharge of pollutants from ferry operations and its passengers. Therefore, ferry operators are subject to the following requirements:

- The ship's crew members who actively take part in the management of the discharge or who may affect the discharge 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; and
- Appropriate reprimand procedures must be developed for crew whose actions lead to violations of any effluent limit set forth in this permit or procedures established by the ferry operator to minimize the discharge of pollutants.

Ferry operators must also educate passengers on their potential environmental impacts. The goals of these education efforts should include eliminating the discharge of trash overboard, minimizing the production of trash from parking areas or other storage areas, eliminating the addition of unused soaps, detergents, and pharmaceuticals to the graywater or blackwater systems, and minimizing production of graywater. This can be accomplished in a variety of ways including, but not limited to, posting signage and informational material in common areas, incorporating environmental information into orientation presentations, or broadcasting information via loudspeakers.

Vessel owners/operators of large ferries must also meet all training-related recordkeeping requirements of Part 4.2 of this permit.

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

The requirements in Part 5.4 apply to vessel discharges from barges. Barges engaged in the transportation of oil or other petroleum products must also comply with Part 5.5 of this permit.

5.4.1 Additional Effluent Limits

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 as defined in 40 CFR Part 110. If a visible sheen, as defined in Appendix A of this permit, 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 mechanically plug their scuppers before any cargo operations if required by vessel class society and/or 33 CFR Parts 155 and/or 156. Additionally, scuppers, when available, must be mechanically plugged during fueling of ancillary equipment (e.g., generators and compressors) located on the deck of the barge. If scuppers are unavailable, other types of secondary containment should be employed. If any spills result during loading or unloading of cargo, or other ancillary equipment fueling operations, vessel owners/operators must completely clean up spills or residue before scuppers are unplugged.

Vessel owners/operators must clean out cargo residues (i.e., broom clean or equivalent) such that any remaining residue is minimized before washing the cargo compartment or tank and discharging washwater overboard.

5.4.2 Supplemental Inspection Requirements

After every instance of pumping water from areas below decks, 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 operator should focus the inspection on the area surrounding the vessel where discharges from below deck or deck washings are discharges into the receiving water. A visible sheen is defined in Appendix A of this permit. If a visible sheen is observed, you must initiate corrective actions required in Part 3 of this permit and meet recordkeeping and notification (reporting) requirements in Part 4.2 of this permit.

5.5 Oil Tankers, Petroleum Tankers, and Bulk Chemical Carriers

The requirements in Part 5.5 apply to vessel discharges from oil tankers, petroleum tankers, and bulk chemical carriers, as well as barges engaged in transportation of oil or petroleum products.

5.5.1 Additional Authorized Discharges

For vessels which have an inert gas system, the effluent produced from inert gas scrubbers (IGS) 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.

5.5.2 Additional Effluent Limits

Owners/operators of 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. Additionally, owners/operators of oil tankers must comply with applicable requirements of 33 CFR §155.310 and 33 CFR Part 156, Subpart A.

Vessel owners/operators must minimize the discharge of effluent produced from inert gas scrubbers if feasible for their vessel design.

5.5.3 Supplemental Inspection Requirements

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

this permit, and meet recordkeeping and notification (reporting) requirements in Part 4.2 of this permit.

5.5.4 Educational and Training Requirements

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 members who actively take part in the management of the discharge or who may affect the discharge 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; and
- 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.

Vessel owners/operators of tankers must also meet all training-related recordkeeping requirements of Part 4.2 of this permit.

5.6 Research Vessels

The requirements in Part 5.6 apply to vessel discharges from research vessels. Research vessels are those that are engaged in investigation or experimentation aimed at discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.

5.6.1 Supplemental Authorized Discharges

In addition to the discharges incidental to the normal operation of a vessel authorized elsewhere in this permit, owners/operators of research vessels are authorized to discharge tracers (dyes, fluorescent beads, SF6), drifters, tracking devices and the like, and expendable bathythermograph (XBT) probes, into waters subject to this permit, provided such discharges are for the sole purpose of conducting research on the aquatic environment or its natural resources in accordance with generally recognized scientific methods, principles, or techniques.

5.6.2 Additional Effluent Limits

Owners/operators of research vessels must discharge only the minimal amount of materials referenced in Part 5.6.1 necessary to conduct research on the aquatic environment or its natural resources in accordance with generally recognized scientific methods, principles, or techniques.

5.7 Emergency and Rescue Vessels (Fire Boats, Police Boats)

The requirements in Part 5.7 apply to vessel discharges from emergency and rescue boats.

5.7.1 Supplemental Authorized Discharges

In addition to the discharges incidental to the normal operation of a vessel authorized elsewhere in this permit, owners/operators of emergency and rescue vessels are authorized to discharge waste streams in conjunction with training, testing, and maintenance operations, provided that they comply with all additional requirements of the CWA (e.g., section 311) and the National Contingency Plan (40 CFR Part 300). This part does not relieve vessel operators of any additional responsibilities under the CWA and the National Contingency Plan which prohibits the discharge of oil for research or demonstration purposes without Administrator approval. The use of foaming agents for oil or chemical fire response must be implemented in accordance with the National Contingency Plan (40 CFR Part 300).

5.7.2 Additional Effluent Limits

Owners/operators are strongly encouraged to seek alternative formulations of AFFF that are less harmful to the aquatic environment, such as non-fluorinated foam, while maintaining their effectiveness in emergency operations. Furthermore, operators are encouraged to not use AFFF or discharge toxic substances in areas near active commercial or recreational fisheries, near swimmable waters, or in high traffic areas for maintenance or training purposes. Emergency vessel owners/operators are also encouraged to perform training, testing, and maintenance operations outside of port and as far from shore as possible. The use of foaming agents for oil or chemical fire response, and the control of their discharge from a vessel, must be implemented in accordance with the National Contingency Plan (40 CFR Part 300).

6. SPECIFIC REQUIREMENTS FOR INDIVIDUAL STATES OR INDIAN COUNTRY LANDS

Section 401(d) of the CWA provides that any certification under the Act "shall set forth any effluent limitations and other limitations, and monitoring requirements" necessary to assure that any applicant for a federal license or permit will comply with any applicable CWA-based effluent limitations and other limitations, standards of performance, prohibitions, effluent standards, or pretreatment standards, and with any other appropriate requirements of State and Tribal law. Section 401(d) further provides that such additional limitations and monitoring requirements "shall become a condition on any Federal license or permit subject to the provisions of this section." Pursuant to section 401(d), EPA has attached those provisions provided by States and Tribes in their CWA § 401 certifications that constitute effluent or other limitations or monitoring requirements as enforceable conditions of this permit[3].

The VGP is effective in every State and Indian Country Land except in the waters of The Bad River Band of Lake Superior Tribe of Chippewa Indians and Oklahoma Outstanding Resource Waters listed[4]. States and Indian Tribes which are not listed below have either certified without conditions or waived.

The following States or Tribes included additional permit requirements in their CWA § 401 certification:

6.1 Alaska

Alaska certified the VGP with the following additional permit conditions:

Terms

6.1.1 This Section 401 certification shall become effective on the date when EPA's final VGP becomes effective.

6.1.2 For violations that occur within State waters, permittees shall notify and provide DEC electronic copies of any noncompliance reports required under 40 CFR 122.44(i)(5).

6.1.3 Owners or operators of large and small commercial passenger vessels are responsible for complying with all Alaska statutes, regulations, and wastewater discharge requirements.

Conditions

6.1.4 All discharges authorized by the VGP to waters of the United States extending to the three-mile demarcation of the territorial seas and inland or coastal waters of the State of Alaska shall not result in a violation of Alaska water quality criteria, found in 18 AAC 70, in the water body.
Rationale: Vessel operators must treat wastewater and/or implement the BMPs in the VGP and ensure discharges comply with the applicable water quality criteria for the subject water body.

[3] State 401 certification letters are available in the docket for today's permit which are available as PDFs by linking to EPA's website at: www.epa.gov/npdes/vessels.

[4] Oklahoma's list of Outstanding Resource Waters are attached to their 401 certification letter which is available as a PDF file by linking to EPA's website at: www.epa.gov/npdes/vessels.

6.1.5 Permittees covered under the VGP shall undertake immediate corrective actions to mitigate noncompliance or violations with any terms or conditions specified in this Section 401 certification. EPA's regulation of vessels under the VGP shall not preclude DEC from regulating vessels or taking enforcement action authorized by Alaska law.
Rationale: EPA is the primary authority responsible for ensuring compliance with the EPA-issued VGP. However, the Department does not waive its rights to regulate vessels and or take enforcement action in accordance with Alaska law.

6.1.6 Permittees must be aware of the status of the water bodies they are traveling through, specifically whether the water bodies are impaired and have, or do not have, an EPA-approved Total Maximum Daily Load implementation plan prepared under CWA 303(d).
Rationale: The location of impaired waters of the United States must be known prior to the discharge activity. The permittees are responsible for identifying areas where discharges are prohibited, including accessing CWA 303(d) list of impaired waters or the State's most current Integrated Water Quality Monitoring and Assessment Report.

6.2 Arizona

Arizona certified the VGP with the following additional permit conditions:

6.2.1 Discharges authorized by these general permits shall not:

a. Violate Arizona's Surface Water Quality Standards (A.A.C. Title 18, Chapter 11, Article 1).
b. Contain a hazardous substance as defined in A.R.S. §49-201(19). Additionally, the following wastes are prohibited from being discharged into waters of the state under this permit: sewage sludge, wastewater, used or spent oil, garbage or trash. In addition, A.A.C. R18-11-123(B) prohibits the discharge of human body wastes and the wastes from toilets and other receptacles intended to receive or retain wastes from a vessel to Lake Powell.
c. Contain oil, grease, or any other pollutant that floats as debris, foam, or scum; or that causes a film or iridescent appearance on the surface of the water; or that causes a deposit on a shoreline, bank, or aquatic vegetation. The discharge of lubricating oil or gasoline associated with the normal operation of a recreational watercraft is not a violation of this narrative standard (A.A.C. R1 8-11-108(B)).
d. Contain suspended solids in quantities or concentrations that interfere with the treatment processes at the nearest downstream potable water treatment plant or substantially increase the cost of handling solids produced at the nearest downstream potable water treatment plant (A.A.C. R18-11-108(C)).

6.2.2 If ballast water receives chlorination treatment prior to discharge, the discharge must not exceed a maximum level of 19 µg/L of total residual chlorine (A.A.C. Title 18, Chapter 11, Article 1, Appendix A, Table 1).

6.2.3 This certification does not relieve the authorized permittee of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from ADEQ or any other agency.

6.2.4 To prevent the propagation and spread of invasive species to waters of the state, before transporting any watercraft or vessel to any waters located within or bordering this State from waters or locations where aquatic invasive species are suspected or known to be present, permittees shall comply with the Vessel Decontamination Best Management Practices that follow (A.R.S. § 49-203(A)(7)).

Vessel Decontamination Best Management Practices

a. Short-term Day-use Boaters- One to five (1-5) days on the water:

   i. CLEAN the hull and remove any clinging materials.

   ii. DRAIN (remove the bilge plug) the water from the engine, bilge, livewell(s), etc.

   iii. DRY the whole boat and equipment.

   iv. If possible, treat any standing water (in bilge, bottom of boat) or other boat surfaces with vinegar.

b. Long-term Moored Boats (e.g. in marinas)- more than five (5) days on the water:

   v. CLEAN, DRAIN (remove the bilge plug) and DRY

   vi. REMOVE all attached mussels

   vii. DESICCATE the boat. Keep the boat out of the water for a minimum of seven (7) days in the spring, summer, and fall, and a minimum of 18 days in the winter to kill all hidden quagga mussels.

Additional information regarding these Best Management Practices related to the control of invasive aquatic species can be found at: www.azgfd.gov/mussels, or by contacting the Arizona Game and Fish Department

6.3 Arkansas

Arkansas certified the VGP with the following additional permit conditions:

6.3.1 If a discharger has any violation of any effluent limit in the VGP or sVGP, they must document the violation and notify the Department by telephone within 24 hours (501-682-0640) and by written notice within three days of identification of the violation. They must report the following items to the Department:
a. A description of the violation,
b. Date of the violation,
c. Estimated volume of discharge involved in violation,
d. Location at time of violation,
e. Description of any corrective actions that are planned,
f. Identification of any hazardous substances, if known to be present.

6.3.2 All uncontained spills not covered by the VGP or sVGP of more than one gallon liquid or four pounds dry weight must be reported to the Water Division Enforcement Branch of ADEQ within 24 hours by Telephone (501-682-0640) and by written notice within three days. Dischargers are responsible for the cost of cleanups resulting from spills by their operations.

6.3.3 This Department does not support coverage under the VGP or sVGP in Ecologically Sensitive Waters (ESWs) and Natural and Scenic Waterways (NSWs), as designated in Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 2.

6.4 California

California certified the VGP with the following additional permit conditions:

This Order includes Attachments 1-3.[5] Following is a description of these attachments:

- Attachment 1 – Signatory Requirements
- Attachment 2 – List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials from title 22, chapter 11, appendix X of the California Code of Regulations
- Attachment 3 – Effluent Limitations Based on Narrative Objectives in the California Ocean Plan and Regional Water Quality Control Plans (Basin Plans)

6.4.1 All discharges are prohibited in state Water Quality Protection Areas as defined in the Public Resources Code sections 36700- 36900 inclusive, and the California Ocean Plan, except for those discharges that occur in transit associated with vessel traffic separation lanes. (Auth: 33 U.S.C. § 1313; Pub. Resources Code,§ 36710; Wat. Code,§ 13140. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.2 Large passenger vessel and cruise ship graywater discharges are prohibited in state waters. Graywater discharges from oceangoing vessels that weigh 300 gross tons or more are also prohibited if such vessels have sufficient holding capacity. Any co-mingling of black water (sewage) and graywater waste streams will be considered graywater for purposes of these conditions as stated in section 2.2.25 of the 2013 VGP. (Auth: Pub. Resources Code,§ 72400 et seq. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.3 Vessel discharges shall comply with all requirements and discharge prohibitions set forth in the California Clean Coast Act of 2005. (Auth: Pub. Resources Code, § 72400 et seq. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.4 A monitoring study shall be conducted in order to provide the State Water Board an adequate representative characterization of the discharges from vessels. The representative monitoring study requirement is designed to efficiently gather and present representative water quality data on the impacts of these discharges. The data will be used to determine if any future changes to the conditions are necessary for compliance with the California Ocean Plan numeric objectives, Basin Plans numeric objectives, and the California Toxics Rule criteria. Additionally, a collaborative, representative monitoring program is designed to minimize the costs for individual dischargers and the aggregate costs for individual vessel owners and operators as a whole.

[5] These attachments are available as a PDF file with California's 401 certification letter. This information is available by linking to EPA's website at: www.epa.gov/npdes/vessels.

Vessels that do not discharge any waste streams into waters of the state during the 2013 VGP cycle are not subject to this requirement. However, a copy of the USEPA NOI (or when applicable, PARI form), USEPA Acknowledgement Letter, and applicable fee shall be submitted.

Any vessels that do not make their first port of call in California until the last calendar year of the 2013 VGP cycle shall be exempt from participating in this monitoring study.

The representative regional/group monitoring program (Representative Monitoring Study) shall be developed in consultation with State Water Board staff. The monitoring study shall include representative sampling for each vessel class. A draft study design will be developed by no later than December 1, 2013, and is subject to the approval by the Executive Director of the State Water Board.

The Final Report for the Representative Monitoring Study must be submitted to the Executive Director of the State Water Board by the end of the 2013 VGP cycle. (Auth: Wat. Code, §§ 13260.1, 13267, 13383. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.5 None of the 27 discharges covered by the VGP may contain hazardous waste as defined in the California Code of Regulations, title 22, section 66261 and Water Code section 13173, as well as hazardous substances listed in Attachment 2 of this Order, which includes bilgewater. Additionally, the following wastes are prohibited from being discharged: noxious liquid substance residues, used or spent oil, garbage or trash/plastic (In compliance with the applicable California Basin Plans), sewage sludge, photo-developing wastes, dry cleaning wastes, and medical wastes. By signing USEPA's NOI (or when applicable, the PARI form), the vessel owner/operator certifies that hazardous and prohibited wastes as defined under California law, will not be discharged from a covered vessel or vessels. Upon receipt of USEPA's NOI (or when applicable, PARI form) Acknowledgement Letter, the vessel owner/operator shall submit a copy of the letter along with the fee required per Cal. Code Regs., tit. 23, § 2200.

The vessel owner/operator shall submit the fee and a copy of USEPA's NOI (or when applicable, PARI form) Acknowledgment Letter to:

NPDES Unit
Division of Water Quality
State Water Resources Control Board
1001 I Street, 15th Floor
Sacramento, CA 95814

(Auth: See generally, statewide and regional water quality control plans; 33 U.S.C.§ 1313; Pub. Resources Code, § 72420.2; Wat. Code, §§ 13140, 13173, 13240, 13260.1, 13267, 13383; Cal. Code Regs., tit. 22, § 66261. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.6 There shall be no oily sheen from any discharge, and oil and grease shall not exceed 15 milligrams per liter (mg/L) from any discharge as stated in section 2.1.4 of the VGP. (Auth: See generally, statewide and regional water quality control plans; 33 U.S.C. § 1313; Wat. Code,§§ 13140, 13240. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.7 Detergents shall not be used to disperse hydrocarbon sheens in any waste streams. To ensure this practice is implemented for all state waters, and additionally to protect drinking water sources, such as sources in the Sacramento and San Joaquin Delta, methylene blue active substances (MBAS) are not to exceed 0.5 mg/L in any waste streams being discharged, applicable to all water bodies. (Auth: See generally, statewide and regional water quality control plans; 33 U.S.C. § 1313; Wat. Code,§§ 13140, 13240. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.8 Vessel discharges shall comply with California State Lands Commission (SLC) requirements for ballast water discharges and hull fouling to control and prevent the introduction of nonindigenous species, found in Public Resources Code, section 71200 et seq. and California Code of Regulations, title 2, division 3, chapter 1, articles 4.5 through 4.8, inclusive. (Auth: Pub. Resources Code,§ 71200 et seq. and Cal. Code Regs, tit. 2, div. 3, ch. 1, arts. 4.5 through 4.8. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.9 The SLC has jurisdiction over vessels that are 300 gross registered tons and above that carry or are capable of carrying ballast water. Vessels entering state waters that fall within this description shall complete the SLC forms found in the following Marine Invasive Species Program (MISP) Compliance and Reporting Documents page:

http://www.slc.ca.gov/spec_pub/mfd/ballast_water/Compliance_Rptng_Docs.html

Forms are subject to change. Please use the most updated forms.
(Auth: Pub. Resources Code,§ 71200 et seq. and Cal. Code Regs, tit. 2, div. 3, ch. 1, arts. 4.5 through 4.8. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.10 Propeller cleaning is allowed until the biofouling management regulations for vessels are adopted by the SLC and become effective. After the SLC biofouling management regulations become effective, propeller cleaning is allowed as specified in those regulations. All other in-water hull cleaning is prohibited unless conducted using the best available technologies economically feasible, as determined by State Water Board staff in consultation with SLC staff. This prohibition includes underwater ship husbandry discharges (VGP Discharge No. 23). (Auth: Pub. Resources Code,§ 71200 et seq. and Cal. Code Regs, tit. 2, div. 3, ch. 1, arts. 4.5 through 4.8. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.11 If the ballast water receives chlorination treatment, the discharge to the ocean shall not exceed a maximum level of 60 micrograms per liter (µg/L) of total residual chlorine, and the discharge to inland waters, enclosed bays, and freshwaters shall not exceed a maximum level of 19 µg/L of total residual chlorine. (The Gold Book, U.S. EPA 440/5-86-001, May 1986.) (Auth: See generally, statewide and regional water quality control plans; 33 U.S.C. § 1313; Wat. Code,§§ 13140, 13240, 13377; Cal. Code Regs., tit. 23, § 2235.2. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.12 Vessel discharges must comply with the applicable statewide water quality control plans and Basin Plans. Attachment 3 lists the effluent limitations based on the narrative water quality

objectives cited in these plans that shall be met in the receiving water. (Auth: See generally, statewide and regional water quality control plans; 33 U.S.C. § 1313; Wat. Code, §§ 13140, 13240. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.4.13 Allowance for emergency conditions: In the case of a sudden unexpected situation which involves a clear and imminent danger to life, health, or property, the requirements of this Certification are suspended to the extent that those requirements would otherwise be violated. Any suspension of the requirements of this Certification is only permitted as long as the emergency conditions persist. In such cases the vessel owner/operator shall report to State Water Board staff the emergency conditions requiring the violation of Certification conditions, the specific conditions that were violated, the duration of the violation, and nature of discharges during that emergency period and the location of the emergency discharge. This report shall be transmitted to the State Water Board staff within 24 hours after the emergency conditions cease. In the event that the State Water Board staff determines that the circumstances do not constitute an emergency, the State Water Board may seek appropriate investigatory or enforcement action pursuant to Administrative Condition No.6.4.15. (Auth: Pub. Resources Code, § 21080; Wat. Code, § 1058; Cal. Code Regs., tit. 14, § 15359. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)
Submit report electronically to: calvgp_cert@waterboards.ca.gov

6.4.14 The owner or operator of a large passenger vessel shall notify the California Emergency Management Agency (Cal EMA) immediately, but not longer than 30 minutes, after the discovery of a release of graywater or sewage into the marine waters of the state or a marine sanctuary. The owner or operator of an oceangoing ship with sufficient holding tank capacity shall notify Cal EMA immediately, but not longer than 30 minutes, after the discovery of a release of graywater or sewage into the marine waters of the state or a marine sanctuary. The owner or operator of a large passenger vessel or an oceangoing ship shall notify Cal EMA immediately, but not longer than 30 minutes, after the discovery of a release of hazardous waste, other waste, sewage sludge, or oily bilgewater into the marine waters of the state or a marine sanctuary.

Cal-EMA Office of Emergency Services hotline: (800) 852-7550

(Auth: Pub. Resources Code, § 72400 et seq. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

ADMINISTRATIVE CONDITIONS:

6.4.15 In response to a suspected violation of any condition of this Certification, the State Water Board may require a vessel owner/operator to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Auth: Wat. Code, §§ 13267, 13383. This condition cannot be made less stringent without violating the requirements of state law, including water quality standards.)

6.5 Connecticut

Connecticut certified the VGP with the following additional permit conditions:

GENERAL CONDITIONS

6.5.1 Any vessel that discharges or intends to discharge into Connecticut waters under the VGP must submit to DEEP a copy of the Notice of Intent (NOI) or the Permit Authorization and Record of Inspection Form (PARI) submitted to EPA. Additionally, all reports required to be submitted to EPA under Appendices F through J of the VGP must also be submitted to DEEP. This condition is necessary for compliance with CGS sections 22a-430, 22a-430b, and 22a-430c. The preferred method of submission is via electronic mail to dep.webmaster@ct.gov sent to the attention of the Director of Water Permitting and Enforcement. Submissions made via standard mail shall be directed to:

The Director of Water Permitting and Enforcement
Bureau of Materials Management and Compliance Assurance
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

6.5.2 The operator of any vessel covered under the VGP or sVGP who by accident, negligence, or otherwise causes the discharge, spillage, uncontrolled loss, seepage or filtration of oil or petroleum or chemical liquids or solid, liquid or gaseous products, or hazardous wastes which poses a potential threat to human health or the environment, shall immediately report to DEEP by telephone at 860-424-3338 or 866-337-7745. This condition is necessary for compliance with CGS section 22a-450.[6]

6.5.3 All work and activities conducted by the permittee in accordance with the VGP or sVGP shall be consistent with the terms and conditions of this certification. Any regulated activities carried out in a manner inconsistent with the conditions set forth herein or inconsistent with the requirements specified in the VGP or sVGP, which are not more stringently conditioned under this certification, constitute a violation of this certification pursuant to 40 CFR §124.53(e)(1), and all instances of non-compliance with this certification must be immediately reported to DEEP pursuant to CGS section 22a-450 as set forth in General Condition No. 6.5.2, above.

6.5.4 All vessels covered by the VGP or sVGP shall minimize point and non-point sources of phosphorus, nitrogen, and alkylphenol ethoxylates, which have the potential to contribute to the impairment of any Connecticut surface water. The loading of nutrients, principally phosphorus and nitrogen, to any surface water body shall not exceed that which supports maintenance or attainment of designated uses. This condition is necessary to restore impaired waters, and prevent excessive anthropogenic inputs of nutrients or impairment of downstream waters in compliance with Standards 1, 2, and 19 of the CT WQS.[7]

[6] For additional information see the webpage to Report an Environmental Concern or Problem at www.ct.gov/dep.

[7] As identified in Part 2 of the VGP 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.

6.5.5 Use of Best Management Practices and other reasonable controls are preferable to the use of biocides. This condition is necessary for compliance with Standards 1, 2, and 20 of the CT WQS.

SPECIFIC CONDITIONS

6.5.6 Discharge of treated or untreated bilgewater into Connecticut waters from any vessel covered under the VGP or sVGP is prohibited. This condition is necessary for compliance with CGS section 22a-427, Standards No. 1, 2, 9, 12, 14, 15, and 24 of the CT WQS, and EPA designation of Connecticut coastal waters as No Discharge Areas (NDAs) pursuant to 33 USC§ 1322(f)(3).[8] This condition does not apply to the discharge of bilgewater if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition.

6.5.7 Discharge of treated or untreated graywater into Connecticut waters from any vessel covered under the VGP or sVGP is prohibited. This condition is necessary for compliance with CGS section 22a-427, Standards No. 1, 2, 9, 12, 14, 15, and 24 of the CT WQS, and EPA designation of Connecticut coastal waters as No Discharge Areas (NDAs) pursuant to 33 USC§ 1322(f)(3).[9]

6.5.8 The discharge of wastewaters from pressure washing the bottom of vessels and any point source or non- point source pollution from spillage, sanding, sand blasting, or scraping vessels into Connecticut waters from any vessel covered under the VGP or sVGP is prohibited. This condition is necessary for compliance with CGS section 22a-430 or 22a-430b and Standards No. 1 , 2, 12, 14, and 15 of the CT WQS.[10]

6.5.9 Discharge of exhaust gas scrubber washwater into Connecticut waters from any vessel covered under the VGP or sVGP is prohibited. This condition is necessary for compliance with CGS section 22a-427, StandardsNo.1, 2, 9, 12, 14, 15, and 24 of the CT WQS.

6.5.10 Discharges containing polychlorinated biphenyls (PCBs) into Connecticut waters from any vessel covered under the VGP or sVGP are prohibited. This condition is necessary for compliance with CGS section 22a-427, Standards No. 1, 2, 9, 12, 14, and 15 of the CT WQS.

6.5.11 Discharge of fish hold effluent from any vessel covered under the VGP or sVGP is prohibited in open waters of Connecticut's Long Island Sound. This condition is necessary for compliance with CGS section 22a-430 or 22a-430b and Standards No. 1, 2, 9 12, and 15 of the CT WQS.

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8 Standard No. 24 of the CT WQS specifies the discharge of sewage from any vessel to any water is prohibited. "Sewage" as defined in CGS section 22a-423 includes bilgewater, which is a domestic or manufacturing waste that may tend to be detrimental to the public health. The term "bilgewater" is defined in Appendix A of the VGP and Part 6 of the sVGP.

9 Standard No. 24 of the CT WQS specifies the discharge of sewage from any vessel to any water is prohibited. Sewage as defined in CGS section 22a-423 includes graywater, which is a domestic or manufacturing waste that may tend to be detrimental to the public health. The term "graywater" is defined in Appendix A of the VGP and Part 6 of the sVGP.

10 Point Source" and "Non-point Source" pollution are defined in Appendix A of the CT WQS

6.5.12 Any discharge from any vessel covered under the VGP or sVGP that results in the further degradation of the chemical, physical, or biological integrity of Connecticut waters classified as Impaired Waters in the most recent State of Connecticut Integrated Water Quality Report to Congress is prohibited. This condition is necessary for compliance with Standard 1 of the CT WQS.[11]

6.5.13 Discharges to impaired waters in Connecticut shall be consistent with the requirements of the VGP and sVGP and with the following to comply with Standard 1 of the CT WQS:

Waterbody	Contaminant	Requirement
Long Island Sound, connected harbors, embayments and tidal rivers and waterbodies	Nitrogen and other substances with a high biological or chemical oxygen demand which when discharged could result in a decrease in the amount of dissolved oxygen in the receiving water body	Eliminate the discharge of such substances or minimize discharge of these substances to the greatest extent practicable if discharge is unavoidable
Within LIS, waters between the 50ft bathymetric contour and the Connecticut coastline	Bacteria	Fecal coliform: Geometric Mean less than 14 CFU/100 ml with 90% of samples less than 31 CFU/100 ml
		Enterococci: Geometric Mean less than 35 CFU/100 ml with no single sample exceeding 104 CFU/100 ml

6.5.14 All vessels entering Connecticut waters must maintain the ability to measure salinity levels in each ballast water tank onboard the vessel so that salinities between 20 and 25 parts per thousand ("ppt") can be ensured for ballast exchange in marine waters and salinities between 0 and 5 ppt can be ensured for ballast exchange in fresh waters. This condition is necessary to meet Standards No. 1, 2, and 12 of the CT WQS.

6.6 Georgia

Georgia certified the VGP with the following additional permit conditions:

6.6.1 All discharges from vessels covered by these permits will be conducted in a manner so as not to violate Georgia's water quality standards.

6.6.2 Except for ocean going vessels of 20 tons displacement or more, the discharge of graywater shall be through a marine sanitation device that is in compliance with the Federal standards of performance and regulations for marine sanitation devices promulgated pursuant to Section 312 of the Clean Water Act. Georgia DNR or EPD personnel, or other duly authorized agents, shall have access to any vessel at reasonable times for the purposes of determining compliance with these rules. Georgia Rules for Water Quality Control, 391-3-6-.04.

11 The most recent State of Connecticut Integrated Water Quality Report containing the updated Connecticut Impaired Waters List may be obtained at the Water Quality Monitoring Program webpage at www.ct.gov/dep.

6.7 Hawaii

6.7.1 Coverage of this Conditional WQC

a) This conditional Section 401 WQC covers the discharge from an applicable vessel of one or more of the following 27 categories of effluent that have received the best control or treatment into waters of the State of Hawaii incidental to the normal operation of the applicable vessels (operated in a capacity as a means of transportation) that are eligible for permit coverage under Part 1.2 of the proposed 2013 VGP and subject to comply with "Technology-Based Effluent Limits and Related Requirements Applicable to all Vessels," "Effluent Limits and Related Requirements for Specific Discharge Categories," "Additional Water Quality-Based Effluent Limits," and "Vessel-Class-Specific Requirements" as specified in §§2.1, 2.2, 2.3 and 5, respectively, of the proposed 2013 VGP:

(1) Deck Washdown and Runoff and Above Water Line Hull Cleaning. (proposed 2013 VGP, §1.2.2.1)
(2) Bilgewater/Oily Water Separator Effluent. (proposed 2013 VGP, §1.2.2.2)
(3) Ballast Water. (proposed 2013 VGP, §1.2.2.3)
(4) Anti-fouling Hull Coatings/Hull Coating Leachate. (proposed 2013 VGP, §1.2.2.4)
(5) Aqueous Film Forming Foam (AFFF). (proposed 2013 VGP, §1.2.2.5)
(6) Boiler/Economizer Blowdown. (proposed 2013 VGP, §1.2.2.6)
(7) Cathodic Protection. (proposed 2013 VGP, §1.2.2.7)
(8) Chain Locker Effluent. (proposed 2013 VGP, §1.2.2.8)
(9) Controllable Pitch Propeller and Thruster Hydraulic Fluid and other Oil Sea Interfaces including Lubrication Discharges from Paddle Wheel Propulsion, Stern Tubes, Thruster Bearings, Stabilizers, Rudder Bearings, Azimuth Thrusters, and Propulsion Pod Lubrication, and Wire Rope and Mechanical Equipment Subject to Immersion. (proposed 2013 VGP, §1.2.2.9)
(10) Distillation and Reverse Osmosis Brine (proposed 2013 VGP, §1.2.2.10)
(11) Elevator Pit Effluent. (proposed 2013 VGP, §1.2.2.11)
(12) Firemain Systems. (proposed 2013 VGP, §1.2.2.12)
(13) Freshwater Layup. (proposed 2013 VGP, §1.2.2.13)
(14) Gas Turbine Wash Water. (proposed 2013 VGP, §1.2.2.14)
(15) Graywater.
Except that Graywater from commercial vessels within the meaning of CWA section 312 that are operating in the Great Lakes is excluded from the requirement to obtain an NPDES permit (see CWA section 502(6)), and thus is not within the scope of this permit. (proposed 2013 VGP, §1.2.2.15)
(16) Motor Gasoline and Compensating Discharge. (proposed 2013 VGP, §1.2.2.16)
(17) Non-Oily Machinery Wastewater (proposed 2013 VGP, §1.2.2.17)
(18) Refrigeration and Air Condensate Discharge. (proposed 2013 VGP,§1.2.2.18)
(19) Seawater Cooling Overboard Discharge (Including Non-Contact Engine Cooling Water; Hydraulic System Cooling Water, Refrigeration Cooling Water). (proposed 2013 VGP, 1.2.2.19)
(20) Seawater Piping Biofouling Prevention. (proposed 2013 VGP, §1.2.2.20)
(21) Boat Engine Wet Exhaust. (proposed 2013 VGP, §1.2.2.21)
(22) Sonar Dome Discharge. (proposed 2013 VGP, §1.2.2.22)
(23) Underwater Ship Husbandry. (proposed 2013 VGP, §1.2.2.23)
(24) Welldeck Discharges. (proposed 2013 VGP, §1.2.2.24)
(25) Graywater Mixed with Sewage from Vessels. (proposed 2013 VGP,§1.2.2.25)
(26) Exhaust Gas Scrubber Washwater Discharge. (proposed 2013 VGP,§1.2.2.26)

(27) Fish Hold Effluent. (proposed 2013 VGP, §1.2.2.27)

b) Geographical Area Exclusions:

In addition to water bodies specified in Appendix G of EPA proposed 2013 VGP, discharges into following State waters are also excluded from coverage under this conditional Section 401 WQC. “Owner” or “operator" of a vessel seeking coverage under the proposed 2013 VGP may submit an individual Application to the Clean Water Branch (CWB), DOH, for review and consideration for the processing for an individual Section 401 WQC:

(1) (A)Natural freshwater lakes, saline lakes, and anchialine pools will be maintained in the natural state through Hawaii’s "no discharge" policy for these waters. Waste discharge into these waters is prohibited. (see HAR, paragraph 11-54-3 (b) (1)). [HAR, Paragraph 11-54-5.2]

(B)It is the objective of Inland Class 1 waters that these waters remain in their natural state as nearly as possible with an absolute minimum of pollution from any human-caused source. To the extent possible, the wilderness character of these areas shall be protected. Waste discharge into these waters is prohibited. Any conduct which results in a demonstrable increase in levels of point or nonpoint source contamination in class 1 waters is prohibited. [HAR, Paragraph 11-54-3(b)(1)]

“Waste” means sewage, industrial and agricultural matter, and all other liquid, gaseous, or solid substance, including radioactive substance, whether treated or not, which may pollute or tend to pollute the waters of the State. [HRS, §342 D-1]

(2) Sewage, whether commingled with graywater or not, shall be disposed at pier side collection or treatment system or outside of estuaries or embayments. No new treated sewage discharges shall be permitted within estuaries. [HAR, Paragraph 11-54-3(b)(2)] No new sewage discharges will be permitted within embayments. [HAR, Paragraph 11-54-3(c)(2)]

(3) No new industrial discharges shall be permitted within estuaries. [HAR, Paragraph 11-54-3(b)(2)] No new industrial discharges shall be permitted within embayments. [HAR, Paragraph 11-54-3(c)(2)]

(4) This conditional Section 401 WQC does not cover any discharges identified in 1.2.3 (§§1.2.3.1 through 1.2.3.10) as “not eligible” for coverage under the proposed 2013 VGP.

6.7.2 Terms of this conditional Section 401 WQC:

a) This conditional Section 401 WQC for each of the 27 categories of the effluent discharges listed Item No. 6.7.1(a), above, shall become effective on December 19, 2013.

These actions shall not preclude the DOH from taking appropriate enforcement action authorized by law.

Written notification by the Director under this section is complete upon mailing or sending a facsimile or an email transmission of the document or actual receipt of the document by the "owner" or "operator" of the vessel.

b) The "owner" or "operator" of a vessel shall comply with all conditions and requirements specified in the proposed 2013 VGP. All terms, requirements, limitations, and restrictions specified in this conditional Section 401 shall constitute as Part 6 of the proposed 2013 VGP conditions and shall be primarily enforced by the EPA, Region 9, through the compliance of the proposed 2013 VGP. DOH reserves the right to take appropriate enforcement action authorized by law.

6.7.3 Validation of this conditional Section 401 WQC coverage for each category of treated effluent discharges from a vessel into waters of the State of Hawaii shall become effective when the "owner" or "operator" of a vessel submits to the DOH-CWB the notification information as required in Item 6.7.4, below, except otherwise notified by the Director in writing or through an email that an individual Section 401 is required for the proposed effluent discharges from the vessel. Coverage under this conditional Section 401 shall remain valid during the period the Director processing the individual Application until such time the Director renders its final determination on an individual Application for a Section 401 WQC.

6.7.4 Notification Requirements:

The "owner" or "operator" of a vessel seeking coverage for treated effluent discharges to be authorized under this conditional Section 401 WQC shall submit the following information through DOH-CWB website at: http://hawaii.gov/health/environmental/water/cleanwater/forms/wqc-index.html.

a) Vessel "Owner" or "Operator" Information:

Provide the full legal name(s), street address, contact person's name and position title, telephone and fax numbers, and email address of the owner(s) and, if applicable, its duly authorized representative. When the notification is prepared and submitted by the owner's duly authorized representative, an authorization statement with the owner's original signature shall also be submitted. Any signatures required in this conditional Section 401 WQC shall be provided as described in 40 CFR, §122.22(a).

b) Vessel Information

Provide:
(1) Vessel Name
(2) EPA VGP tracking number (or permit number or both, if applicable)
(3) Vessel Registered Number
(4) Vessel International Maritime Organization (IMO) number, if applicable
(5) Vessel Call Sign
(6) Flag State/Port of Registry (Complete spellings of state and port city names required)
(7) Type of Vessel (list one primary vessel type, and secondary vessel type where appropriate)

c) Vessel Discharge Information

List all applicable discharges, from the 27 applicable categories specified in Item 6.7.1(a), above, vessel may generate.

d) Industrial Effluent Discharge Information

lf the vessel ever engage in or have capacity to engage in industrial operations, provide the type of industrial operation that will generate effluent discharges, i.e., (1) Seafood processing (2) Energy Exploration (3) Mining or (4) other.

As specified in §1.2.3.1 of the proposed 2013 VGP, for any discharges identified in the proposed 2013 VGP, discharges are not eligible if they contain materials resulting from industrial or manufacturing processes onboard or other materials not derived from the normal operations of a vessel.

e) Vessel Onboard Treatment Systems and/or Best Control or Best Management Practices (BMPs) Measures Information
Provide onboard treatment system is or to be used for any waste stream(s) covered by the proposed 2013 VGP such as Ballast Water, Bilgewater, Exhaust Gas Scrubber Effluent, Graywater, Graywater mixed with Sewage, and any other treatment system and/or control measures, etc., to be used for the category of the proposed effluent discharges:
   (1) Specify Discharge stream(s) treated.
   (2) Treatment system type/design and manufacturer.
   (3) Treatment System Capacity.
   (4) Normal Treatment System Flow Rate (gallons/day or liters/day).
   (5) Residuals (wastes) generated by this treatment system.
   (6) How they are disposed.

f) Ballast Water Information

   (1) lf the vessel is or will be using an experimental ballast water treatment system which discharges residual biocides:
      (A) Are residual biocide concentrations expected to be below those listed in Part 2.2.3.5.1.1.5 of the proposed 2013 VGP or this Section 401 WQC, whichever is more stringent.
      (B) List the biocide residuals or derivatives that may be discharged by the ballast water treatment system.

   (2) Ballast Water and Invasive Species Management

   Specify:
      (A) How often is the ballast tank cleaned and sediment disposed of?
      (B) How and where do you typically dispose of ballast tank sediment?
      (C) Does vessel have an existing ballast water management plan? If yes, please provide a pdf copy of the ballast water management plan.

g) Hull Anti-fouling Information

Provide:
   (1) Type of anti-fouling hull coating on the vessel and list specific product: Copper Based or Non-Copper Based.
   (2) When was anti-fouling hull coating last applied.

(3) Describe hull husbandry practices, such as frequency of hull cleaning, method used, how niches and propellers are cleaned, etc.
(4) Date of last hull cleaning.
(5) Date of next scheduled/anticipated hull cleaning.

6.7.5 Discharge Limitations and Reporting Requirements

a) Pursuant to HAR, §11-54-4(a), all waters shall be free of substances attributable to the discharge activities authorized under this conditional Section 401 WQC and EPA 2013 VGP, including:
(1) Materials that will settle to form objectionable sludge or bottom deposits.

(2) Floating debris, oil, grease, scum, or other floating materials.

(3) Substances in amounts sufficient to produce taste in the water or detectable off flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters.

(4) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.

(5) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life.

(6) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.

An electronic copy of the HAR, Chapter 11-54 is available at: http://hawaii.gov/health/environmental/water/cleanwater/forms/wqc-index.html or http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx.

b) Discharges authorized under EPA proposed 2013 VGP shall be monitored and effluent quality shall comply with effluent limits specified in "Effluent Limits and Related Requirements" of the proposed 2013 VGP. Discharges authorized under EPA proposed 2013 VGP shall not cause the applicable specific water quality criteria to be violated in the receiving waters of the State of Hawaii. When conflict occurs, the most stringent limitation applies. Applicable specific water quality criteria are:
(1) HAR, §11-54-5 Uses and specific criteria applicable to inland waters; definitions;
(2) HAR, §11-54-5.1 Inland water areas to be protected;
(3) HAR, §11-54-52 Inland water criteria;
(4) HAR, §11-54-6 Uses and specific criteria applicable to marine waters;
(5) HAR, §11-54-7 Uses and specific criteria applicable to marine bottom types; and
(6) HAR, §11-54-8 Specific criteria for recreational.

c) Parameter and Limitation contained in Table 6.7.1, below, applicable to all discharges from a vessel:

Table 6.7.1

Parameter	Limitation in Fresh waters	Limitation in Salt waters	Units
Chlorine, Total Residual Chlorine (TRC)	19.0	13.0	µg/l
pH	Shall not deviate more than 0.5 units from ambient conditions and shall not be lower than 5.5 nor higher than 8.0	Shall not deviate more than 0.5 units from a value of 8.1, except at coastal locations where and when freshwater form stream, storm drain or groundwater discharge may depress the pH to a minimum level of 7.0	pH Unit
Turbidity	25.0	5.0	NTU
Temperature	Shall not vary more than one degree Celsius from ambient conditions.	Shall not vary more than one degree Celsius from ambient conditions.	°C
Enterococcus	Enterococcus content shall not exceed a geometric mean of 33 per one hundred milliliters in not less than five samples which shall be spaced to cover a period between 25 and 30 days. No single sample shall exceed the single sample maximum of 89 CFU per 100 milliliters or the site-specific one-sided 82 per cent confidence limit.	Within 300 meters (one thousand feet) of the shoreline, including natural public bathing or wading areas, enterococcus content shall not exceed a geometric mean of 35 CFU per 100 milliliters in not less than five samples which shall be spaced to cover a period between twenty-five and thirty days. No single sample shall exceed the single sample maximum of 104 CFU per 100 milliliters or the site-specific one-sided 75 per cent confidence limit. Marine recreational waters along sections of coastline where enterococcus content does not exceed the standard, as shown by the geometric mean test described above, shall not be lowered in quality.	CFU

d) Ballast water discharges from "Qualifying Vessels" shall also comply with the provisions of HAR, Chapter 13-76. An electronic copy of HAR, Chapter 13-76 is available at: https://hawaii.gov/dlnr/dar/rules/ch76pqf.

The term "Qualifying Vessels," as defined in HAR, Section 13-76-12, means all vessels, United States or foreign flagged, carrying ballast water into state marine waters after operating outside the EEZ.

The term "EEZ," as defined in HAR, Section 13-76-12, means the United States exclusive economic zone established by Presidential Proclamation No. 5030, dated March 10, 1983, which extends from the baseline of the territorial sea of the United States seaward 200 nautical miles, substantially as defined in federal law 33 CFR 151.2025, dated July 1, 2005.

e) Discharges from "Commercial Passenger Vessels" shall comply with requirements specified in HRS, Sections 342D-102, 342D-103, 342D-104, 342D-105 and 342-106 of PART Vl of HRS, Chapter 3420 titled "DISCHARGES FROM COMMERCIAL PASSENGER VESSELS."

"Commercial passenger vessel," as defined in HRS, Section 342D-101, means a vessel that carries passengers for hire. The term does not include a vessel:

(1) Authorized to carry fewer than passengers;
(2) That does not provide overnight accommodations for at least 50 passengers for hire, determined with reference to the number of lower berths and based on an average of two persons per cabin; or
(3) Operated by the United States or a foreign government.

f) There shall be no net increase in loadings of pollutant of concerns (POC) attributable to vessel's effluent discharges into water quality-limited segments as listed by the DOH under CWA, 303(d). POC information for each water body is included in 2008/2010 State of Hawaii Water Quality Monitoring and Assessment Report which is available at: http://hawaii.gov/heaith/environmentaI/water/cleanwater/integrated/index.html.
g) The discharge incidental to normal operation of commercial vessels and commercial fishing vessels permitted under the authorization of the proposed 2013 VGP shall not interfere with or become injurious to any assigned uses made of (designated uses, as defined in HAR, Section 11-54-1, and specified in HAR, Section 11-54-3), or presently in (existing uses, as defined in HAR, Section 11-54-1, and specified in HAR, Subsection 11-54-1.1), those waters
h) Except for non-compliance to Part 2 of the proposed 2013 VGP effluent limits or non-compliance to HAR, Chapter 11-54 requirements, Permittee of the proposed 2013 VGP shall retain on board all records, inspection reports, monitoring data, including analytical monitoring results from specific discharge types as identified in Parts 2.2.3, 2.2.15, and 2.2.26 of the proposed 2013 VGP and for specific vessel types in Part 5 of the proposed 2013 VGP. EPA proposed 2013 VGP Permittee shall submit all records, inspection reports, monitoring data to DOH-CWB upon request by the Director.

EPA proposed 2013 VGP permittee shall report all non-compliance to basic water quality criteria applicable to all State waters and analytical monitoring data that exceeds the numerical criteria of the State WQS to the DOH-CWB as soon as the Permittee becomes aware of such non-compliance or exceedance. All report(s) shall be submitted on a non-compliance reporting form provided by the director in website at https:://eha-cloud.doh.hawaii.gov/epermit/View/default.aspx.

6.7.6 Pursuant to HRS, Section 342D-8, the DOH-CWB may conduct routine inspection of vessel covered under this conditional Section 401 WQC, taking color photographs, and to sample any effluent discharges.

6.7.7 EPA 2013 VGP Permittee (the “owner” or “operator” of the vessel) shall undertake immediate corrective measure(s) to mitigate the noncompliance or violations of HAR, Chapter 11-54 or any terms, requirements, limitations, or restrictions specified in this conditional Section 401 WQC.

6.7.8 It shall constitute a violation under HRS, Chapter 342D; HAR, Chapter 11-54; and this WQC if any discharges resulting from the activities authorized under the EPA VGP, resulting in any noncompliance to terms, requirements, restrictions, or limitations as specified in this WQC. The DOH reserves the right to take enforcement actions authorized by law.

6.8 Idaho

Idaho certified the VGP with the following additional permit conditions:

6.8.1 Receiving Water Body Level of Protection

All waters in Idaho that receive discharges from vessels will receive, at minimum, Tier 1 antidegradation protection because Idaho's antidegradation policy applies to all state waters. Water bodies that fully support their aquatic life or recreational uses are considered to be "high quality waters" and will receive Tier 2 antidegradation protection. For waters which have not yet been assessed, DEQ must evaluate on a case-by-case basis whether to apply tier 2 protections, in addition to tier 1 protections. Although Idaho does not currently have any outstanding resource waters (ORWs) designated, it is possible that a water body could be designated as an ORW during the life of this permit. Because of this potential, this antidegradation review will also assess whether the permit complies with the outstanding resource water requirements (Tier 3) of Idaho's antidegradation policy.

6.8.2 Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the CWA, and requires a showing that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL. A permit with effluent limitations consistent with TMDL wasteload allocations will provide the level of water quality necessary to support existing and designated uses and therefore satisfies Tier 1 antidegradation requirements.

Currently, there are no TMDLs in the state of Idaho that contain WLAs for discharges from vessels. Furthermore, EPA has determined that numeric effluent limits for discharges authorized under the VGP and sVGP are impracticable to calculate due to the varied nature of discharges from vessels, therefore non-numeric effluent limits contained in both permits speak to best management practices (BMPs) for dischargers to comply with. DEQ has reviewed the BMPs and has added further conditions on discharges to water bodies which are expected to receive discharges from vessels and are currently not meeting Idaho WQS.

Owners or operators of large vessels, covered under the VGP, are required to know whether they are discharging to impaired waters. Under the High Priority Provision of Section 055 of Idaho's WQS, in absence of a TMDL, there must not be additional loading of a pollutant where an impairment caused by that pollutant exists (IDAPA 58.01.02.055.04). Therefore, special considerations will need to be taken when discharging to these waters to ensure that discharges will not contribute to the impairment. For example, where a water body is impaired by metals, the discharger must not engage in activities (i.e. releasing contaminated bilgewater) where those pollutants are discharged to the water body, thereby contributing to the existing impairment (see Table 6.8.1).

Idaho state law prohibits discharges of graywater and/or sewage/graywater mixtures in certain regions, which are otherwise authorized under this general permit (see "Conditions" section).

The limitations and associated requirements in the 2013 VGP, coupled with other applicable state laws, and the conditions set forth in this certification provide DEQ reasonable assurance of compliance with IDAPA 58.01.02.051.01 and 58.01.02.052.07.

6.8.3 Protection of High-Quality Waters (Tier 2 Protection)

As indicated previously, water bodies that fully support their beneficial uses will be provided Tier 2 protection. As such, the quality of these waters must be maintained and protected, unless it is deemed necessary to accommodate important economic or social development. For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license (IDAPA 58.01.02.052.06.a). For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit or license (IDAPA 58.01.02.052.06.a).

With respect to vessels currently operating in Idaho and discharging to waters of the State, DEQ believes that as long as discharges are not increasing, there will be no degradation or adverse change in water quality because the new permits are more stringent than the previous permits. New or increased discharges however, must be evaluated on a case-by-case basis.

As a condition of this certification, DEQ is requiring that owners/operators of vessels proposing to increase their discharges or number of vessels in their fleet, or those who are seeking coverage under the VGP for the first time, contact the appropriate DEQ Regional Office (6.8.2) to determine whether additional controls are necessary in order to ensure that high quality waters are not degraded. This condition shall ensure compliance with Idaho's tier 2 antidegradation requirements.

In sum, as long as the vessel operators comply with the terms of the NPDES permit and §401 certification then there is reasonable assurance that existing and designated beneficial uses will be protected and maintained and there will be no degradation or adverse change in water quality as required under IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

Protection of Outstanding Resource Waters (Tier 3 Protection)

Idaho's antidegradation policy requires that the quality of outstanding resource waters be maintained and protected from the impacts of point source discharges. No water bodies in Idaho have been designated as outstanding resource waters to date; however, it is possible that waters may become designated during the term of these permits. Because of this possibility, DEQ has evaluated whether the proposed draft VGP and sVGP comply with the ORW antidegradation provision.

As a condition of this certification, DEQ is requiring any applicant proposing to discharge to an ORW, under either permit, to obtain an individual NPDES permit from EPA. This requirement complies with Idaho's antidegradation provisions concerning ORWs (IDAPA 58.01.02.052.09).

6.8.4 Permittee Responsibility

Owners and operators of vessels covered by the Vessel General Permit (VGP) and/or the Small Vessel General Permit are responsible for knowing the current support status of the waters in which they operate on and may discharge to. The most current EPA-approved IR must be used to determine the support status of the affected water body and can be found online: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx.
DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.
The information provided in Table 6.8.1 (below) is based on the 2010 Integrated Report and is subject to change. As previously stated, discharges must not contain pollutants where the receiving water body is identified as "impaired" due to those pollutants (IDAPA 58.01.02.055.04).

Table 6.8.1. Water bodies expected to receive discharges from vessels, current support status *(Integrated Report, 2010)*

Region	*Water Body*	*HUC*	*Support Status* ·	*Pollutants of Concern*
Coeur d'Alene	Clark Fork River	17010213	Impaired	Cadmium, Copper, Zinc, Dissolved Gas Supersaturation, Temperature
	Coeur d'Alene Lake	17010303	Impaired	Cadmium, Lead, Zinc
	Kootenai River	17010104	Impaired	Temperature
	Lake Pend Oreille	17010214	Impaired	Mercury, Temperature, Dissolved Gas Supersaturation
	Pend Oreille River	17010214 17010216	Impaired	Temperature, Dissolved Gas, Supersaturation
	Priest Lake	17010215	Unassessed	N/A
	Spokane River	17010305	Impaired	Cadmium, Lead, Zinc, Phosphorus
Lewiston	Clearwater River	17060304 17060306 17060308	Multiple Categories	Dissolved Gas Supersaturation, Sedimentation, Temperature
	Dworshak Reservoir	17060308	Unassessed	N/A

6.8.5 Reporting New or Increased Discharges, or Increased Fleet Size, to Tier 2 (High- Quality) Waters

As a condition of this certification, DEQ is requiring that owners/operators of vessels proposing to increase their discharges or number of vessels in their fleet, or those who are seeking coverage under the VGP for the first time, contact the appropriate DEQ Regional Office (Table 6.8.5) to determine whether additional controls are necessary in order to ensure that high quality waters are not degraded.

6.8.6 Rules Prohibiting Discharges on Certain Water Bodies

Owners and operators of vessels covered by these general permits must be aware of and comply with the Panhandle Health District Rules governing discharges from vessels. The

discharge of graywater or a sewage/graywater mixture otherwise authorized under this general permit is prohibited in certain regions of the state pursuant to IDAPA 41.01.01.200.01(c). Those areas include Boundary, Bonner, Kootenai, Benewah, and Shoshone counties in Northern Idaho (IDAPA 41.01.01.200.01 *et seq.).*

6.8.7 Reporting of Discharges Containing Hazardous Materials or Petroleum Products

Any spill of hazardous materials must be immediately reported to the appropriate DEQ Regional Office (Table 6.8.2). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24- hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.850, 58.01.02.851, 58.01.02.852).

Table 6.8.2. DEQ Regional Office contact information

Regional Office	*Contact Name*	*Phone Number*	*Email*
Coeur d'Alene	June Bergquist	208-769-1422	june.bergquist@deq.idaho.gov
Lewiston	John Cardwell	208-799-4370	john.cardwell@ deq.idaho.gov

Outside of regular business hours, qualified spills should be reported to the State Communications Center (1-800-632-8000 or 208-846-7610).

6.8.8 Invasive Species

Owners and operators of vessels covered by these general permits must be aware of and comply with the Idaho State Department of Agriculture Rules Governing Invasive Species (IDAPA 02.06.09).

6.9 Illinois

Illinois certified the VGP with the following additional permit conditions:

6.9.1 Discharges of wastestreams containing Bioaccumulative Chemicals of Concern (BCC's) from vessel covered by the Vessel General Permit shall be consistent with the provisions of 35 Ill. Adm. Code 302.520, 302.521, and 302.530.

6.9.2 All discharges to Waters of the State from vessels covered by the Vessel General Permit shall not cause a violation of Illinois Water Quality Standards, as found at 35 Ill. Adm. Code Part 302 or effluent standards, as found at 35 Ill. Adm. Code Part 304.

6.9.3 No effluent from any vessel covered by the Vessel General Permit shall contain settleable solids, floating debris, visible oil, grease, scum, or sludge solids pursuant to 35 Ill. Adm. Code 304.106. Color, odor, and turbidity must be reduced to below obvious levels, pursuant to 35 Ill. Adm. Code 304.106.

6.9.4 Any vessel covered by the Vessel General Permit employing ballast water treatment systems using chlorine in any of its forms, shall not exceed the acute water quality standard for Total Residual Chlorine of 0.019 mg/1 or the chronic water quality standard for Total Residual Chlorine of 0.011 mg/1, pursuant to 35 Ill. Adm. Code 302.208. In order to demonstrate

compliance with the water quality standards above, the discharge of Total Residual Chlorine shall not exceed the laboratory quantification level of 0.05 mg/1 using test methods equivalent in accuracy to amperometric titration. The usage of other biocides shall not cause a violation of applicable water quality standards and shall not be discharged in concentrations considered toxic or harmful to aquatic life, pursuant to 35 Ill. Adm. Code 302.210, 302.410 and 302.540.

6.9.5 The discharge from any vessel covered by the Vessel General Permit shall be free from any substances or combination of substances in concentrations toxic or harmful to human health, or to animal, plant or aquatic life, pursuant to 35 Ill. Adm. Code 302.210, 302.410, and 302.540.

6.9.6 No bilge or ballast water from vessels covered by the Vessel General Permit which fails to meet the effluent standards of 35 Ill. Adm. Code Part 304 shall be discharged to waters of the State pursuant to 35 Ill. Adm. Code 308.103.

6.9.7 Any discharge of sewage from a vessel shall comply with 35 Ill. Adm. Code Part 308 - Disposal of Wastes from Watercraft.

6.9.8 The issuance of this certification pursuant to Section 401 of the Clean Water Act does not release any dischargers from responsibilities or liabilities for past or future violations of federal, state or local laws or regulations, nor does it release any potential dischargers from the responsibility of obtaining permits, including any from the IEPA, or other approvals from other units of government as may be required by law.

6.10 Indiana

Indiana certified the VGP with the following additional permit conditions:

6.10.1 Permittee shall allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials:

a. to enter and inspect covered vessels;
b. to have access to and copy at reasonable times any records that must be kept under the conditions of this certification;
c. to inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and
d. to sample or monitor any discharge of pollutants from covered vessels.

6.10.2 This granting of WQC does not relieve the permittee from the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from the IDEM or any other agency or person.

6.10.3 This certification does not:

a. Authorize impacts or activities outside the scope of this certification;
b. Authorize any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
c. Convey any property rights of any sort, or any exclusive privileges; or

d. Preempt any duty to obtain federal, state or local permits or authorizations required by law.

6.10.4 The IDEM, for any vessel that qualifies under the terms and conditions of this certification, may choose to require an individual WQC if it determines that the vessel would have more than minimal impacts to water quality, either viewed individually or collectively with other activities that may affect the same waterbody.

6.10.5 Activities authorized by this general permit shall not violate or exceed Indiana's Water Quality Standards at 327 IAC 2.

6.10.6 Oceangoing vessels eligible for coverage under the EPA VGP that enter the great Lakes-St. Lawrence Seaway system and are transiting from beyond the 200- nautical-mile Exclusive Economic Zone (EEZ) shall perform open ocean ballast water exchange or saltwater flushing before entering the Great Lakes-St. Lawrence Seaway system in order to ensure water quality standards are met.

6.10.7 Oceangoing Vessels covered by the EPA VGP shall comply with the following ballast water discharge requirements:

a. For vessels constructed prior to December 1, 2013, and meeting the applicability criteria in the federal NPDES permit, treatment shall be installed and operational to meet the performance standards for organisms included in EPA VGP by the vessel's first scheduled drydocking after January 1, 2016.

b. For vessels constructed after December 1, 2013, and meeting the applicability criteria in the federal NPDES permit, treatment shall be installed and operational to meet the performance standards for organisms included in EPA VGP prior to commencement of vessel operation in Indiana State waters.

6.10.8 Any vessel discharging ballast water employing ballast water treatment systems using chlorine, shall not exceed a maximum total residual chlorine limit of 0.02 mg/1. The usage of other biocides shall not cause a violation of applicable water quality standards, and shall not be discharged in concentrations considered to be toxic or harmful to aquatic life.

6.11 Iowa

Iowa certified the VGP with the following additional permit conditions:

6.11.1 Permittee is responsible for securing and for compliance with such other permits or approvals as may be required by the IDNR, federal, state, or local governmental agencies for the project activities described.

6.11.2 All discharges to waters of the state of Iowa from vessels covered by the VGP shall not cause a violation of Iowa Water Quality Standards, as found at Iowa Administrative Code 567 Chapter 61. http:/ /www.iowadnr.gov/InsideDNR/RegulatoryWater/WetlandsPermitting.aspx

6.11.3 If the vessel discharges oil or hazardous substances in the water, immediately call the National Response Center at 1-800-424-8802 (or contact them through their website at: www.nrc.uscg.mil) and the IDNR Emergency Response Unit at 1-515-281-8694.

6.12 Kansas

Kansas certified the VGP with the following additional permit conditions:

The Permittee shall not cause or contribute to a violation of the following narrative Kansas Surface Water Quality Standards [KAR28-16-28E(B)]:

6.12.1 Surface waters shall be free, at all times, from the harmful effects of substances that originate from artificial sources of pollution and that produce any public health hazard, nuisance condition, or impairment of a designated use.

6.12.2 Hazardous materials derived from artificial sources, including toxic substances, radioactive isotopes, and infections microorganisms derived directly or indirectly from point or nonpoint sources, shall not occur in surface waters at concentrations or in combinations that jeopardize the public health or the survival or well-being of livestock, domestic animals, terrestrial wildlife, or aquatic or semiaquatic life.

6.12.3 Surface waters shall be free of all discarded solid materials, including trash, garbage, rubbish, offal, grass clippings, discarded building or construction materials, car bodies, tires, wire, and other unwanted or discarded materials. The placement of stone and concrete rubble for bank stabilization shall be acceptable to the Department, if all other required permits are obtained before placement.

6.12.4 Surface waters shall be free of floating debris, scum, foam, froth, and other floating materials directly or indirectly attributable to artificial sources of pollution.

6.12.5 Oil and grease from artificial sources shall not cause any visible film or sheen to form upon the surface of the water or upon submerged substrate or adjoining shorelines, nor shall these materials cause a sludge or emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines.

6.12.6 Surface waters shall be free of deposits of sludge or fine solids attributable to artificial sources of pollution.

6.12.7 Taste-producing and odor-producing substances or artificial origin shall not occur in surface waters at concentrations that interfere with the production of potable water by conventional water treatment process, that impart an unpalatable flavor to edible aquatic or semiaquatic life or terrestrial wildlife, or that result in noticeable odors in the vicinity of surface waters.

6.12.8 The natural appearance of surface waters shall not be altered by the addition of color-producing or turbidity-producing substances of artificial origin.

6.13 Maine

Maine certified the VGP with the following additional permit conditions:

6.13.1 Draft permit generally. All the conditions set forth in the draft VGP cannot be made less stringent without impairing Maine waters for their best usage. These conditions, or equally protective conditions, are needed to comply with the Maine State statutes and regulations indicated above. In accordance with 40 CFR 124.53(e)(3), this condition cannot be made less stringent and still comply with State water quality standards.

Exchange and flushing for voyages beyond the Exclusive Economic Zone. The operator of any vessel covered under the VGP whose voyage originates outside the exclusive economic zone and enters Maine waters shall conduct ballast water exchange or flushing beyond the EEZ, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth, resulting in salinity levels of at least 30 ppt. These requirements remain in effect regardless of whether the vessel is equipped with a ballast water treatment system.

No vessel which operates a treatment system in accordance with Section 2.2.3.5 of the draft VGP shall bring ballast water into Maine waters unless its ballast tanks have been exchanged or flushed at an ocean location in accordance with the above requirements, and unless any water reintroduced into the vessel's tanks is ocean water from that same general location which has been treated by the vessel's treatment system prior to entry into Maine waters.

All vessels entering Maine waters must maintain the ability to measure salinity levels in each tank onboard the vessel so that salinities of at least 30 ppt can be ensured.

This condition adds no new requirement or deadline for ballast water treatment. The requirements and deadlines for ballast water treatment are those specified in the draft VGP, Section 2.2.3.5 and Table 6. However, in addition to meeting those requirements, vessel operators will need to continue performing exchange or flushing.

This condition does not apply to vessels:

a. that either have no ballast tanks or that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

b. that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft VGP in their ballast tanks.

This condition does not apply if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition. If a vessel is unable to conduct ballast water exchange or flushing due to serious safety concerns as specified above, the operator of any vessel with ballast on board shall take reasonable measures to avoid discharge of organisms in ballast water.

6.13.2 Large Commercial Passenger Vessel Specific Conditions.

a. Large Commercial Passengers Vessels[12] are prohibited from discharging graywater into No Discharge Areas designated pursuant to section 312 of the Act, 33 CFR Part 159 and 40 CFR Part 140.

b. Large Commercial Passenger Vessels must report discharges of all blackwater, a mixture of blackwater and graywater, or graywater to No Discharge Areas to the Department.[13]

6.13.3 No vessel covered by the VGP may discharge pollutants to Class GPA or class SA waters.[14]

[12] Large Commercial Passenger Vessels means vessels that provide overnight accommodations for 250 or more passengers for hire. 38 M.R.S.A §423-D(l)(E)

[13] 38 MRSA §423-D(3)

6.13.4 No vessel covered by the VGP may conduct underwater hull cleaning except as part of emergency hull repairs necessary to secure the vessel or saving a life at sea. The Maine Department of Environmental Protection has determined that removal of biological growth, debris, or scrubbing the hull to reveal fresh antifouling coatings will invariably release pollutants at levels potentially toxic to the marine environment and cause violations of water quality standards.[15]

6.14 Michigan

Michigan certified the VGP with the following additional permit conditions:

6.14.1 Oceangoing vessels (a vessel that operates on the Great Lakes or the St. Lawrence waterway after operating in waters outside the Great Lakes or the St. Lawrence waterway) covered by the VGP are prohibited from discharging ballast water in Michigan's waters unless the vessel has obtained a Certificate of Coverage under the Ballast Water Control General Permit (Permit No. MIG140000) or an Individual Permit from the MDEQ and is in full compliance with the discharge limitations, monitoring requirements, and other conditions set forth in that General Permit or Individual Permit. (Section 3112[6] of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended [NREPA])

6.14.2 Ballast Water Exchange and Saltwater Flushing:

a. All vessels covered by the VGP whose voyages originate from outside the exclusive economic zone (EEZ) and enter Michigan waters with ballast onboard, shall conduct ballast water exchange at least 200 nautical miles (nm) from any shore and in waters beyond the EEZ. Such vessels that carry only residual amounts of ballast water and/or sediments shall conduct saltwater flushing of their ballast tanks, at least 200 nm from any shore and in waters beyond the EEZ. (Section 3103a of Part 31 of the NREPA)

   Ballast water exchange is defined as at least 1 empty and refill cycle of each ballast tank that contains ballast water, resulting in a salinity level of at least 30 parts per thousand (ppt). If the master of the vessel determines that such exchange is impracticable, a sufficient number of flow-through exchanges of ballast water may be conducted to achieve replacement of at least 95 percent of ballast water in ballast tanks of the vessel, resulting in a salinity level of at least 30 ppt.

   Saltwater flushing is defined as the addition of ocean water to ballast water tanks, the mixing of the flushwater with residual water and sediment through the motion of the vessel, and the discharge of the mixed water, such that the resulting residual water has a salinity level of at least 30 ppt.

   All vessels entering Michigan waters must maintain the ability to measure salinity levels in each ballast tank onboard the vessel so that salinities of at least 30 ppt can be ensured.

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[14] 38 MRSA §465-A (1) and 38 MRSA §465-B(l)

[15] 38 MRSA §420(2) and 38 MRSA §465-B

b. Condition 6.14.2(a) does not apply to vessels that:

i. Carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

ii. Use only water from a United States public water system or Canadian drinking water system as ballast water.

c. Condition 6.14.2(a) does not apply if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition. If a vessel is unable to conduct ballast water exchange or flushing due to serious safety concerns as specified above, the operator of a vessel shall take reasonable measures to avoid discharge of organisms in ballast water and shall inform the MDEQ in writing of the measures taken.

6.14.3 Discharge limitations for living organisms for vessels whose voyage originates outside the EEZ (Sections 3103a and 3109 of Part 31 of the NREPA):

a. Ballast water discharges from vessels whose voyage originates outside the EEZ may contain biological pollutants in the form of aquatic invasive species. Ballast water discharges to Michigan waters must be controlled to a level sufficient to prevent aquatic invasive species. These pollutants must not be discharged at a level that is, or may become, injurious to any of the following: to the public health, safety, or welfare; to domestic, commercial, industrial, agricultural, recreational, or other uses that are being made, or may be made, of such waters; to the value or utility of riparian lands; to livestock, wild animals, birds, fish, aquatic life, or plants or to their growth or propagation; or to the value of fish and game.

b. Any vessel utilizing a ballast water treatment system by December 31, 2014, consistent with the technologies identified in Michigan's Ballast Water Control General Permit (Permit No. MIG140000) or an alternative technology approved by the MDEQ, will not be required to meet any future numeric water quality-based effluent limits (WQBEL) for living organisms that may be set forth in a subsequent Section 401 certification until the functional life of that ballast water treatment system has expired or the life of the vessel has expired, whichever is earlier. These vessels must continue ballast water exchange and saltwater flushing as described in Condition 6.14.2 unless it is demonstrated to the MDEQ that numeric WQBELs adopted after the date of this certification for living organisms are met.

6.14.4 Live Organism Monitoring (R 323.2154(2)(c) of the Part 21 Rules, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA):

a. The owner/operator of any vessel covered by the VGP whose voyages originate from outside the EEZ that discharges ballast water to Michigan waters, shall monitor ballast water discharged from their vessel at least once each year for living organisms greater than 50 micrometers in minimum dimension, and living organisms equal to or less than 50 micrometers in minimum dimension and equal to or greater than 10 micrometers in minimum dimension; and submit a report summarizing the discharge monitoring results collected for the above live organism size categories to the MDEQ no later than December 31 of each year. The ballast water discharge samples shall be collected and

analyzed consistent with protocols established by the MDEQ. If the MDEQ fails to establish protocols, then the requirements set forth in this condition will be waived.

6.14.5 The owners/operators of vessels required to utilize a ballast water treatment system shall allow the MDEQ reasonable entry onto the vessel for inspection, access to records, and collection of a ballast water discharge sample(s) for determining compliance with this certification and applicable laws. (R 323.2149(1)(c) and R 323.2189 of the Part 21 Rules of the NREPA)

6.14.6 Nonoceangoing vessels covered by the VGP operating ballast water treatment systems are prohibited from discharging ballast water in Michigan waters with total residual chlorine concentrations above 38 micrograms per liter (µg/L) when the ballast water discharge duration exceeds 160 minutes, or above 200 µg/L when the ballast water discharge duration is less than or equal to 160 minutes. (R 323.1057 of the Part 4 Rules, Water Quality Standards, promulgated under Part 31 of the NREPA)

6.14.7 Discharges of blackwater and graywater from vessels covered by the VGP or sVGP are prohibited to Michigan waters. (Part 95, Watercraft Pollution Control, of the NREPA)

6.14.8 Vessel owners/operators shall immediately notify the MDEQ whenever they become aware that a discharge from their vessel causes or contributes to an exceedance of an applicable state water quality standard. (R 323.2189 of the Part 21 Rules of the NREPA)

6.14.9 Each condition in the proposed VGP and sVGP cannot be made less stringent without potentially violating the requirements of state law, including water quality standards. (Part 31 of the NREPA)

6.14.10 All discharges to Michigan waters from vessels covered by the USEPA's VGP are prohibited from causing or contributing to exceedances of the Michigan Water Quality Standards (Part 4 Rules, Water Quality Standards, promulgated under Part 31 of the NREPA).

The contact point for consultation, submittals, and approvals as referred to in this certification is:

Chief, Water Resources Division
Michigan Department of Environmental Quality
P.O. Box 30458
Lansing, Michigan 48909-7958
Phone: 517-335-4176

6.15 Minnesota

Minnesota certified the VGP with the following additional permit conditions:

6.15.1 Compliance with Minnesota State Disposal System (SDS) permit for ballast water;

Requirement
The applicability of International Maritime Organization (IMO) D-2 ballast water discharge limits for vessels in the 2013 must not relieve any person from the duty to obtain and comply with the existing Minnesota ballast water general permit MNG300000, or subsequent modifications of that permit issued by the MPCA. Obtaining coverage under the 2013 VGP does not release any person from the duty to obtain a permit required by state law. Vessels

covered by the EPA's 2013 VGP must obtain any permits required by the state of Minnesota for vessel discharges and comply with all requirements in the applicable permit at the time of compliance review.

6.15.2 Exchange and flushing for voyages originating beyond the Exclusive Economic Zone (EEZ).

Requirement
The operator of any vessel covered under the 2013 VGP whose voyage originates outside the exclusive economic zone and enters Minnesota waters shall not discharge ballast unless the following conditions are met: the vessel has conducted ballast water exchange or flushing beyond the EEZ, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth, while in oceanic waters, resulting in a salinity level of at least 30 parts per thousand (ppt) prior to the time the vessel enters Minnesota waters. This requirement remains in effect regardless of whether the vessel is equipped with a ballast water treatment system. This requirement is in addition to treatment requirements required under the proposed 2013 VGP.

All vessels entering Minnesota waters must maintain the ability to measure salinity levels in each tank onboard the vessel so that salinities of at least 30 ppt can be ensured prior to discharge in Minnesota waters.

For vessels entering the Great Lakes from outside the EEZ and carrying only residual amounts of ballast water and/or sediment, the flushing requirements are equivalent to those set forth in the July 1, 2012, edition of the 51. Lawrence Seaway regulations, 33 CFR §401.30(f).

This requirement does not apply to:

a. Vessels that either have no ballast tanks or that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

b. Vessels that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft 2013 VGP in their ballast tanks.

This requirement does not apply if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition. If a vessel is unable to conduct ballast water exchange or flushing due to serious safety concerns as specified above, the operator of such vessel shall inform the MPCA and DNR prior to discharging ballast in state waters to allow a determination of whether the discharge of the ballast presents a "high risk" as described below. No ballast shall be discharged that does not meet the conditions in this part if the MPCA determines that the ballast is "high risk" and that additional treatment is necessary to protect aquatic resources.

6.15.3 Emergency Control of Ballast Water discharge

Requirement

a. The MPCA, in coordination with the DNR, may prohibit discharge, require a discharge to occur in a particular area, or require emergency treatment of any "high risk" ballast water proposed to be discharged in Minnesota waters pursuant to its authority under Minn. Stat. §116.11 and Minn. R. 7000.5000.

b. A “high risk" ballast water is one that, in the opinion of the MPCA in consultation with the DNR, poses an imminent and substantial danger to the health and welfare of the people of the state related to the introduction of a nonnative species into Minnesota waters.

c. If relocation of a high risk ballast discharge is required, the MPCA, coordinating with the U.S. Coast Guard (USCG), the DNR, and the States of Michigan and Wisconsin, as needed, will identify alternative locations for the discharge of the high risk ballast water.

d. Nothing in this section relieves the vessel owner or operator of the responsibility for ensuring the vessel's safety and stability or the safety of the crew and passengers.

e. As an alternative to discharging high-risk ballast water, the MPCA may authorize the use of Ballast Water Treatment Systems (BWTS) identified as promising technology by EPA, USCG, neighboring states or a U.S. ballast water testing research facility. U.S. ballast water testing research facilities include, but may not be limited to the Golden Bear, Great Ships Initiative and Maritime Environmental Resource Center.

6.15.4 Coverage of Lakers that operate exclusively in the Great Lakes

Requirement

For vessels that operate exclusively in the Great Lakes, the following Best Management Practices (BMPs) are required to be incorporated into the vessel's ballast management plan and implemented prior to discharge of ballast in Minnesota waters):

a. Annually inspect and replace, as necessary, ballast sea chest screens. Replace screens with the smallest openings allowed by good engineering practice. Inspections must be documented by log entry, diver's report, video report, dry-docking report, marine inspection note, or surveyor's report.

b. During cargo operations (while accounting for boom list, hull stress, and bending moments), lighten the ship as much as practical to elevate water intakes before ballasting to minimize sediment uptake and increase water flow.

c. Ballast water taken aboard shall be the minimum needed to ensure the safety of the crew and vessel. Additional ballast water can be taken aboard, once deeper water is reached.

d. Ballast water shall always be taken aboard or discharged via the pumps and never "gravity fed or drained." This ensures an organism that somehow makes it past the screen is pulverized by the high speed, high pressure, and tight tolerance pump.

6.15.5 Monitoring Requirements

Requirements:

a. *Monitoring for vessels required to meet the 2013 VGP(numeric limits equivalent to IMO 0-2) ballast water discharge limits*: In addition to meeting the draft 2013 VGP monitoring requirements in section 2.2.3.S., all vessels covered under the2013 VGP and operating in Minnesota waters after a Ballast Water Treatment System is installed must

sample and analyze the ballast water discharge at least once a year (provided appropriate facilities are available) using the shipboard Environmental Technology Verification (ETV) sampling protocol, a protocol consistent with IMO G8/G9 protocols, or a compliance monitoring protocol developed by the USCG, whichever is most advanced and available. The MPCA will be available to interpret which method(s) are most advanced and available. This monitoring shall include sampling, identification and enumeration of live organisms >50 µm and between 10-50 µm in size. The monitoring results shall be submitted to EPA and the MPCA on an annual basis, consistent with the mechanisms used in the 2013 VGP for all other submissions, provided such electronic tools are made available by EPA. In the absence of available submittal tools by EPA, monitoring data must be directly submitted to the MPCA. The MPCA's point of contact is provided at the close of this letter. Such live organism monitoring shall include the collection of representative discharge samples and the testing (counting) of live organisms in such samples by qualified personnel in accordance with standard and/or best available sampling and analytical methods.

b. *Monitoring for vessels not required to meet numeric ballast treatment limits because of 2013 VGP condition* 2.2.3.5.3.3 *(currently addressing vessels operating exclusively upstream of the Welland Canal)* or *similar condition:* Within 24 months of final issuance of the 2013 VGP, all vessels not required to meet numeric ballast treatment standards, and that discharge ballast in Minnesota waters, shall have the capacity to collect at the request of the MPCA, EPA or other regulatory authority representative samples of organisms in ballast water discharges. Beginning 24 months after final issuance of the 2013 VGP, all vessel*s* not required to meet numeric ballast treatment limits shall complete the following ballast discharge monitoring:

    i. A minimum of once annually, sample and analyze for organism density and composition (based on broad taxonomic categories). Sampling and analysis methods shall be consistent with protocols described above. Samples must be analyzed for total organisms (live or dead) greater than or equal to 10 micrometers in size. The ballast discharge subject to sampling must be taken on the ship in a Great Lakes port for discharge into Minnesota waters. You must report the uptake locations and volumes subject to sampling, as well as the volume you plan to discharge in Minnesota's waters, best management practices employed, and other factors affecting the composition of the sample.; <u>or</u>

    ii. Complete, individually or in partnership with other permittees, a ballast discharge biological study approved by the MPCA. The study must include actual discharge data representing designated vessels that may discharge native and non-native organisms into Minnesota waters. The purposes of the study must include an evaluation of the risk that ballast discharges pose to Minnesota waters.

6.15.6 Biocide Usage

<u>Requirement:</u>

Discharges of residual biocides are authorized as defined by the September 24, 2008, Minnesota General Ballast Water Permit or subsequent reissuances, whichever is most recent. Discharge limitations for residual oxidants, and procedures for obtaining authorization to use other chemical additives are established by the permit. Obtaining coverage under the 2013 VGP does not release any person from the duty to obtain a permit required by state law.

Vessels covered by the EPA's 2013 VGP must obtain any permits required by the state of Minnesota for vessel discharges and comply with all requirements in the applicable permit at the time of compliance review.

6.15.7 Other State Regulations

Requirement:

All vessels must comply with the requirements of Minn. Stat. 115.1703 and any other applicable state law, statute or rule.

6.16 Missouri

Missouri certified the VGP with the following additional permit conditions:

6.16.1 The permittee shall not cause or contribute to the general or numeric criteria to be exceeded nor impair beneficial uses established in the Water Quality Standards, 10 CSR 20-7.031.

6.16.2 Representatives from the Department shall be allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the letters and conditions of the permit.

6.16.3 This certification shall not be construed or interpreted to imply the requirements for other permits are replaced or superseded. Any National Pollutant Discharge Elimination System Permits, Land Disturbance General Permits, or other requirements shall be complied with.

6.17 Nebraska

Nebraska certified the VGP with the following additional permit conditions:

Chapter 6, § 004 of Title 117- Nebraska's Surface Water Quality Standards, states that:

"No discharge of wastewater from domestic, municipal, or industrial sources shall be allowed directly into lakes or impounded waters except:

"004.01 Wastewater from sources authorized by NPDES permits to discharge to these waters prior to May 10, 1982 which have operated under active NPDES permits since then.

"004.02 Noncontact cooling waters from sources authorized by NPDES permits to discharge to these waters.

"004.03 Stormwater from sources authorized by NPDES permits to discharge to these waters."

This precludes allowing discharges into lakes and reservoirs of greywater; bilge water, or any sewage commingled with any other discharge as described in the permits and in Federal Register Vol. 76, No. 236, pp 76716 through 76725. Vessels on these waters will need to discharge these wastewaters into sanitary dump stations that do not result in a discharge to lakes or impounded waters. Cooling water discharges are allowed. Use of these General Permits for vessels operating on streams of the State of Nebraska is acceptable.

6.18 New Hampshire

New Hampshire certified the VGP with the following additional permit conditions:

6.18.1 Conditions Applicable to Coastal (Tidal) Waters

a. In a Notice of Determination in the Federal Register dated September 27, 2005, the State of New Hampshire was granted permission by EPA for a No Discharge Area. The No Discharge Area consists of all tidal and estuarine waters, including all bays and rivers to the tidal dams, and all ocean waters within three nautical miles of the New Hampshire shoreline and Isles of Shoals. In the No Discharge Area, all boat sewage discharge (including graywater containing sewage), whether treated or untreated, is prohibited. For a brochure on New Hampshire's Coastal Pumpout Program see http://des.n.h.gov/organization/commissioner/pip/publications/wd/documents/no_discharge area.pdf

b. Graywater without sewage should be discharged at pumpout facilities or beyond three nautical miles of the New Hampshire shoreline and the Isles of Shoals wherever feasible. This is infeasible at this time for vessels without holding tanks for graywater, but these vessels should plan to install such holding tanks during one of the next two scheduled dry docking events if such installation is technically feasible and would not jeopardize the safety of the vessel.

c. Part 2.2.15 of the draft Vessel General Permit prohibits the discharge of graywater from vessels with graywater holding tanks to nutrient impaired waters. For all practical purposes for this part, nutrient impaired tidal waters in New Hampshire include tidal waters west of the Interstate 95 Bridge over the Piscataqua River. For a more detailed delineation of nutrient impaired waters see the DES' Watershed Report Cards at http://des.nl1.gov/organization/divisions/water/W!nb/swga/report_cards.htm.

d. Bilgewater may contain fuel, oil, paint chips and other pollutants associated with the cargo or processes occurring on the vessel. Part 2.3.1 requires among other things that your discharges be controlled as necessary to meet applicable water quality standards. The applicable water quality standards in New Hampshire are found in RSA 485-A:8 and the Surface Water Quality Regulations Env-Wq 1700, which are available at http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wg l 700.pdf. Vessel operators should pay particular attention to using all necessary management practices, treatment and discharge methods to ensure that the surface waters near the vessel remain free from substances that would settle to form harmful deposits or float as foam, debris, scum or other visible pollutants or otherwise violate the General Water Quality Criteria (see Env-Wq 1703.03) or the Minimum Criteria for Mixing Zones (see Env-Wq 1707.02). For discharges such as bilgewater that are likely to contain pollutants that are toxic to aquatic life, the management practices, treatment and discharge methods must also ensure that the discharge does not cause the surface water in the vicinity of the discharge to contain "toxics in toxic amounts" (see Env-Wq 1703.21).

6.18.2 Conditions Applicable to Inland (Freshwater) Surface Waters

a. The inland lakes of New Hampshire are No Discharge Areas for both sewage and graywater. See RSA 487:1-14 at http://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-L-487.btm. Information on pumpout facilities on Lake Winnipesaukee, Lake Sunapee and Squam lake can be found

at
http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/lakes_region_pumpout.pdfl

b. Bilgewater may contain fuel, oil, paint chips and other pollutants associated with the cargo or processes occurring on the vessel. Part 2.3.1 requires among other things that your discharges be controlled as necessary to meet applicable water quality standards. The applicable water quality standards in New Hampshire are found in RSA 485-A:8 and the Surface Water Quality Regulations Env-Wq 1700, which are available at http://des.nh.gov/organization/comrnissioner/legal/rules/documents/envwq1700.pdf. Vessel operators should pay particular attention to using all necessary management practices, treatment and discharge methods to ensure that the surface waters near the vessel remain free from substances that would settle to form harmful deposits or float as foam, debris, scum or other visible pollutants or otherwise violate the General Water Quality Criteria (see Env-Wq 1703.03) or the Minimum Criteria for Mixing Zones (see Env·Wq 1707.02). For discharges such as bilgewater that are likely to contain pollutants that are toxic to aquatic life, the management practices, treatment and discharge methods must also ensure that the discharge does not cause the surface water in the vicinity of the discharge to contain "'toxics in toxic amounts"(see Env-Wq 1703.21).

6.19 New York

New York certified the VGP with the following additional permit conditions:

Vessel General Permit Certification Conditions

The Department finds *that the conditions in the draft VGP* cannot be made less stringent without violating water quality standards and other requirements of State law, and also establishes *other conditions more stringent than those contained in the draft VGP* that are needed to meet the requirements of either the CWA or New York State law. As further explained herein and in the Department's Fact Sheet dated 2012, each such condition is needed to assure compliance with the relevant provisions of law and regulation which are set forth in the Department's Fact Sheet dated 2012. In accordance with 40 CFR §§ 124.53(e)(2) and (3), those provisions of the CWA and New York State law form the basis for the conditions of this Certification. In accordance with 40 CFR § 124.53 (e)(2) and (3), each such condition cannot be made less stringent and still comply with the requirements of State law and regulation, including State water quality standards. Since the requirements of New York State law and regulation, including water quality standards, are more stringent than the protections the VGP would otherwise provide, this water quality certification is necessary.

In accordance with 40 CFR § 122.44(d)(1), numeric Water Quality-Based Effluent Limitations (WQBEL) for living organisms in ballast water discharges can be set for vessels covered under the VGP. The WQBEL is set at a level which will neither cause nor contribute to an excursion above New York State water quality standards, including State narrative criteria for water quality. While this Certification does not set a WQBEL, it does specify interim measures to ensure compliance with State water quality standards, including State narrative criteria for water quality, until such time as the WQBEL is developed and fully attainable. The Certification also sets conditions for other vessel discharges such as bilge water. All studies, reports, authorities and other documents cited herein, including the Department's Fact Sheet dated 2012, are incorporated into this Certification by reference.

Conditions set forth in the draft VGP cannot be made less stringent:

6.19.1 ***Draft permit generally***. The conditions set forth in the draft VGP, including Section 2.2.3.5 (discharge limitations), Section 2.2.3.7 (Great Lakes exchange and flushing), and Section 2.2.15 (graywater), cannot be made less stringent without impairing New York waters for their best usage. These conditions, or equally protective conditions, are needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(3), this condition cannot be made less stringent and still comply with State water quality standards.

For example, permittees must meet the following discharge limits consistent with Section 2.2.3.5 and Table 6: Ballast Water Treatment to BAT(Best Available Technology) Schedule found in the VGP, unless excluded from these requirements by Parts 2.2.3.5.3 or 2.2.3.8 of the VGP:

a. For organisms greater than or equal to 50 micrometers in minimum dimension: discharge must include fewer than 10 living organisms per cubic meter of ballast water.

b. For organisms less than 50 micrometers and greater than or equal to 10 micrometers: discharge must include fewer than 10 living organisms per milliliter (mL) of ballast water.

c. Indicator microorganisms must not exceed:

   i. For Toxicogenic *Vibrio cholerae* (serotypes O1 and O139): a concentration of less than 1 colony forming unit (cfu) per 100 mL.

   ii. For *Escherichia coli*: a concentration of fewer than 250 cfu per 100 mL.

   iii. For intestinal enterococci: a concentration of fewer than 100 cfu per 100 mL

Conditions more stringent than those contained in the draft VGP:

6.19.2 ***Exchange and flushing for voyages originating beyond the exclusive economic zone (EEZ).*** The operator of any vessel covered under the VGP whose voyage originates outside the exclusive economic zone and enters New York waters shall conduct ballast water exchange or flushing beyond the EEZ, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth, resulting in a salinity level of at least 30 parts per thousand (ppt). These requirements remain in effect regardless of whether the vessel is equipped with a ballast water treatment system.

No vessel subject to this condition which operates a treatment system in accordance with Section 2.2.3.5 of the draft VGP shall bring ballast water into New York waters unless its ballast tanks have been exchanged or flushed at a location at least 200 nautical miles from shore in accordance with the above requirements, and unless any water reintroduced into the vessel's tanks is ocean water from that same general location which has been treated by the vessel's treatment system prior to entry into New York waters.

All vessels entering New York waters must maintain the ability to measure salinity levels in each tank onboard the vessel so that salinities of at least 30 ppt can be ensured.

This condition adds no new requirement or deadline for ballast water treatment. The requirements and deadlines for ballast water treatment are those specified in the draft VGP, Section 2.2.3.5 and Table 6. However, in addition to meeting those requirements, vessel operators will need to continue performing exchange or flushing.

This condition does not apply to vessels:

a. that either have no operable ballast tanks or that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

b. that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft VGP in their ballast tanks.

This condition does not apply if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition. If a vessel is unable to conduct ballast water exchange or flushing due to serious safety concerns as specified above, the operator of any vessel with ballast on board shall take reasonable measures to avoid discharge of organisms in ballast water and shall inform the Department in writing of the measures taken.

For vessels entering the Great Lakes from outside the EEZ and carrying only residual amounts of ballast water and/or sediment, the flushing requirements are equivalent to those set forth in the May 4, 2012 edition of the Seaway Regulations and Rules, 33 CFR 401.30(f).

New York finds that the exchange/flushing requirements set forth in this condition, including the combination of treatment with exchange or flushing, are needed to prevent impairment of waters for their best usage and are thus needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(2), this condition cannot be made less stringent and still comply with State water quality standards.

6.19.3 WQBEL. The discharge of ballast water from vessels covered under the EPA VGP contains biological pollutants in the form of aquatic invasive species (AIS). These pollutants must not be discharged at a level which will cause, or have the potential to cause, or contribute to an excursion above the State narrative water quality standards in 6 NYCRR Part 703.2. Vessels discharging ballast water in New York's waters must control the level of these biological pollutants to a level to achieve the State narrative water quality standards. A numeric effluent limitation for this condition is deferred until the next VGP.

6.19.4 Confined Laker vessels. Requirements and recommendations for vessels that operate exclusively in the Great Lakes are the following Best Management Practices ***(BMPs).*** New York requires the use of reasonable and effective management practices to limit the introduction and spread of aquatic invasive species, until at least the WQBEL is fully implemented.

The following ***BMPs*** are *required* to be implemented in the Great Lakes:

a. In lieu of the normal 5-year inspection, annually inspect and replace, as necessary, ballast sea chest screens. Replace screens with the smallest openings allowed by good engineering practice. Inspections will be documented by log entry, diver's report, video report, dry-docking report, marine inspection note, or surveyor's report.

b. During cargo operations while accounting for boom list, hull stress, and bending moments, lighten the ship as much as practical to elevate water intakes before ballasting to minimize sediment uptake and increase water flow.

c. Ballast water taken aboard in Viral Hemorrhagic Septicemia (VHS) affected waters shall be the minimum needed to ensure the safety of the crew and vessel. Additional ballast water can be taken aboard, once deeper water is reached.

d. Ballast water shall always be taken aboard or discharged via the pumps and never "gravity fed or drained." This ensures an organism that somehow makes it past the screen is pulverized by the high speed, high pressure, and tight tolerance pump.

The following ***BMPs*** are *recommended* to be implemented in the Great Lakes:

e. The temperature range in which the VHS virus is known to replicate, and in which fish kills have been detected, is quite broad (37ºF - 70ºF [3ºC - 21ºC]). Since this range encompasses the majority of water temperatures found in the Great Lakes throughout the year, New York State recommends following this supplemental BMP regardless of water temperatures.

i. In order for the VHS disease to spread, an uninfected, yet vulnerable fish must be exposed to an active virus, such as with exposure to the bodily fluids from an infected fish. The virus is most stable in a living fish. It can remain active in dead or macerated fish parts, but for a shorter time. Therefore New York State recommends its vessel operators take all appropriate actions to insure that fish or fish parts do not enter their ballast tanks. This is accomplished by inspecting the ½" openings screening the ballast water intakes and using pumps as macerators during uptake and discharge.

ii. Fish populations are denser near shore and significantly less dense more than 3 miles from shore; therefore, New York State recommends its vessel operators, when and where possible, minimize uptake of ballast water in near shore locations. To further reduce risk, when possible:

1. Conduct a ballast water exchange in the deepest, warmest water prior to entering Lake Superior (this practice would specifically preclude exchanging ballast water in Lake St. Clair and the western basin of Lake Erie).

2. If vessel operators are unable to conduct an exchange in the lower Great Lakes, consider doing an exchange in deep, remote waters of Lake Superior.

3. Although it is unlikely a live fish or larger fish particle could have entered the ballast system, consider exchanging ballast water within the ship or re-circulating it within a ballast tank (pumps act as a macerator to reduce the possibility of discharging fish or larger pieces of fish).

4. Continue working with the U.S. Coast Guard and Council of Lake Committees to evaluate additional risk reduction actions.

New York finds that the ***BMPs*** set forth in this condition are needed to prevent impairment of waters for their best usage and are thus needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(2), this condition cannot be made less stringent and still comply with State water quality standards.

6.19.5 ***Live organism monitoring.*** In addition to meeting the draft VGP monitoring requirements in section 2.2.3.5.1.1.4, all vessels covered under the VGP and operating in New York waters,

after a Ballast Water Treatment System is installed, must sample and analyze the ballast water discharge at least once a year (provided appropriate facilities are available) using the California shipboard sampling protocol, or a compliance monitoring protocol developed by the USCG, whichever is most advanced and available. This monitoring shall include sampling for >50 µm and for 10-50 µm organisms. The monitoring results shall be submitted to EPA and the Department on an annual basis, consistent with the mechanisms used in the VGP for all other submissions. The Department's point of contact is provided at the close of this letter. Such live organism monitoring shall include the collection of representative discharge samples and the testing (counting) of live organisms in such samples by qualified personnel in accordance with standard and/or best available sampling and analytical methods.

New York finds that the monitoring requirements set forth in this condition are needed to prevent impairment of waters for their best usage and are thus needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(2), this condition cannot be made less stringent and still comply with State water quality standards.

6.19.6 ***Bilge water.*** Discharge of bilge water is prohibited in New York waters. This condition does not apply to the discharge of bilge water if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition.

New York finds that the discharge prohibition set forth in this condition, coupled with the narrowly defined safety exemption, is needed to prevent impairment of waters for their best usage and is thus needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(2), this condition cannot be made less stringent and still comply with State water quality standards.

6.20 North Carolina

North Carolina certified the VGP with the following additional permit conditions:

6.20.1 This Certification is valid only for those activities that fully comply with all terms and conditions of the National Pollutant Discharge Elimination System (NPDES) Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (VGP) or the proposed NPDES Small Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels less than 79 Feet (sVGP) and all other state laws applicable to such discharges.

6.20.2 Discharges that are not eligible for coverage under the VGP or sVGP that require an individual permit must also obtain an individual Water Quality Certification or waiver from the Division.

6.20.3 This General Certification does not relieve the applicant/permittee of the responsibility to obtain all other required Federal, State, or Local approvals.

6.20.4 The applicant/permittee and their authorized agents shall conduct all activities in a manner consistent with state water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), the Oil Pollution and Hazardous Substances Control Act of 1978 (Chapter 143 Article 21A) and any other appropriate requirements of State and Federal Law.

6.21 Ohio

Ohio certified the VGP with the following additional permit conditions:

Water Quality Standards and Impacts

6.21.1 Ohio Narrative Water Quality Standards and Nuisance Species

Ohio Water Quality Standards (WQS) contain narrative conditions to prohibit nuisance conditions in waters of the state. The specific standard states that "To every extent practical and possible as determined by the director, these waters shall be . . . Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance;" [Ohio Administrative Code 3745-1-04(C)].

In this rule, the term materials is not defined or limited; Ohio considers that this condition applies to non-indigenous nuisance species. The federal NPDES permit may not adequately prevent the introduction of new non-indigenous species, depending on the conditions issued in the final NPDES permit.

6.21.2 Ohio Narrative Water Quality Standards for Toxicity

The narrative WQS also contain a provision prohibiting toxicity: "To every extent practical and possible as defined by the director, these waters shall be....Free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone;" [Ohio Administrative Code 3745-1-04(0)].

The federal NPDES permit requirement for salt water ballast exchange means that ballast water discharges to fresh water will contain large concentrations of dissolved solids; these solids have the potential to be toxic to fresh water aquatic life, and discharges must meet the narrative toxicity standard.

6.21.3 Biocide Limits and Experimental Ballast Water Treatment

The discharge limits for residual chlorine, peroxyacetic acid and hydrogen peroxide do not meet Ohio WQS for continuous discharges. The federal NPDES permit's total residual chlorine discharge standard is 100 µg/l for discharges from ballast water treatment systems. This limit meets Ohio WQS for short-term intermittent discharges, but does not meet WQS for continuous discharges.

Ohio has used its authority to establish site-specific WQS to establish a separate inside-mixing-zone maximum criterion for short-term exposures to chlorine. This criterion for is 200 µg/l; the otherwise applicable criterion is 38 µg/l. [OAC 3745-1-35 and -36].

Ohio EPA has developed water quality criteria applicable to bromine and combinations of bromine and chlorine. These criteria are based on data submitted by the Chemical Manufacturers Association to U.S. EPA Region V that shows bromine being approximately four times as toxic as chlorine. The water quality criteria for bromine are therefore set at1/4 of the chlorine standard.

Ohio EPA has also developed water quality criteria for peracetic acid using the criteria calculation rule OAC 3745-1-36. Similar procedures have been used by Michigan to develop water quality criteria for hydrogen peroxide and ozone (Michigan DEQ Rule 57).

Discharges of other biocides must meet the narrative water quality standard for toxicity noted above. [OAC 3745-1-04(0)].

Specific Conditions

6.21.4 Ballast Water Controls

Given the number of invasive species already in the Great Lakes, the number of recent introductions, and the likelihood of increased ship traffic, the existing program of ballast water control is not effective in preventing the introduction of invasive non-native organisms, and therefore does not meet Ohio's narrative WQS. An integrated system of ballast water treatment and management controls would reduce the number of live organisms in ballast water, and is the most effective approach to meeting the nuisance WQS. [OAC 3745-1-04(C)].

The draft VGP proposes treatment limits and practices to reduce the number of organisms discharged into U.S. waters. Ohio EPA believes that these controls are "practical and possible" means of controlling potentially invasive species, and is incorporating those requirements into this certification. These controls include the International Maritime Organization (IMO) treatment standards and ballast water management techniques in the draft permit.

Discharges must meet the IMO treatment standards in the VGP or 33 CFR 151.1511, whichever is more restrictive, according to the schedule in the VGP or 33 CFR 151.1512, whichever compliance date comes first.

Treatment systems to reduce the number of live organisms discharged in ballast water exist and are continuing to be developed. These treatment systems are intended to kill and/or filter all organisms from ballast water so that they are not discharged. Several of the treatment systems being designed to meet the discharge standards of the International Maritime Organization (IMO) can remove a large percentage, if not all, organisms. Ohio EPA is certifying IMO standards because they are the most widely accepted and tested standards in the world. These treatment systems shall be operated to maximize the destruction and/or removal of organisms in the ballast water, with the object of discharging no viable organisms.

The VGP contains additional management controls on ballast water discharges that can reduce the risk of organisms discharged in ballast water. These controls are currently in-use by many ships, and are therefore reasonable conditions. As they are capable of reducing the risk of nuisance organisms discharged, these conditions are required to meet OAC 3745-1-04(C):

> Vessels that operate outside the U.S. Exclusive Economic Zone (EEZ) and more than 200 nautical miles from shore, and then enter the Great Lakes via the St. Lawrence Seaway System must conduct salt water flushing of ballast tanks. This condition applies both before and after treatment system deadlines in the VGP;

Vessels are prohibited from discharging ballast water sediment in Ohio waters.

Ohio EPA believes that the IMO certification combined with ballast water flushing and exchange is sufficient demonstration that these treatment standards are "practical and possible" methods for meeting ballast water treatment standards for ocean-going ships. U.S. EPA's fact sheet demonstrates that more restrictive treatment standards cannot be reliably attained or measured at this time.

Ohio EPA also believes that there are reasons to treat existing vessels that operate exclusively within the Great Lakes differently than those that operate outside the Lakes. The effluent flows of ballast water are larger than ocean-going vessels, are discharged more rapidly that the ballast water of ocean-going vessels, and space for treatment equipment is limited on existing lake vessels. These factors affect the practicability of treatment. Ohio EPA believes that IMO treatment standards are not "practical and possible" at this time for existing vessels operating exclusively within the Great Lakes, as defined in the VGP.

If the federal government adopts treatment standards more stringent than IMO, then those standards shall replace the above treatment standards for new treatment systems installed after the date those federal standards go into effect.

The Director will evaluate treatment standards equivalent to IMO or more restrictive standards for all vessel classes covered by the federal general permit (including both ocean-going vessels and vessels that operate only in the Great Lakes) when he issues the next certification on this permit. The decision to require IMO or more restrictive treatment standards will be based on treatment system availability and costs, and other considerations required by law.

6.21.5 Salt Water Discharges

It is likely that discharges of ballasted sea water will not meet the toxicity narrative water quality standard if discharged in the relatively shallow water of Ohio's Lake Erie ports, due to the dissolved solids levels in sea water. Discharges in the open waters of the Lake minimize the risk of toxicity, and will allow the standard to be met. In order to prevent toxicity to ambient organisms or rapidly lethal conditions, discharges of ballasted sea water within the breakwalls of Ohio's Lake Erie Ports is prohibited.

6.21.6 Ballast Treatment Chemical-Specific Discharge Limits

For ballast water treatment systems using chlorine, discharges must meet a maximum chlorine limit of 38 micrograms per liter (µg/l) if the discharge lasts for more than 160 minutes/day; the limit is 200 µg/l if the discharge is 160 minutes/day or less. [OAC 3745-1-07 (inside-mixing-zone maximum water quality standards, definition and applicability), OAC 3745-1-35, (site-specific WQS, exposure time-based criteria), OAC 3745-1-36 (aquatic life criteria calculation procedures, equivalency of IMZM with FAV criteria), OAC 3745-2-05(8)(3) (maximum limits for discharges to lakes)]. These standards apply to all ballast water treatments - both experimental and those treatments installed to meet IMO standards.

6.21.7 Ballast Treatment- Other Biocides

Biocides other than the biocides listed in c. above used in ballast water treatment must meet Ohio's narrative toxicity water quality standard. To meet the 'no rapidly lethal conditions' narrative, discharges of all biocides must meet inside-mixing-zone water quality standards

(Final Acute Values) as determined by the OAC Rule 3745-1-36 [Great Lakes Initiative rule procedures]. The discharge of organic quaternary ammonium compounds is prohibited.

6.22 Rhode Island

Rhode Island certified the VGP with the following additional permit conditions:

6.22.1 The operator of any vessel covered under the draft VGP whose voyage originates outside the exclusive economic zone (EEZ) and enters Rhode Island waters shall conduct ballast water exchange or flushing beyond the EEZ, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth. These requirements remain in effect *regardless of whether the vessel is equipped with a ballast water treatment system.* No vessel subject to this condition which operates a treatment system in accordance with Section 2.2.3.5 of the draft VGP shall bring ballast water into Rhode Island waters unless its ballast tanks have been exchanged or flushed at a location at least 200 nautical miles from shore and unless any water reintroduced into the vessel's tanks is ocean water from that same general location which has been treated by the vessel's treatment system prior to entry into Rhode Island waters.

This condition adds no new requirement or deadline for ballast water treatment. The requirements and deadlines for ballast water treatment are those specified in the draft VGP, Section 2.2.3.5 and Table 6. However, in addition to meeting the requirements in Section 2.2.3.5 and Table 6, vessel operators will need to continue performing exchange or flushing. This condition does not apply to vessels that either have no ballast tanks or that carry only permanent ballast water, all of which is contained in sealed tanks that are not subject to discharge, or that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft VGP in their ballast tanks.

This condition does not apply if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition. If a vessel is unable to conduct ballast water exchange or flushing due to serious safety concerns as specified above, the operator of any vessel with ballast on board shall take reasonable measures to avoid discharge of organisms in ballast water and shall inform the Department in writing of the measures taken.

The above condition combines water quality protection with operational flexibility. They provide flexibility to the industry by allowing further development of treatment technology and testing protocols. While not a mandatory requirement, the Department urges vessel permittees to voluntarily install currently available technologies that go beyond the IMO D-2 standard (e.g., systems that have demonstrated the ability to meet and exceed a 10X IMO level of treatment) as a means of gaining useful experience while contributing to the advancement of treatment technology.

6.22.2 The discharge of bilge water from any vessel covered under the draft VGP whose voyage originates outside the exclusive economic zone (EEZ) shall discharge all existing bilge water prior to entering Rhode Island waters. This condition does not apply to the discharge of bilge water if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant conditions. If the operator of the vessel (originating outside of the EEZ) is unable to discharge their bilge water prior to entering

Rhode Island waters, the operator is prohibited from discharging bilge water within Rhode Island waters.

The Department finds that this condition is necessary to protect the ecological integrity of RI waters from the discharge of invasive species within bilge water. The BMP's required within the draft VGP include prohibitions on releases of certain chemicals, including dispersants, detergents, emulsifiers, chemicals, and other substances; however it has been demonstrated[16] that bilge water is a significant vector for transporting invasive species. The Department has added this condition but isolated it to those vessels that originate outside of the EEZ since the prohibition is intended to restrict the discharge of invasive species to Rhode Island waters.

6.22.3 In addition to meeting the draft VGP monitoring requirements in Section 2.2.3.5.1.1.4, all vessels covered under the VGP and operating in Rhode Island waters, after a Ballast Water Treatment System is installed, must sample and analyze the ballast water discharge at least once a year (provided appropriate facilities are available), using the California shipboard sampling protocol, or a compliance monitoring protocol developed by the USCG, whichever is most advanced and available. The monitoring results shall be submitted to EPA and the Department on an annual basis, consistent with the mechanisms used in the VGP for all other submissions. Coordination of sampling/monitoring shall be directed to Kevin Cute of the RI Coastal Resources Management Council. Such live organism monitoring shall include the collection of representative discharge samples and the testing (counting) of live organisms in such samples by qualified personnel in accordance with standard and/or best available sampling and analytical methods. In addition to EPA submissions, the applicant must submit all sampling results to the Office of Water Resources, RI Department of Environmental Management.

6.22.4 Graywater discharges to nutrient and pathogen impaired waters from vessels subject to the VGP covered under this permit shall be managed in accordance with Section 2.2.15 of the VGP. All requirements applied to special waters listed in Appendix G of the VGP apply to Rhode Island waters that are impaired for nutrients and/or pathogens. A specific list identifying impaired waters within the State of Rhode Island is available at http://www.dem.ri.gov/pubs/305b/index.htm. This website contains the most recent Integrated Water Quality Monitoring and Assessment Report which shall be used to identify the impaired waterbodies. Specifically, appendixes Category 4A (Impaired but TMDL has been completed) and Category 5 (303{d} listed and impaired). This is necessary to comply with Rule 9b (no further degradation of low quality waters) of the State Water Quality Regulations. This condition shall also support the "No Discharge Area designation of state waters pursuant to Section 312-(f)(3) of Public Law (Federal Water Pollution Control Act) and 92-500 as amended.

6.23 Vermont

Vermont certified the VGP with the following additional permit conditions:

6.23.1 The Department certifies there is a reasonable assurance that discharges from vessels covered by EPA's VGP and sVGP will comply with the applicable provisions of 33 U.S.C §§ 1311,

[16] *Muir, Adrianna A. PhD,* California Research bureau, Managing Coastal Aquatic Invasive Species in California: Existing Policies and Policy Gaps: Requested by Senate Natural Resources and Water Committee; January 2011. CRB 11-001.

1312, 1313, 1316, 1317 and 1341 (CWA §§ 301, 302, 303, 306, 307 and 401), and that permittees and their activities will not contravene applicable limitations, standards and other appropriate requirements of State law, provided the following conditions set forth in this Certification are met.

6.23.2 The operator of any vessel covered under the VGP or sVGP who by accident, negligence, or otherwise causes the discharge, spillage, uncontrolled loss, seepage or filtration of oil or petroleum or chemical liquids or solid, liquid or gaseous products, or hazardous wastes which poses a potential threat to human health or the environment, shall immediately report to the Department by telephone at (802) 828-1535.

6.23.3 All work and activities conducted by the permittee in accordance with the VGP or sVGP shall be consistent with the terms and conditions of this certification. Any regulated activities carried out in a manner inconsistent with the conditions set forth herein or inconsistent with the requirements specified in the VGP or sVGP, which are not more stringently conditioned under this certification, constitute a violation of this certification pursuant to 40 CFR §124.53(e)(l), and all instances of non-compliance with this certification must be immediately reported to the Department at (802) 828-1535.

6.23.4 The discharge of wastewaters from pressure washing the bottom of vessels and any point source or non-point source pollution from spillage, sanding, sand blasting, or scraping vessels into Vermont waters from any vessel covered under the VGP or sVGP is prohibited.

6.23.5 Any discharge from any vessel covered under the VGP or sVGP that results in the further degradation of the chemical, physical, or biological integrity of Vermont waters listed on Vermont's Section 303(d) list is prohibited.

6.23.6 This certification is only valid for those activities that fully comply with all terms and conditions of EPA's final VGP and sVGP and all other state laws applicable to such discharges. The Department reserves the authority to enforce any violation of the Vermont Water Quality Standards that results from any discharge and to enforce all other state laws applicable to such discharges.

6.23.7 Discharges that are not eligible for coverage under the VGP and sVGP and that require an individual permit must obtain an individual water quality certification or waiver from the Department.

6.23.8 The issuance of this certification does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any Department permits or approvals, or permits or approvals from other governmental entities.

6.24 Washington

Washington certified the VGP with the following additional permit conditions:

6.24.1 Conditions Related to Washington State Geography

The conditions and requirements of the Vessel General Permit (VGP) shall extend to all surface waters of the state. (Authority- Article XXIV of the Washington State Constitution and 43 USC§ 1312.)

6.24.2 Conditions Related to State Law

1. Except for discharges of firefighting foam conducted in accordance with VGP Part 2.2.5, discharges to state waters are prohibited which would cause a sheen, film, sludge, foam, turbidity, color, or odor. (Authority RCW 90.48.020, RCW 90.48.080, and WAC 173-201A-260(2)(b)).

2. Based upon experience in Washington State with vessel discharges violating RCW 90.48.080 and requirements that the Department of Ecology has routinely imposed since before issuance of the original VGP in 2008, the following instructions for vessels are conditions of the VGP:

    a. In order to minimize the generation and release of wastewater, vessel operators shall use best management practices which include mechanical methods to thoroughly clean bulk and break bulk cargo holds. Unless flammable or explosive vapor concentrations make the risk too great, hold cleanliness shall be documented photographically before washing with water. Solid wastes from hold cleaning must be transferred onshore for disposal in an approved landfill. This includes agricultural products such as grains.
    b. The discharge of wash down water from holds containing metal ores, prilled coal tar (pencil pitch), coal, and petroleum coke is prohibited.
    c. The discharge of tank cleaning and wash down water from petroleum and chemical tank ships is prohibited.
    d. Discharge of wash water from holds which contained concrete, sand, gravel and other similar inorganic products shall be allowed as long as it is managed to prevent violation of any provision of state law or WQS, especially creating a visible increase in turbidity or raising receiving water pH more than 0.5 units or above 8.5.
    e. The discharge of fish hold effluent while at a dock, pier, or mooring is prohibited.

3. No vessel meeting the VGP definition of a large or medium cruise ship may discharge graywater within 0.5 miles of a shellfish bed that is recreationally harvested or approved for commercial harvest. (Authority – RCW 69.30.130).

4. The release to state waters of a harmful animal or plant species meets the state's definition of pollution in RCW 90.48.020 and would be a violation of RCW 90.48.080, WAC 173-201A-260(2)(a), and the sVGP. VGP Part 3 requires corrective actions when a problem such as significant biofouling is known. VGP Part 2.2.23 requires vessel operators to minimize the transport of attached living organisms from overseas or between Captain of the Port (COTP) zones. Regular cleaning of hulls and niche areas is the only routinely available nontoxic method for minimizing transport of attached living organisms.

    The release of nonnative aquatic animal species from in-water cleaning of vessel hulls, niche areas, and running gear without approval from the Washington Department of Fish and Wildlife (WDFW) is forbidden by RCW 77.15.253. The state VGP/sVGP webpage described in Condition 6.24.5. contains contact information and instructions for seeking WDFW approval.

Allowing biofouling to accumulate and mature without hull cleaning can also be interpreted as an illegal release. Operators of vessels with hulls which have not been cleaned for months or that are involved in extended unmanned periods or other lay- ups as described in VGP Part 4.1.1.2 should conduct a hull inspection. A hull inspection under these circumstances is especially needed before leaving on a voyage to Washington State waters or a voyage between COTP zones within the state. In accordance with VGP Part 3, hull cleaning must be conducted when needed.

5. Vessel operators must meet all applicable ballast water requirements in place as of July 2, 2012 in Chapter 77.120 RCW and Chapter 220-150 WAC.

6. Any discharge from emergency treatment of ballast water must meet the requirements in Part 2.2.3.5.1.1.5.1 of the VGP.

6.24.3 Notification Condition

The following incidents must be reported as soon as possible but no more than 24 hours after first becoming aware of their occurrence to the Washington State Department of Health (WDOH) at 360-236-3330 or 360-789-8962 (after hours). Information provided should include the discharge location (latitude and longitude), discharge volume, discharge type, date and time, and duration of discharge. WDOH need not be notified of any incident not occurring in state waters. (Authority - RCW 69.30.130.)

1. A discharge of graywater in violation of VGP Parts 2.2.15, 5.1.1, or 5.2.1.
2. Any vessel discharge containing sewage if the discharge exceeds the bacterial or suspended solids standards in 40 CFR § 140.3(d).
3. Any upset in a disinfection system.

6.24.4 State Inspection Authority

1. In accordance with RCW 90.48.090, Department of Ecology inspectors shall have access to the ship at reasonable times and locations for the purpose of sampling discharges covered by the VGP, interviewing crew members, and inspecting log books and other relevant records.
2. In accordance with WAC 220-150-033, WDFW inspectors shall have access at any time to any vessel carrying or capable of carrying ballast water in order to provide technical assistance, assess compliance, and enforce the requirements of Chapter 220-150 WAC.

6.24.5 State VGP/sVGP Webpage

In order to assist the public and shipping industry with sVGP requirements and related information, the Department of Ecology maintains a VGP/sVGP webpage at: http://www.ecy.wa.gov/programs/wq/permits/VGP/. The webpage describes the legal history of the vessel permits and provides links to important state and federal documents. The webpage has guidance for graywater discharges, oily water separator discharges, and in-water load line painting. Hull cleaning guidance will be developed and added. Information will be added on no discharge zones when they are granted. Guidance on pumpout facilities will be included.

6.25 Wisconsin

Wisconsin certified the VGP with the following additional permit conditions:

General Conditions:

6.25.1 The permittee shall allow WDNR reasonable entry onto the vessel for inspection, access to records, and collection of a discharge sample for determining compliance with the water quality certification and applicable laws [s. NR 205.07(1)(d), Wis. Adm. Code].

6.25.2 Activities not eligible for authorization under this state water quality certification include:

a) Fills or deposition of material in navigable waters (s. 30.12, Wis. Stats.).

b) Activities likely to jeopardize the continued existence of a state designated threatened or endangered species or a species proposed for such designation, or which is likely to destroy or adversely modify the habitat of such species [s. 29.604, Wis. Stats.; s. NR 1.015(l)(a), Wis. Adm. Code].

c) Activities that would result, overall, in adverse impacts to fishery spawning habitat or adversely affect avifauna breeding areas or substantially disrupt the movement of those species which normally migrate from open water to upland or vice versa (i.e., amphibians, reptiles and mammals) [s. NR 102.01(2), Wis. Adm. Code].

d) Activities detrimental to the public interest in waters of the state [s. NR 102.01(2), Wis. Adm. Code].

Specific Conditions

6.25.3 Oceangoing vessels eligible for coverage under the EPA VGP that enter the Great Lakes - St. Lawrence Seaway system and are transiting from beyond the 200- nautical-mile Exclusive Economic Zone (EEZ) shall perform open ocean ballast water exchange or saltwater flushing before entering the Great Lakes - St. Lawrence Seaway system in order to ensure water quality standards are met that protect the general public interest (s. NR 102.01(2), Wis. Adm. Code; s. 4.1.2, WPDES Permit No. WI-0063835-01-1).

6.25.4 Vessels covered by the EPA VGP shall comply with the ballast water discharge requirements in pars. (a) through (g) to meet water quality standards for protecting the general public interest (s. NR 102.01(2), Wis. Adm. Code).

a) Vessels must obtain any permits required by the State of Wisconsin for vessel discharges (s. 283.35(1m), Wis. Stats.). WDNR's ballast water discharge general permit WI-0063835-01-1 requires vessels meeting the permit's applicability criteria to comply with the biological treatment performance standards shown in Table 6.24.1 and implementation schedule in pars. (b) through (d). Any treatment system installed to comply with these performance standards shall be operated to maximize destruction or removal of organisms in ballast water, with the objective of discharging no viable organisms (s. 5.2, WPDES Permit No. WI-00063835-01-1).

Table 6.24.1

Parameter	Limit and Units	Limit Type	Sample Type
Organisms > 50 µm in minimum dimension	< 10 viable organisms per m^3	Daily Average	Composite
Organisms 10 - 50 µm in minimum dimension	< 10 viable organisms per ml	Daily Average	Composite
Escherichia coli	< 250 cfu per 100 ml	Daily Average	Composite
Intestinal enterococci	< 250 cfu per 100 ml	Daily Average	Composite

b) For oceangoing vessels constructed prior to December 1, 2013, treatment systems shall be installed and operational to meet the performance standards for organisms in Table 6.24.1 by the date provided in the EPA VGP.

c) For oceangoing vessels constructed on or after December 1, 2013, treatment systems shall be installed and operational to meet the performance standards for organisms in Table 6.24.1 prior to commencement of vessel operation in Wisconsin waters by the date provided in the EPA VGP.

d) In addition to the requirements in pars. (b) and (c), if ballast water treatment systems are approved and commercially available and compatible for a specific vessel, the vessel owner will make reasonable efforts to install a treatment system at the earliest practicable date.

e) Vessels that operate exclusively within the Great Lakes, and which meet the EPA VGP applicability requirements, will be addressed in Wisconsin's next ballast water discharge general permit. The requirements of that permit, to be issued in 2015, must be met [s. 283.35(lm)(e), Wis. Stats.].

f) Discharges of ballast water from vessels employing ballast water treatment systems (BWTS) using chlorine must meet a daily maximum total residual oxidants limit, measured as total residual chlorine, of 38 µg/L (chs. NR 105 and 106, Wis. Adm. Code).

g) Discharges of ballast water from vessels containing seawater in other than insignificant residual amounts that remain in tanks and that cannot be pumped out or drained (no ballast on board) is prohibited unless it can be demonstrated that the discharge will comply with Wisconsin chloride limits (Subchapter VII of ch. NR 106, Wis. Adm. Code).

h) Discharges of graywater or sewage by a cruise ship into Lake Michigan, a No Discharge Zone, are subject to penalties [s. 29.601(3), Wis. Stats.].

6.25.5 WDNR may require emergency treatment as part of a temporary compliance plan or temporary alternative strategy for vessels with unexchanged or untreated ballast water discharge of high-risk ballast water [s. NR 102.01(2), Wis. Adm. Code].

a) High-risk ballast water may not be discharged into waters of the state without WDNR review and authorization. WDNR will determine whether ballast water proposed for discharge represents a high-risk for introduction of nonindigenous species and whether

feasible management alternatives are available to minimize that risk and protect waters of the state.

b) Vessel owners or operators with unexchanged or untreated ballast must submit a request, providing sufficient additional information for WDNR to evaluate the request and determine whether an emergency ballast water management alternative is warranted.

c) A vessel owner or operator shall not discharge untreated or unexchanged ballast water without WDNR authorization after the compliance dates have gone into effect, except in the following cases:

   i. Where discharging is necessary to prevent jeopardy to the vessel, crew or passengers, or
   ii. For discharges from tugs or unmanned barges.

d) WDNR may identify high-risk ballast water cases using factors including but not limited to the following:

   i. A nonindigenous species profile of source waters;
   ii. The volume and frequency of exchanged ballast water discharged;
   iii. Design limitations in vessels that prevent effective ballast exchanges;
   iv. Vessel owner or vessel operator compliance history; or
   v. Frequency of vessel claims for safety exemption.

e) WDNR, coordinating with the U.S. Coast Guard (USCG) and the States of Illinois, Iowa, Michigan and Minnesota as needed may identify alternative locations for the discharge of unexchanged or untreated ballast water.

f) Nothing in this section relieves the vessel owner or operator of the responsibility for ensuring the vessel's safety and stability or the safety of the crew and passengers.

g) As an alternative to discharging high-risk ballast water, WDNR may authorize the use of BWTS identified as promising technology by EPA, USCG, neighboring states or a US ballast water testing research facility. US ballast water testing research facilities include, but may not be limited to the Golden Bear, Great Ships Initiative and Maritime Environmental Resource Center.

6.25.6 BWTS used in Wisconsin waters must be specifically tested for use in freshwater (s. 4.1.2, WPDES Permit No. WI-0063835-01-1).

6.25.7 All instances of non-compliance with this certification must be reported to WDNR immediately [s. NR 205.07(1)(s), Wis. Adm. Code].

6.25.8 Proper operation and maintenance of treatment facilities, as required by s. NR 205.070), Wis. Adm. Code, shall include routine visual inspections of the BWTS, to be conducted at least on a monthly basis.

Appendix A– Definitions

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

"Active Substance" means a substance or organism, including a virus or a fungus, that has a general or specific action on or against harmful aquatic organisms and pathogens. *[source: BW Treaty Reg A-1(7)]*

"Alternative Management System" means the meaning given to ballast water treatment systems given by the U.S. Coast Guard under 33 CFR 151.2026.

"Appropriate Regional Office" means the regional office listed in Appendix B 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]*

"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 CFR §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).

"Bioaccumulative" means the opposite of "Not Bioaccumulative".

"Biocide" means a substance or organism, including a virus or a fungus, which is introduced or produced to kill or eliminate organisms to prevent biofouling, to prevent the transfer of invasive species, or to eliminate organisms as part of the ballast water treatment process.

"Biodegradable" means the following for purposes of the VGP:

- Regarding environmentally acceptable lubricants and greases, biodegradable means lubricant formulations that contain at least 90% (w/w (weight in weight concentration)) or grease formulations that contain at least 75% (w/w) of a constituent substance or constituent substances (only stated substances present above 0.10% shall be assessed) that each demonstrate either the removal of at least 70 percent of dissolved organic

carbon, production of at least 60 percent of the theoretical carbon dioxide, or consumption of at least 60 percent of the theoretical oxygen demand within 28 days. Acceptable test methods include: Organization for Economic Co-operation and Development Test Guidelines 301 A-F, 306, and 310, ASTM 5864, ASTM D-7373, OCSPP Harmonized Guideline 835.3110, and International Organization for Standardization 14593:1999. For lubricant formulations, the 10% (w/w) of the formulation that need not meet the above biodegradability requirements, up to 5% (w/w) may be nonbiodegradable (but not bioaccumulative) while the remainder must be inherently biodegradable. For grease formulations, the 25% (w/w) of the formulation that need not meet the above biodegradability requirement, the constituent substances may be either inherently biodegradable or non-biodegradable, but may not be bioaccumulative. Acceptable test methods to demonstrate inherent biodegradability include: OECD Test Guidelines 302C (>70% biodegradation after 28 days) or OECD Test Guidelines 301 A-F (>20% but <60% biodegradation after 28 days).

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

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

"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 CFR Part 3. *[source: 33 CFR §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 CFR §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—

- “the keel is laid;
- “construction identifiable with the specific vessel begins;
- “ 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
- “ the vessel undergoes a major conversion.” [patterned after the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, regulation A-1(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 CFR §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 CFR §1700.4]*

“Delivered” means the date of the owner’s/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.

“Devices for which high quality data are available” means either:

a) any ballast water treatment system type approved by the United States Coast Guard under 46 CFR Part 162.060 or granted alternate management system status by the US Coast Guard under 33 CFR 151.2026; or

b) any ballast water treatment system:

   (i) type approved by a foreign administration;

   (ii) for which efficacy testing was conducted by an independent third party testing organization, either in accordance with the ETV protocol or in a manner consistent with the ETV protocol with respect to QA/QC procedures, the use of validated methods including appropriate volumes of representative samples, and full description and documentation of test procedures, results and analyses; and

(iii) all "Active Substance" or "Biocide" data (e.g., the full data package as submitted to the International Maritime Organization for approval) have all been made available to the US EPA.

"Discharge Incidental to the Normal Operation of a Vessel" means those discharges that were excluded from the NPDES permitting program by operation of 40 CFR §122.3(a) as in effect on September 29, 2008.

"Distillation and Reverse Osmosis Brine" means the concentrated seawater (brine) produced as a by-product of the processes used to generate freshwater from seawater. *[source: 40 CFR §1700.4]*

"Drydocking" or "next drydocking" for purposes of the VGP, means the next scheduled drydocking, consistent with the requirements of 46 CFR 31.10-21 (typically, at least every five years or sooner). In the context of ballast water implementation schedule, it means hauling out of a vessel or placing a vessel in a drydock or slipway for an examination of all accessible parts of the vessel's underwater body and all through-hull fittings and does not include emergency drydocking and emergency hull repairs.

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

"Environmentally Acceptable Lubricants" means lubricants that are "biodegradable" and "minimally-toxic," and are "not bioaccumulative" as defined in this permit. For purposes of the VGP, products meeting the permit's definitions of being an "Environmentally Acceptable Lubricant" include those labeled by the following labeling programs: Blue Angel, European Ecolabel, Nordic Swan, the Swedish Standards SS 155434 and 155470, Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) requirements, and EPA's Design for the Environment (DfE).

"ETV Protocol" means EPA's final protocol for verification of ballast water treatment systems published in September 2010 and subsequent revisions.

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

- "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 CFR §151.2025]*
- "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.

"Exclusive Economic Zone" (EEZ) means the area established by Presidential Proclamation Number 5030, dated March 10, 1983 (*48 FR 10605*) 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 CFR §151.2025]*

"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 CFR §70.10-1]*

"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 CFR §1700.4]*

"Fish Hold" means the area where seafood or seafood products are kept once caught and kept fresh during the remainder of the voyage before being offloaded to shore or another tender vessel. The fish hold is typically a refrigerated seawater holding tank, where the seafood product is kept cool by mechanical refrigeration or ice. It can also include continuous flow systems needed to keep certain organisms such as lobster and crab alive until they are unloaded. Fish hold effluent is the water discharged from fish holds.

"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 CFR §1700.5(d)]*

"Gas Turbine Water Wash" means the water released from washing gas turbine components. *[source: 40 CFR §1700.4]*

"Graywater" means galley, bath, and shower water, as well as wastewater from lavatory sinks, laundry, and water fountains. *[modified from 40 CFR §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: $K = 0.2 + 0.02 * \log_{10} V$).

"Hazardous materials" means, for purposes of the VGP, any hazardous material as defined in 49 CFR § 171.8.

"High quality data" see "Devices for which high quality data are available"

"Hull Coating Leachate" means the constituents that leach, dissolve, ablate, or erode from the paint on the hull into the surrounding seawater. *[source: 40 CFR §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 CFR §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 U.S. territorial sea.

"Laker" means Existing Bulk Carrier Vessels built before January 1, 2009, that operate exclusively in Lake Ontario, Lake Erie, Lake Huron (including Lake Saint Clair), Lake Michigan, Lake Superior, and the connecting channels (Saint Mary's River, Saint Clair River, Detroit River, Niagara River, and Saint Lawrence River to the Canadian border), including all other bodies of water within the drainage basin of such lakes and connecting channels).

"Large Cruise Ship" means a passenger ship, used commercially for pleasure cruises, that provides overnight accommodations to passengers, and is authorized by the U.S. 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 U.S. Coast Guard to carry 250 or more people.

"Length of Vessel" means the horizontal distance between the foremost part of a vessel's stem to the aftermost part of its stern, excluding fittings and attachments.

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

- substantially alters the dimensions or carrying capacity of the vessel;
- changes the type of the vessel; or
- 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 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 CFR §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 U.S. 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.

"Minimally-Toxic" means a substance must pass either OECD 201, 202, and 203 for acute toxicity testing, or OECD 210 and 211 for chronic toxicity testing. For purposes of the VGP,

equivalent toxicity data for marine species, including methods ISO/DIS 10253 for algae, ISO TC147/SC5/W62 for crustacean, and OSPAR 2005 for fish, may be substituted for OECD 201, 202, and 203. If a substance is evaluated for the formulation and main constituents, the LC_{50} of fluids must be at least 100 mg/L and the LC_{50} of greases, two-stroke oils, and all other total loss lubricants must be at least 1000 mg/L. If a substance is evaluated for each constituent substance, rather than the complete formulation and main compounds, then constituents comprising less than 20 percent of fluids can have an LC_{50} between 10-100 mg/L or a no observed effect concentration (NOEC) between 1-10 mg/L, constituents comprising less than 5 percent of fluids can have an LC_{50} between 1-10 mg/L or a NOEC between 0.1-1 mg/L, and constituents comprising less than 1 percent of fluids can have an LC_{50} less than 1 mg/L or a NOEC between 0-0.1 mg/L.

"Minimally-Toxic Soaps, Cleaners, and Detergents" means any substance or mixture of substances which has an acute aquatic toxicity value (LE50) corresponding to a concentration greater than 10 ppm and does not produce "byproducts" with an acute aquatic toxicity value (LE50) less than 10 ppm. EPA expects that minimally-toxic soaps, cleaners, and detergents will contain little to no nonylphenols.

"Minimize" means to 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.

"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 CFR §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 CFR §151.2025]*

"New Build" means vessels "constructed" after a given date. This permit contains "New Build" dates of December 19, 2008 (See Part 5.2), January 1, 2009 (See Part 2.2.3.5.3.3), December 1, 2013 (See Part 2.2.3.5), and December 19, 2013 (See Parts 2.2.2, 2.2.9, 2.2.15.2)

"Niche Areas," for purposes of Parts 2.2.23, 4.1.3, and 4.1.4, means the areas identified in MEPC.207(62) found at 7.3 of that document. Thos areas include "propeller thrusters and propulsion units, sea chests, rudder stocks and hinges, stabilizer fin apertures, rope guards, stern tube seals, and propeller shafts, cathodic protection anodes, anchor chain and chain lockers, free flood spaces inherent to the ship's design, sea chest and thruster tunnel grates, echo sounders and velocity probes, overboard discharge outlets and sea inlets, and areas prone to anti-fouling coating system damage or grounding. . ." *[source, modified from MEPC.207(62)]*

"NISA" means the National Invasive Species Act of 1996, which reauthorized and amended "NANPCA". *[source: 33 CFR §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 CFR §1700.4]*

"Not Bioaccumulative" means -

- the partition coefficient in the marine environment is log KOW <3 or >7 using test methods OECD 117 and 107,
- molecular mass > 800 Daltons,
- molecular diameter >1.5 nanometer,
- BCF or BAF is <100 L/kg, using OECD 305, OCSPP 850.1710 or OCSPP 850.1730, or a field-measured BAF or
- polymer with MW fraction below 1,000 g/mol is <1%.

"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. *[modified from: 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:

- has operational control over vessel activities, including the ability to modify those activities; or

- 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.

"Permittee" means the "Owner or Operator" of a permitted vessel.

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

"Phosphate Free" soaps, cleaners, and detergents means these materials which contain, by weight, 0.5 percent 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 CFR §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 CFR §151.2025]*

"Port or Place of Destination" means any port or place to which a vessel is bound to anchor or moor. *[source: 33 CFR §151.2025]*

"Recreational Vessel" means any "Vessel" that is manufactured or operated primarily for pleasure or leased, rented, or chartered to another for the pleasure of that person. This term does not include a vessel that is subject to Coast Guard inspection and that is engaged in commercial use or carries paying passengers. *[source: 33 U.S.C. 1362(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.

"Seafood Processing" means the conversion of aquatic animals from a raw to marketable form which involves more than evisceration of fish or other seafood at sea.

"Seawater Cooling Overboard Discharge" means the discharge of seawater from a dedicated system that provides noncontact cooling water for other vessel systems. *[source: 40 CFR §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 CFR §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 CFR §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 CFR §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 USC 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 Materials" means, for purposes of the VGP: any toxic pollutant identified in 40 CFR 401.15.

"United States" means the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands. *[modified from CWA section 502(3)]*

"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 CFR §1700.4]*

"Untreated Bilgewater" means "Bilgewater" that is not treated or "Bilgewater" with a concentration of oil greater than 15 ppm.

"Untreated Graywater" means graywater that is not treated to the standards found in Part 5.1.2.2 of this permit for large and medium cruise ships and the standards found in part 2.2.15.1(ii) for all other vessels.

"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 section 312(a)]*

"Vessels Unable to Voyage More than 1 mile from Shore" or "Vessels Unable to Voyage More than 3 miles from Shore" means vessels operating in waters which do not physically allow them to voyage more than 1 nm or 3 nm (as applicable) from shore (e.g., underway on inland river systems) or vessels which do not possess required certifications from the U.S. Coast Guard to operate more than 1 nm or 3 nm (as applicable) 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].*

"Voyage" means, for the purposes of VGP Part 4.1.1 (including its routine visual inspection provisions), that a voyage begins when the vessel departs a dock or other location at which it has loaded or unloaded (in whole or in part) cargo or passengers, and ends after it has tied-up at another dock or location in order to again conduct either of such activities. For example, for a barge on the Mississippi River, such voyage would begin when it departs a location at which it has cargo loaded onto it and end when cargo is unloaded at another location. For the purposes of the inspection provisions, an inspection can be conducted while the vessel is at the dock.

- For vessels such as mobile oil and gas rigs, which are in a mode of transportation only when relocating between drill sites, a voyage for purposes of VGP Part 4.1.1 begins when the rig departs one site and ends when it arrives at the new site to commence operations which are not transportation-oriented, such as drilling.

- For vessels such as harbor tugs, which may be in semi-continuous operation for up to a week within the same harbor and do not carry passengers or cargo, for purposes of VGP Part 4.1.1 a voyage begins when the crew or master takes charge of the vessel and ends when that crew or master are replaced by another crew or master, at which point a new voyage would begin due to the arrival of the new crew or master. For example, if crew changes occur every seven days on a harbor tug, the voyage begins with crew arrival, ends on day seven with departure of that crew, and a new voyage begins on day seven with arrival of the new crew.

"Waters Subject to this Permit" means "waters of the U.S." 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 CFR §1700.4]*

"You" means the "Owner" or "Operator**"** of a permitted vessel.

Appendix B – EPA Regional Contacts

An updated EPA regional contact list is maintained at www.epa.gov/npdes/vessels

Region 1 – CT, ME, MA, NH, RI, VT, and 10 Tribal Nations
5 Post Office Square - Suite 100
Boston, MA 02109-3912
New England States: (888) 372-7341
Outside New England: (617) 918-1111

Region 2 – NJ, NY, PR, VI, and 7 Tribal Nations
290 Broadway, 24th Floor
New York, NY 10007-1866
Phone: (212) 637-3660

Region 3 – DE, DC, MD, PA, VA, WV
1650 Arch St
Philadelphia, PA 19103
Phone: 215-814-5000
Toll Free w/in Region 3: (800) 438-2474

Region 4 – AL, FL, GA, KY, MS, NC, SC, TN, and 2 Tribes
Atlanta Federal Center
61 Forsyth St SW
Atlanta, GA 30303-8960
Phone: (404) 562-9756
Phone: (404) 562-9304
Toll Free: 1-800-241-1754

Region 5 – IL, IN, MI, MN, OH, WI, and 35 Tribes
Ralph Metcalfe Federal Building
77 W Jackson Blvd
Chicago, IL 60604-3507
Phone: (312) 353-2000

Region 6 – LA, AR, OK, NM, TX, and 65 Tribes
1445 Ross Ave
Dallas, TX 75202-2733
Phone: (214) 665-6444

Region 7 – IA, KS, MO, NE, and 9 Tribes
11201 Renner Boulevard
Lenexa, Kansas 66219
Phone: (913) 551-7003
Toll-Free: 1-800-223-0425

Region 8 - CO, MT, ND, SD, UT, WY, and 27 Tribal Nations
1595 Wynkoop St
Denver, CO 80202-1129
Phone: (303) 312-6312
Toll Free w/in Region 8: (800) 227-8917

Region 9 – AZ, CA, HI, NV, and Pacific Islands and Native Tribes
75 Hawthorne St
San Francisco, CA 94105-3901
Phone: (415) 947-8000
Toll Free: (866) EPA-WEST

Region 10 – AK, ID, OR, WA, and Native Tribes
1200 6th Ave, Suite 900
Seattle, WA 98101-1128
Phone: (206) 553-1200
Toll Free: (800) 424-4EPA

Appendix C – Areas Covered

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. If states or tribes determine to seek authorization to issue vessel permits pursuant to the CWA, areas covered by this permit could change.

Appendix D – Reserved

Reserved.

Appendix E – Notice of Intent (NOI)

Draft NOI Instructions

Who Must File an NOI Form

Under the provisions of the CWA, as amended (33 USC 1251 et. seq.), federal law prohibits discharges incidental to the normal operation of a vessel unless that discharge is covered under an NPDES Permit. To obtain authorization under this permit, operators must meet the eligibility requirements found in Part 1.2 of the Permit and, if required by Part 1.5.1.1 of the Permit, submit a complete and accurate NOI according to the requirements in Appendix E. NOIs must be signed in accordance with 40 CFR §122.22.

An owner/operator is required to submit an NOI if the vessel meets either of the following two criteria:

- The vessel is greater or equal to 300 gross tons,

Or

- The vessel has the capacity to hold or discharge more than 8 cubic meters (2113 gallons) of Ballast Water.

Owner/Operators Required to Submit NOIs

Owners/operators required to submit an NOI for their vessel must submit an NOI in accordance with deadlines provided in the following table.

Table 1: NOI Submission Deadlines/Discharge Authorization Dates

Category	NOI Deadline	Discharge Authorization Date*
Vessels authorized to discharge under the 2008 Vessel General Permit (VGP)	No later than December 12, 2013 or 7 days prior to discharge into waters subject to this permit, whichever is later	For eNOIs: December 19, 2013 or, if not submitted by December 12, 2013, 7 days after complete NOI processed** by EPA For Paper NOIs: 30 days after complete NOI processed by EPA
New Owner/Operator of Vessel – transfer of ownership and/or operation of a vessel whose discharge is previously authorized under this permit	By date of transfer of ownership and/or operation	Date of transfer or date EPA processes NOI, whichever is later

Table 1: NOI Submission Deadlines/Discharge Authorization Dates

Category	NOI Deadline	Discharge Authorization Date*
New vessels delivered to owner or operator after December 19, 2013	For vessels submitting eNOIs: 7 days prior to discharge into waters subject to this permit For vessels submitting Paper NOIs: At least 30 days prior to discharge into waters subject to this permit	For eNOIs: 7 days after complete NOI processed by EPA For Paper NOIs: 30 days after complete NOI processed by EPA
Existing vessels delivered to owner or operator after December 19, 2013 that were not previously authorized under this permit	For vessels submitting eNOIs: 7 days prior to discharge into waters subject to this permit For vessels submitting Paper NOIs: At least 30 days prior to discharge into waters subject to this permit	For eNOIs: 7 days after complete NOI processed by EPA For Paper NOIs: 30 days after complete NOI processed by EPA

* Based on a review of your NOI or other information, EPA may delay the discharge authorization date for further review, or may deny coverage under this permit and require submission of an application for an individual NPDES permit, as detailed in Part 1.8 of the permit. In these instances, EPA will notify you in writing of the delay or the request for submission of an individual NPDES permit application. If EPA requires an individual permit for an existing vessel previously covered by this general permit, EPA will allow the permittee a reasonable amount of time to obtain individual permit coverage before their general permit coverage terminates.
** NOI processing means that a complete electronic NOI has been submitted and successfully signed and certified by the permittee, or in the case of a paper NOI, that EPA has received your NOI and input the information into its electronic system. Submitting a paper NOI may result in processing delays dependent upon the volume of NOIs received by EPA.

Owner/Operators Not Required to Submit NOIs

An operator of a vessel is not required to submit an NOI pursuant to Part 1.5.1.2 of the permit if the vessel is less than 300 gross tons and does not have the capacity to hold or discharge more than 8 cubic meters (2113 gallons) of ballast water. Owner/operators that are not required to submit an NOI must sign and maintain a copy of the PARI form onboard their vessel.

Where to File NOI Form

All NOIs must be completed and filed using the eNOI system at www.epa.gov/vessels/enoi. Alternatively, if you meet one of the exemptions from electronic reporting found in Part 1.14 of the VGP, you may send your completed NOI to the Notice Processing Center at EPA Headquarters, EPA Vessel Notice Processing Center, Mail Code 4203M, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. If you have questions about whether you need to file an NOI or questions about completing the form, refer to www.epa.gov/vessels/enoi or contact the NOI center at 1-866-352-7755. Updated contact information will be maintained at www.epa.gov/npdes/vessels.

Completing the Form

Section A: Owner/Operator Information

Provide the full legal name of the person, firm, public organization, or other entity that is the owner/operator of the vessel, as well as the name of the certifying official. Include the complete contact information for the owner/operator. The mailing address, city, state/province and country, as well as zip code and phone number are required. The email address is required if the NOI is submitted electronically. The fax number is optional. Please do not use abbreviations for cities, and when using abbreviations for US states, please use only the official postal abbreviations which may be found at https://www.usps.com/send/official-abbreviations.htm.

Section B: Vessel Information

Provide the vessel name, previous VGP tracking number (if applicable), registered identification number (if applicable), vessel International Maritime Organization (IMO) number (if applicable), call sign, and port of registry. You must complete all of these fields if those data are available (failure to submit available information is a permit violation). Provide port of registry by spelling out entire name of location (e.g., New Orleans, Louisiana, United States). Select the type of vessel by checking the appropriate box. Enter the vessel tonnage in gross tons, the length in feet, and the ballast water capacity in gallons or m^3. Enter the year in which the vessel was built, as well as the date of last dry-dock and the date of the next scheduled or anticipated dry-dock. If the vessel is not required to have measurements in gross tons, gross registered tons may be used instead; however, you must indicate that the measurements are in gross registered tons. Indicate whether the vessel currently holds or has ever held an NPDES permit other than the VGP. Include the permit number, dates of permit coverage, and discharges covered. If the vessel is covered under this General Permit and this NOI is being submitted for a transfer of ownership to continue coverage, check the appropriate box, and include the date of transfer. Enter the NAICS code: a listing of NAICS codes can be found at http://www.census.gov/eos/www/naics/.

Section C: General Voyage Information

Enter the vessel home port, or if it does not have a home port, enter the U.S. port it most frequently visits. Provide the name of each US port the vessel may visit during the Permit term. Do not use abbreviations for cities, and when using abbreviations for US states, please use only the official postal abbreviations which may be found at: https://www.usps.com/send/official-abbreviations.htm. This list does not need to be exhaustive, but should be based on ports visited in the past and should be representative of the geographic area in which the vessel travels. Indicate the number of overnight berths for passengers and crew separately for each vessel, as well as maximum passenger and crew capacity typical of normal operation of the vessel. Also, select the appropriate box to indicate if the vessel will travel in ocean waters seaward of the US exclusive economic zone (EEZ) and more than 200 nautical miles from any shore during the period of permit coverage. Indicate whether the vessel engages in nearshore voyages.

Section D: Discharge Information

From the list provided, select each applicable discharge type that your vessel may create. All discharges incidental to the normal operation of a vessel are included in permit coverage; you do not have to select each discharge type for your vessel to receive coverage for all discharges you may have; however, when completing the NOI, vessel owner/operators should list all discharge types they expect from their vessels. Select the appropriate box to indicate whether the vessel ever engages or has the capacity to engage in industrial operations, such as seafood processing, energy exploration, or mining. If the vessel will be using a ballast water treatment system, check the appropriate box and answer the questions related to the discharge of residual biocides. The requirements for vessels using a ballast water treatment system can be found in Part 2.2.3 of the Permit. Indicate whether the vessel currently has any onboard treatment systems for any waste stream listed in the permit, such as an Advanced Wastewater Treatment System (AWTS) used for graywater, an exhaust gas washwater treatment system, or an Oily Water Separator (OWS) used for bilgewater. Describe the treatment system, including what waste stream it treats, the type and design of the system, and treatment capacity. Provide information on the frequency and method of ballast tank sediment disposal and whether the vessel currently has a ballast water management plan. Indicate whether the vessel has an anti-foulant coating applied to the hull, what type of coating, when it was last applied, and briefly describe the vessel hull husbandry practices, including frequency of hull cleaning and method usually used. Indicate if your vessel is required to collect samples for analytical monitoring and for which of the discharges you are required to sample.

Section E: Certification

Carefully read the certification language. For eNOIs, to indicate your acceptance of these terms, check the “accept” box. Checking this box acts as a virtual signature on the NOI and indicates the operators consent to adhere to all the applicable terms of the Permit. By completing and submitting the NOI, the owner/operator certifies that every applicable General Permit requirement will be met. Include the name and title of the person completing the eNOI. The person completing the eNOI will have a box to check for “accept” which will act as virtual signature.

NOI Form

NPDES EPA United States Environmental Protection Agency
Form Washington, DC 20460 Form Approved OMB No.
_ _ _ _ - _ Notice of Intent (NOI) for Discharges Incidental to the Normal Operation of a Vessel under the NPDES Vessel General Permit 2040-0004

Submission of this completed Notice of Intent (NOI) constitutes notice that the entity in Section A intends to be authorized to discharge pollutants to waters of the United States, from the vessel identified in Section B, under EPA's Vessel General Permit (VGP). Submission of the NOI also constitutes notice that the party identified in Section B of this form has read, understands, and meets the eligibility conditions of Part 1 of the VGP; agrees to comply with all applicable terms and conditions of the VGP; and understands that continued authorization under the VGP is contingent on maintaining eligibility for coverage. In order to be granted coverage, all information required on this form must be completed. Please read and make sure you comply with all permit requirements.

A. Vessel Owner/Operator Information

1. Name: _____
2a. IRS Employer Information Number: _ _ - _ _ _ _ _ _ _ (if applicable)
2b. Company IMO number _____(if applicable)
3. Name of Certifying Official _____
4. Mailing Address: a. Street: _____
b. City: _____ c. State/Province: _ _ d. Zip code: _____
e. Country: _____
f. Phone (include country code): _____g. Fax (Optional): _____
h. E-mail: _____

B. Vessel Information

1. Vessel Name: _____
2. Did your vessel previously have permit coverage under the 2008 VGP? □ Yes □ No
2a. If yes, 2008 VGP Permit Tracking Number(s): _____
3a. Registered Number: _____(if applicable)
3b. Vessel IMO number: _____(if applicable)
4. Vessel Call Sign _____
5. Flag State/Port of Registry (complete spellings of state and port city names required)_____
6. Type of Vessel (select one primary vessel type, and secondary vessel type where appropriate)

□ Commercial Fishing Vessel
□ Medium Cruise Ship (100 to 499 passengers)
□ Large Cruise Ship (500+ passengers)
□ Large Ferry (250+ passengers or more than 100 tons of cargo, e.g., cars, trucks, trains, or other land- based transportation.)
□ Barge (□ Hopper Barge, □ Tank Barge, □ Other Barge)
□ Oil or Gas Tanker
□ Research/Survey Vessel
□ Emergency and Rescue Vessel
□ Bulk Carrier
□ Container Ship
□ General Cargo Ship
□ Roll-on Roll-Off
□ Utility Vessel, including Tug boats and Offshore supply vessels (□ Tug, □ Offshore supply vessel, □ Other Utility))
□ Reefer
□ Other: .

7. Vessel Dimensions: a. Tonnage: _____ □ gross tons or □ gross registered tons
b. Length: _____ □ feet or □ meters
8. Ballast Water Capacity: _____ □ gallons or □ meters^3
9. Date and Year Vessel Built (i.e., build date or date keel laid): _____
10. a. Date of last dry-dock: _____ .b. Date of next scheduled/anticipated dry-dock: _____
11. Does vessel currently have, or has vessel ever held, an NPDES permit, other than the VGP, for any part, discharge, or operation of the vessel?
□ Yes □ No
If yes, please provide the following:

11a. Permit Number: _____

11b. Effective Date of Permit: _____ 11c. Expiration Date of Permit _____

11d. Discharges permitted: _____

12. Is this a transfer of ownership? □ Yes □ No

12a. If Yes, provide date of transfer: _____

12b. If yes, provide previous vessel permit tracking number(s): _

13. Identify the North American Industry Classification System (NAICS) code that best represents your vessel service for which you are seeking coverage (if applicable): _____

C. Vessel Voyage Information

1. Home Port/Most Frequented US Port: _____

2. US Ports Vessel Anticipates Visiting During Permit Term: _____

3. Number of overnight berths: a. Passengers _____ b. Crew _____

a. Maximum passenger capacity _____ b. Crew _____

4. Does vessel travel beyond the US EEZ **and** more than 200 nm from any shore? □ Yes □ No

5. Is the vessel engaged in Nearshore Voyages? □ Yes □ No

D. Discharge Information:

1. Select all applicable discharges vessel may generate:

□ Deck Washdown and Runoff
□ Bilgewater/Oily Water Separator Effluent
□ Ballast Water
□ Anti-fouling hull coatings
□ Aqueous Film Forming Foams (AFFF)
□ Boiler/Economizer Blowdown
□ Cathodic Protection
□ Chain Locker Effluent
□ Controllable Pitch Propeller Hydraulic Fluid and other Oil-to-Sea Interfaces
□ Distillation or Reverse Osmosis Brine
□ Elevator Pit Effluent
□ Firemain Systems
□ Freshwater layup
□ Gas Turbine Washwater
□ Graywater
□ Motor Gasoline and Compensating Discharge
□ Non-Oily Machinery Wastewater
□ Refrigeration and Air Condensate Discharge
□ Seawater Cooling Overboard Discharge
□ Seawater Piping Biofouling Prevention
□ Small Boat Engine Wet Exhaust
□ Sonar Dome Discharge
□ Underwater Ship Husbandry
□ Welldeck Discharges
□ Graywater Mixed with Sewage
□ Exhaust Gas Scrubber Washwater Discharge
□ Fish Hold/ Fish Hold Cleaning Effluent

2. Does the vessel ever engage in or have capacity to engage in industrial operations? □ Yes □ No

a. If yes, please select appropriate box:

□ Seafood processing
□ Energy exploration
□ Mining
□ Other: .

3. Will the vessel be using a ballast water treatment system which discharges residual biocides?

□ Yes □ No

b. If yes, are residual biocide concentrations expected to be below those listed in Part 2.2.3.5.1.1.5 of the Permit?

□ Yes □ No

c. List the biocide residuals or derivatives that may be discharged by the ballast water treatment system: _____

_____

_____

_____

4. Is your vessel required to collect analytical monitoring? If so, for which of the following discharges must you conduct monitoring:

□ Ballast Water
□ Bilgewater
□ Exhaust Gas Scrubber Effluent
□ Graywater If yes, please check the appropriate answer: □ I use or □ I do not use a treatment system for Graywater

5. Does the vessel have onboard treatment systems for any waste stream(s) covered by this permit?

□ Yes □ No

5.a. If yes, check all that apply and complete the following information for each treatment system: □ Ballast Water, □ Bilgewater, □ Exhaust Gas Scrubber Effluent, □ Graywater, □ Graywater mixed with Sewage, □ Other treatment system: _____

5.b. Treatment system type/design and manufacturer: _____

5.c. Treatment System Capacity: _____

5.d. Residuals (wastes) generated by this treatment system: _____

5.e. How they are disposed:_____

For ballast water, bilgewater, and graywater mixed with sewage, is the system type approved by the US Coast Guard: □ Yes □ No

For ballast water, has the system been determined by the US Coast Guard to be an alternate management system (AMS): □ Yes □ No

Average Treatment System Flow Rate: _____ □ gallons/hour □ m^3/hour

Peak Treatment System Flow Rate: _____ □ gallons/hour □ m^3/hour

Residuals (wastes) generated by this treatment system: _____

How they are disposed:_____

6. Ballast Water and Invasive Species Management–

a. How often is the ballast tank cleaned and sediment disposed of? _____

b. How and where do you typically dispose of ballast tank sediment? _____

c. Does vessel have an existing ballast water management plan? □ Yes □ No

7. a. Type of anti-fouling hull coating on the vessel and list specific product:

□ Copper Based □ Non-Copper Based _____

b. When and where was anti-fouling hull coating last applied: _____

c. Describe hull husbandry practices, such as frequency of hull cleaning, method used, how niches and propellers are cleaned, etc:

_____

_____

d. Date of last hull cleaning: _____

e. Method of last hull cleaning: _____

f. Location of last hull cleaning:_____

g. Date of next scheduled/anticipated hull cleaning: _____

h. Anticipated method of next cleaning: _____

i. Planned location of next cleaning: _____

E. Certifier Name and Title

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____

Title: _____

Signature: _____

Email: _____ Date: _ _ - _ _ - _ _

NOI Preparer (Complete if NOI was prepared by someone other than the certifier)

Prepared By: _____

Organization: _____

Phone: _ Ext: ____

Email: _

Date: _ _ - _ _ - _ _

Appendix F – Notice of Termination (NOT)

NOT Instructions

Who Must File a NOT Form

Any owner/operator who was required to submit an NOI under Part 1.5.1.1 and meets the conditions of Part 1.6.1.2 of the General Permit is required to submit a NOT to end coverage under this permit.

If you have questions about whether you need to file a NOT or questions about completing the form, refer to (website will be inserted after finalization of this permit) or contact the NOI center at 1-866-352-7755.

Where to File NOT Form

All NOTs must be completed and filed using the eNOI system at www.epa.gov/vessels/enoi or send your completed NOT to the Notice Processing Center at EPA Headquarters, EPA Vessel Notice Processing Center, Mail Code 4203M, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

Completing the Form

Section A: Owner/Operator Information

Provide the full legal name of the person, firm, public organization, or other entity that is the owner/operator of the vessel, as well as the name of the certifying official. Include the complete contact information for the owner/operator. The mailing address, city, state, and zip code, as well as phone number are required. The fax number and email address are optional. Provide the date permit coverage began under the applicable NOI. Select the appropriate box to indicate why you are submitting a NOT to end permit coverage. There are three options to choose from: because you have sold or transferred the vessel and are no longer the owner or operator, because the vessel is no longer traveling in or discharging to waters subject to this permit, or because you have obtained individual or alternative permit coverage. If you have sold or transferred the vessel, please provide the date of transfer as well as the name and contact information of the new owner. If you have obtained an individual or alternative permit, please provide the permit number and date permit coverage begins in the space given.

Section B: Vessel Information

Provide the vessel name, registered identification number, IMO number, call sign, and port of registry.

Section C: Certification

Carefully read the certification language. To indicate your acceptance of these terms, check the “accept” box. Checking this box acts as a virtual signature on the NOT and indicates that you understand these vessel discharges will no longer be authorized under the general permit, and that any discharge of these effluent streams without a permit is a violation of the CWA. Include the name and title of the person completing the NOT. The person completing the NOT will have a box to check for “accept” which will act as virtual signature.

NOT Form

NPDES FORM
_ _ _ _ - _

Form Approved. OMB No 2040-0004
Please See Instructions Before Completing This Form

EPA Notice of Termination (NOT) of Coverage under NPDES General Permit for Discharges Incidental to Normal Vessel Operation

Submission of this Notice of Termination constitutes notice that the party identified in Section B of this form is no longer authorized to discharge any discharge incidental to the normal operation of a vessel under the NPDES program for the vessel identified in Section III of this form. All necessary information must be included on this form. Refer to the instructions at the end of this form.

A. Permit Information

1. NPDES Permit Tracking Number: _ _ _ _ _ _ _ _ _

2. Reason for Termination (check one only):

a. □ You transferred operational control to another operator.
Date of transfer: _____

b. □ You terminated vessel operations in waters subject to the General Permit.

c. □ You obtained coverage under an individual or alternative NPDES permit.
Permit Number: _____
Effective Date: _____

B. Vessel Owner/Operator Information

1. Name: _____

2. IRS Employer Information Number: _ _ - _ _ _ _ _ _ _

3. Name of Certifying Official:

_____

4. Mailing Address:

a. Street: _____

b. City: _____

c. State: _ _ d. Zip code: _ _ _ _ _ - _ _ _ _

e. Phone: _ _ _ - _ _ _ - _ _ _ _

f. Fax (Optional): _ _ _ - _ _ _ - _ _ _ _

g. E-mail: _____

C. Vessel Information

1. Vessel Name: _____

2. Vessel ID/Registered Number _____

3. Vessel Call Sign _____

4. Port of Registry _____

D. Certifier Name and Title:

I certify under penalty of law that the information contained in this form is, to the best of my knowledge and belief, true, accurate and complete. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge any effluent associated with normal vessel operation under this general permit, and that discharging pollutants related to the normal operation of a vessel into waters of the United States is unlawful under the CWA where the discharge is not authorized by an NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the CWA.

Furthermore, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____

Title: _____

Signature: _____ Date: _ _ - _ _ - _ _

Appendix G – Waters Federally Protected Wholly or in Part for Conservation Purposes

The list provided in Appendix G is a complete list of marine sanctuaries, units of the National Park System, units of the National Wildlife Refuge System, National Wilderness areas, and national wild and scenic rivers system components. EPA notes that this list is gathered from sources maintained by the administrative agency and the EPA only removed areas that are clearly terrestrial and do not contain waters suitable for permitted vessels or are unlikely to be impacted by permitted vessel discharges (e.g. The Washington Monument). Inclusion in this list does not mean the area is suitable for operation for vessels greater than 79 feet.

You must comply with the specific effluent limits in Parts 2.2.2, 2.1.3, 2.2.6, , 2.2.15, 2.2.16 and 5.1.1.1.1 [etc.] affecting the following federally protected waters to the extent located in waters subject to this permit:

- Marine Sanctuaries designated under the National Marine Sanctuaries Act (16 USC 1431 et seq.) and implementing regulations found at 15 CFR Part 922 and 50 CFR Part 404 or Marine national monuments designated under the Antiquities Act of 1906 (see Part G.1 for a list of such areas);
- A unit of the National Park System, including National Preserves and National Monuments (see Part G.2 for a list of such areas);
- A unit of the National Wildlife Refuge System, including Wetland Management Districts, Waterfowl Production Areas, National Game Preserves, Wildlife Management Area, and National Fish and Wildlife Refuges (see Part G.3 for a list of such areas);
- National Wilderness Areas (see Part G.4 for a list of such areas); and
- Any component designated under the National Wild and Scenic Rivers System (see Part G.5 for a list of such areas).
- Any waterbody designated as an Outstanding National Resource Water (ONRW) by a State or Tribe (see Part G.6 for a description of such areas)

G.1 Marine Sanctuaries under the National Marine Sanctuaries Act (16 USC 1431 et seq.) and National Marine Monuments Designated under the Antiquities Act of 1906

- Channel Islands (California)
- Cordell Bank (California)
- Fagatele Bay (American Samoa)(U.S.)
- Florida Keys (Florida)
- Flower Garden Banks (Texas)
- Grays Reef (Georgia)
- Gulf of the Farallones (California)
- Hawaiian Islands Humpback Whales (Hawaii)
- Monitor (North Carolina)
- Monterey Bay (California)
- Olympic Coast (Washington)
- Papahanaumokuakea Marine National Monument (Hawaii)
- Stellwagen Bank (Massachusetts)
- Thunder Bay (Michigan)

G.2 National Parks and Refuges: National Park Service, Department of the Interior

Alabama
Horseshoe Bend National Military Park
Little River Canyon National Preserve
Russell Cave National Monument
Trail Of Tears National Historic Trail
Tuskegee Airmen National Historic Site

Alaska
Alagnak Wild River
Alaska Public Lands
Aleutian World War II National Historic Area
Aniakchak National Monument and Preserve
Bering Land Bridge National Preserve
Cape Krusenstern National Monument
Denali National Park and Preserve
Gates Of The Arctic National Park and Preserve
Glacier Bay National Park and Preserve
Katmai National Park and Preserve
Kenai Fjords National Park
Kobuk Valley National Park
Lake Clark National Park and Preserve
Noatak National Preserve
Sitka National historical Park
Wrangell - St Elias National Park and Preserve
Yukon - Charley Rivers National Preserve

American Samoa
National Park of American Samoa

Arizona
Casa Grande Ruins National Monument
Glen Canyon National Recreation Area
Grand Canyon National Park
Hohokam Pima National Monument
Lake Mead National Recreation Area
Montezuma Castle National Monument
Navajo National Monument
Organ Pipe Cactus National Monument
Parashant National Monument
Pipe Spring National Monument
Sunset Crater Volcano National Monument
Tonto National Monument
Tuzigoot National Monument
Walnut Canyon National Monument
Wupatki National Monument
Yuma Crossing National Heritage Area

Arkansas
Buffalo National River
Trail Of Tears National Historic Trail

California
Alcatraz Island
Cabrillo National Monument
Channel Islands National Park
Devils Postpile National Monument
Fort Point National Historic Site
Golden Gate National Recreation Area
John Muir National Historic Site
Joshua Tree National Park
Lava Beds National Monument
Muir Woods National Monument
Pinnacles National Monument
Point Reyes National Seashore
Rosie the Riveter WWII Home Front National Historical Park
Santa Monica Mountains National Recreation Area
Whiskeytown National Recreation Area
Yosemite National Park

Colorado
Bent's Old Fort National Historical Site
Black Canyon Of The Gunnison National Park
Colorado National Monument
Curecanti National Recreation Area
Dinosaur National Park
Rocky Mountain National Park
Santa Fe National Historic Trail
Yucca House National Monument

Connecticut
Quinebaug & Shetucket Rivers Valley National Heritage Corridor

Delaware
Captain John Smith Chesapeake National Historic Trail

District of Columbia
Anacostia Park
Capitol Hill Parks
Captain John Smith Chesapeake National Historic Trail
Chesapeake & Ohio Canal National Historical Park
Chesapeake Bay Gateways Network
Kenilworth Park & Aquatic Gardens
Meridian Hill Park
National Capital Parks-East
National Mall & Memorial Parks
Potomac Heritage National Scenic Trail

Florida
Big Cypress National Preserve
Biscayne National Park
Canaveral National Seashore
Castillo De San Marcos National Monument
De Soto National Memorial
Dry Tortugas National Park
Everglades National Park
Fort Caroline National Memorial
Fort Matanzas National Monument
Gulf Islands National Seashore
Timucuan Ecological and Historical Preserve

Georgia
Augusta Canal national Heritage Area
Chattahoochee River National Recreation Area
Chickamauga & Chattanooga National Military Seashore
Cumberland Island National Seashore
Fort Frederica National Monument
Fort Pulaski National Monument
Jimmy Carter National Historic Site
Ocmulgee National Monument

Guam
War In The Pacific National Historical Park

Hawaii

Haleakala National Park
Kalaupapa National Historical Park
Kaloko-Honokohau National Historical Park
Pu`uhonua O Honaunau National Historical Park
Puukohola Heiau National Historical Site

Idaho

Craters Of The Moon National Monument and Preserve
Hagerman Fossil Beds National Monument
Lewis & Clark National Historic Trail
Minidoka Internment National Monument
Nez Perce National Historical Park
Yellowstone National Park

Illinois

Lewis & Clark National Historic Trail
Trail Of Tears National Historic Trail

Indiana

George Rogers Clark National Historical Park
Indiana Dunes National Lakeshore
Lincoln Boyhood National Memorial

Iowa

Effigy Mounds National Monument
Lewis & Clark National Historic Trail

Kansas

Lewis & Clark National Historic Trail

Kentucky

Big South Fork National River and Recreation Area
Cumberland Gap National Historical Park
Mammoth Cave National Park
Trail Of Tears National Historic Trail

Louisiana

Cane River National Heritage Area
Cane River Creole National Historical Park
Jean Lafitte National Historical Park and Preserve
New Orleans Jazz National Historical Park
Poverty Point National Monument

Maine

Acadia National Park
Maine Acadian Culture
Saint Croix Island International Historic Site

Maryland

Antietam National Battlefield
Assateague Island National Seashore
Captain John Smith Chesapeake National Historic Trail
Catoctin Mountain Park
Chesapeake & Ohio Canal National Historical Park
Chesapeake Bay Gateways Network
Clara Barton National Historic Site
Fort McHenry National Monument and Historic Shrine
Fort Washington Park
Glen Echo Park
Harmony Hall
Monocacy National Battlefield
Oxon Cove Park & Oxon Hill Farm
Piscataway Park
Potomac Heritage National Scenic Trail
Thomas Stone National Historic Site

Massachusetts

Blackstone River Valley National Heritage Corridor
Boston National Historical Park
Boston African American National Historic Site
Boston Harbor Islands National Recreation Area
Cape Cod National Seashore
Essex National Heritage Area
Lowell National Historical Park
Minute Man National Historic Site
New Bedford Whaling National Historical Park
Salem Maritime National Historic Site
Saugus Iron Works National Historic Site
Springfield Armory National Historic Site

Michigan

Isle Royale National Park
Pictured Rocks National Lakeshore
Sleeping Bear Dunes National Lakeshore

Minnesota

Grand Portage National Monument
Mississippi National River and Recreation Area
Pipestone National Monument
Voyageurs National Park

Mississippi

Gulf Islands National Seashore
Natchez National Historical Park
Natchez Trace National Scenic Trail

Missouri

Jefferson National Expansion Memorial
Lewis & Clark National Historic Trail
Ozark National Scenic Riverways
Trail Of Tears National Historic Trail
Wilson's Creek National Battlefield

Montana

Bighorn Canyon National Recreation Area
Glacier National Park
Lewis & Clark National Historic Trail
Little Bighorn Battlefield National Monument
Yellowstone National Park

Nebraska

Agate Fossil Beds National Monument
Homestead National Monument of America
Lewis & Clark National Historic Trail
Niobrara National Scenic River
Scotts Bluff National Monument

Nevada

Lake Mead National Recreation Area

New Hampshire

New Jersey

Appalachian National Scenic River
Delaware National Scenic River
Delaware Water Gap National Recreation Area
Ellis Island National Monument
Gateway National Recreation Area
Great Egg Harbor River
Lower Delaware National Wild and Scenic River
New Jersey Pinelands National Reserve

New Mexico

Aztec Ruins National Monument
Capulin Volcano National Monument
El Malpais National Monument
El Morro National Monument
Fort Union National Monument
Gila Cliff Dwellings National Monument
Petroglyph National Monument
Salinas Pueblo Missions National Monument

White Sands National Monument

New York

Castle Clinton National Monument
Chesapeake Bay Gateways Network
Ellis Island National Monument
Erie Canalway National Heritage Corridor
Fire Island National Seashore
Gateway National Recreation Area
Governors Island National Monument
Hudson River Valley National Heritage Area
National Parks of New York Harbor
Saratoga National Historical Park
Statue Of Liberty National Monument
Upper Delaware Scenic and Recreational River

North Carolina

Blue Ridge National Heritage Area
Cape Hatteras National Seashore
Cape Lookout National Seashore
Great Smoky Mountains National Park
Wright Brothers National Monument

North Dakota

Fort Union Trading Post National Historic Site
Lewis & Clark National Historic Trail
Theodore Roosevelt National Park

Northern Mariana Islands

American Memorial Park

Ohio

Perry's Victory & International Peace Memorial

Oklahoma

Chickasaw National Recreation Area
Trail Of Tears National Historic Trail

Oregon

Crater Lake National Park
Fort Vancouver National Historic Site
John Day Fossil Beds National Monument
Lewis & Clark National Historic Trail
Lewis and Clark National Historical Park
Oregon Caves National Monument

Pennsylvania

Chesapeake Bay Gateways Network
Delaware National Scenic River
Delaware & Lehigh National Heritage Corridor
Delaware Water Gap National Recreation Area
Johnstown Flood National Monument
Lackawanna Heritage Valley
Lower Delaware National Wild and Scenic River
Potomac Heritage National Scenic Trail
Rivers Of Steel National Heritage Area
Schuylkill River Valley National Heritage Area
Upper Delaware Scenic and Recreational River

Puerto Rico

Rhode Island

Blackstone River Valley National Heritage Corridor

South Carolina

Congaree National Park
Fort Moultrie National Monument
Fort Sumter National Monument

South Dakota

Jewel Cave National Monument
Lewis & Clark National Historic Trail
Missouri Recreational River

Tennessee

Big South Fork National River and Recreation Area
Great Smoky Mountains National Park
Obed Wild and Scenic River

Texas

Alibates Flint Quarries National Monument
Amistad National Recreation Area
Big Bend National Park
Big Thicket National Preserve
Chamizal National Memorial
Lake Meredith National Recreation Area
Padre Island National Seashore
Rio Grande Wild and Scenic River

Utah

Arches National Park
Bryce Canyon National Park
Canyonlands National Park
Capitol Reef National Park
Cedar Breaks National Monument
Dinosaur National Monument
Glen Canyon National Recreation Area
Hovenweep National Monument
Natural Bridges National Monument
Timpanogos Cave National Monument

Vermont

Virgin Islands

Buck Island Reef National Monument
Virgin Islands National Park
Virgin Islands Coral Reef National Monument

Virginia

Assateague Island National Seashore
Booker T Washington National Monument
Cape Henry Memorial
Captain John Smith Chesapeake National Historic Trail
Chesapeake Bay Gateways Network
Colonial National Historical Park
Fredericksburg & Spotsylvania National Military Park
Great Falls Park
Lyndon Baines Johnson Memorial Grove on the Potomac
Potomac Heritage National Scenic Trail
Theodore Roosevelt Island Park

Washington

Fort Vancouver National Historic Site
Lake Chelan National Recreation Area
Lake Roosevelt National Recreation Area
Lewis & Clark National Historic Trail
Mount Rainier National Park
North Cascades National Park
Olympic National Park
Ross Lake National Recreation Area
San Juan Island National Historical Park

West Virginia

Bluestone National Scenic River
Chesapeake Bay Gateways Network
Gauley River National Recreation Area
New River Gorge National River

Wisconsin

Apostle Islands National Lakeshore
Saint Croix National Scenic River

Wyoming

Bighorn Canyon National Recreation Area

Devils Tower National Monument
Fossil Butte National Monument
Grand Teton National Park
John D Rockefeller Jr. Memorial Parkway
Yellowstone National Park

G.3 National Wildlife Refuges (Including, but Not Limited to Wetlands Management Districts, Waterfowl Production Areas, National Game Preserves, Wildlife Management Areas, and National Fish and Wildlife Refuges)

As of 9/30/06, there were 547 national wildlife refuges in all 50 states. Neches River NWR in Texas and the Rocky Mountain Front Conservation Area in Montana were the 546th and 547th national wildlife refuges. There were 37 Wetland Management Districts in the Prairie Pothole region of the northern Great Plains.

The acreage for the NWRS as of 9/30/06 was 96,369,969.43 acres. The system encompasses 547 national wildlife refuges, 37 Wetland Management Districts (which include Waterfowl Production Areas in 204 counties), and 50 Coordination Areas which are managed by the states.

Refuges that have boundaries in multiple states are listed only in the state where the main visitor entrance is located. Maps of each area can be found by accessing the National Fish and Wildlife Services website at: http://www.fws.gov/refuges/refugeLocatorMaps/index.html.

Alamosa National Wildlife Refuge	CO	Bayou Cocodrie National Wildlife Refuge	LA
Alaska Maritime National Wildlife Refuge	AK	Bayou Sauvage National Wildlife Refuge	LA
Alaska Peninsula National Wildlife Refuge	AK	Bayou Teche National Wildlife Refuge	LA
Alligator River National Wildlife Refuge	NC	Bear Lake National Wildlife Refuge	ID
Amagansett National Wildlife Refuge	NY	Bear River Migratory Bird Refuge	UT
Anahuac National Wildlife Refuge	TX	Becharof National Wildlife Refuge	AK
Ankeny National Wildlife Refuge	OR	Benton Lake National Wildlife Refuge	MT
Antioch Dunes National Wildlife Refuge	CA	Benton Lake Wetland Management District	MT
Aransas National Wildlife Refuge	TX	Big Branch Marsh National Wildlife Refuge	LA
Arapaho National Wildlife Refuge	CO	Big Lake National Wildlife Refuge	AR
Archie Carr National Wildlife Refuge	FL	Big Muddy National Fish & Wildlife Refuge	MO
Arctic National Wildlife Refuge	AK	Big Oaks National Wildlife Refuge	IN
Arrowwood National Wildlife Refuge	ND	Big Stone National Wildlife Refuge	MN
Arrowwood Wetland Management District	ND	Big Stone Wetland Management District	MN
Arthur R. Marshall Loxahatchee National Wildlife Refuge	FL	Bill Williams River National Wildlife Refuge	AZ
Ash Meadows National Wildlife Refuge	NV	Bitter Lake National Wildlife Refuge	NM
Assabet River National Wildlife Refuge	MA	Black Bayou Lake National Wildlife Refuge	LA
Atchafalaya National Wildlife Refuge	LA	Blackbeard Island National Wildlife Refuge	GA
Audubon National Wildlife Refuge	ND	Blackwater National Wildlife Refuge	MD
Back Bay National Wildlife Refuge	VA	Block Island National Wildlife Refuge	RI
Baker Island National Wildlife Refuge	HI	Bogue Chitto National Wildlife Refuge	LA
Bald Knob National Wildlife Refuge	AR	Bombay Hook National Wildlife Refuge	DE
Bamforth National Wildlife Refuge	WY	Bon Secour National Wildlife Refuge	AL
Bandon Marsh National Wildlife Refuge	OR	Bond Swamp National Wildlife Refuge	GA
Banks Lake National Wildlife Refuge	GA	Bosque del Apache National Wildlife Refuge	NM
Baskett Slough National Wildlife Refuge	OR	Bowdoin National Wildlife Refuge	MT
		Boyer Chute National Wildlife Refuge	NE

Brazoria National Wildlife Refuge	TX
Breton National Wildlife Refuge	LA
Browns Park National Wildlife Refuge	CO
Buck Island National Wildlife Refuge	VI
Cabo Rojo National Wildlife Refuge	PR
Cache River National Wildlife Refuge	AR
Cahaba River National Wildlife Refuge	AL
Caloosahatchee National Wildlife Refuge	FL
Cameron Prairie National Wildlife Refuge	LA
Canaan Valley National Wildlife Refuge	WV
Cape May National Wildlife Refuge	NJ
Cape Meares National Wildlife Refuge	OR
Cape Romain National Wildlife Refuge	SC
Carlton Pond Waterfowl Production Area	ME
Carolina Sandhills National Wildlife Refuge	SC
Castle Rock National Wildlife Refuge	CA
Cat Island National Wildlife Refuge	LA
Catahoula National Wildlife Refuge	LA
Cedar Island National Wildlife Refuge	NC
Cedar Keys National Wildlife Refuge	FL
Cedar Point National Wildlife Refuge	OH
Charles M. Russell National Wildlife Refuge	MT
Chase Lake National Wildlife Refuge	ND
Chassahowitzka National Wildlife Refuge	FL
Chautauqua National Wildlife Refuge	IL
Chickasaw National Wildlife Refuge	TN
Chincoteague National Wildlife Refuge	VA
Choctaw National Wildlife Refuge	AL
Cibola National Wildlife Refuge	AZ
Clarence Cannon National Wildlife Refuge	MO
Clarks River National Wildlife Refuge	KY
Clear Lake National Wildlife Refuge	CA
Cokeville Meadows National Wildlife Refuge	WY
Cold Springs National Wildlife Refuge	OR
Coldwater River National Wildlife Refuge	MS
Columbia National Wildlife Refuge	WA
Colusa National Wildlife Refuge	CA
Conboy Lake National Wildlife Refuge	WA
Crab Orchard National Wildlife Refuge	IL
Crane Meadows National Wildlife Refuge	MN
Crescent Lake National Wildlife Refuge	NE
Cross Creeks National Wildlife Refuge	TN
Cross Island National Wildlife Refuge	ME
Crystal River National Wildlife Refuge	FL
Currituck National Wildlife Refuge	NC
Cypress Creek National Wildlife Refuge	IL
Dahomey National Wildlife Refuge	MS
D'Arbonne National Wildlife Refuge	LA
Deep Fork National Wildlife Refuge	OK
Deer Flat National Wildlife Refuge	ID
Delta National Wildlife Refuge	LA
Des Lacs National Wildlife Refuge	ND
Desecheo National Wildlife Refuge	PR
Desert National Wildlife Range	NV
DeSoto National Wildlife Refuge	IA
Detroit Lakes Wetland Management District	MN
Detroit River International Wildlife Refuge	MI
Devils Lake Wetland Management District	ND
Don Edwards San Francisco Bay National Wildlife Refuge	CA
Driftless Area National Wildlife Refuge	IA
Dungeness National Wildlife Refuge	WA
Eastern Neck National Wildlife Refuge	MD
Eastern Shore Of Virginia National Wildlife Refuge	VA
Edwin B. Forsythe National Wildlife Refuge	NJ
Egmont Key National Wildlife Refuge	FL
Elizabeth A. Morton National Wildlife Refuge	NY
Elizabeth Hartwell Mason Neck National Wildlife Refuge	VA
Emiquon National Wildlife Refuge	IL
Erie National Wildlife Refuge	PA
Ernest F. Hollings ACE Basin National Wildlife Refuge	SC
Eufaula National Wildlife Refuge	AL
Fallon National Wildlife Refuge	NV
Felsenthal National Wildlife Refuge	AR
Fergus Falls Wetland Management District	MN
Fish Springs National Wildlife Refuge	UT
Fisherman Island National Wildlife Refuge	VA
Flattery Rocks National Wildlife Refuge	WA
Flint Hills National Wildlife Refuge	KS
Florence Lake National Wildlife Refuge	ND
Fort Niobrara National Wildlife Refuge	NE
Fox River National Wildlife Refuge	WI
Franklin Island National Wildlife Refuge	ME
Franz Lake National Wildlife Refuge	WA
Glacial Ridge National Wildlife Refuge	MN
Grand Bay National Wildlife Refuge	MS
Grand Cote National Wildlife Refuge	LA
Gravel Island National Wildlife Refuge	WI
Grays Lake National Wildlife Refuge	ID
Great Bay National Wildlife Refuge	NH
Great Dismal Swamp National Wildlife Refuge	VA
Great Meadows National Wildlife Refuge	MA
Great River National Wildlife Refuge	MO
Great Swamp National Wildlife Refuge	NJ
Great White Heron National Wildlife Refuge	FL
Green Cay National Wildlife Refuge	VI
Grulla National Wildlife Refuge	TX
Guadalupe-Nipomo Dunes National Wildlife Refuge	CA
Guam National Wildlife Refuge	GU
Hagerman National Wildlife Refuge	TX
Hakalau Forest National Wildlife Refuge	HI
Halfbreed Lake National Wildlife Refuge	MT
Hamden Slough National Wildlife Refuge	MN
Hanalei National Wildlife Refuge	HI
Handy Brake National Wildlife Refuge	LA
Harbor Island National Wildlife Refuge	MI
Harris Neck National Wildlife Refuge	GA
Hart Mountain National Antelope Range	OR
Hatchie National Wildlife Refuge	TN
Havasu National Wildlife Refuge	CA
Hawaiian Islands National Wildlife Refuge	HI
Hillside National Wildlife Refuge	MS
Hobe Sound National Wildlife Refuge	FL
Holla Bend National Wildlife Refuge	AR
Horicon National Wildlife Refuge	WI
Howland Island National Wildlife Refuge	HI
Humboldt Bay National Wildlife Refuge	CA
Huron National Wildlife Refuge	MI
Huron Wetland Management District	SD
Hutton Lake National Wildlife Refuge	WY
Imperial National Wildlife Refuge	AZ
Innoko National Wildlife Refuge	AK

Iowa Wetland Management District	IA
Iroquois National Wildlife Refuge	NY
Island Bay National Wildlife Refuge	FL
Izembek National Wildlife Refuge	AK
J. Clark Salyer National Wildlife Refuge	ND
J. Clark Salyer Wetland Management District	ND
J.N. Ding Darling National Wildlife Refuge	FL
James Campbell National Wildlife Refuge	HI
James River National Wildlife Refuge	VA
Jarvis Island National Wildlife Refuge	HI
John H. Chafee National Wildlife Refuge	RI
John Hay National Wildlife Refuge	NH
John Heinz at Tinicum National Wildlife Refuge	PA
Johnston Island National Wildlife Refuge	HI
Julia Butler Hansen Refuge for the Columbian White-Tailed Deer	WA
Kakahaia National Wildlife Refuge	HI
Kanuti National Wildlife Refuge	AK
Kenai National Wildlife Refuge	AK
Kern National Wildlife Refuge	CA
Key West National Wildlife Refuge	FL
Kilauea Point National Wildlife Refuge	HI
Kirtlands Warbler Wildlife Management Area	MI
Kirwin National Wildlife Refuge	KS
Kodiak National Wildlife Refuge	AK
Kootenai National Wildlife Refuge	ID
Koyukuk National Wildlife Refuge	AK
Kulm Wetland Management District	ND
Lacassine National Wildlife Refuge	LA
Lacreek National Wildlife Refuge	SD
Laguna Atascosa National Wildlife Refuge	TX
Laguna Cartagena National Wildlife Refuge	PR
Lake Alice National Wildlife Refuge	ND
Lake Andes National Wildlife Refuge	SD
Lake Ilo National Wildlife Refuge	ND
Lake Isom National Wildlife Refuge	TN
Lake Mason National Wildlife Refuge	MT
Lake Ophelia National Wildlife Refuge	LA
Lake Umbagog National Wildlife Refuge	NH
Lake Wales Ridge National Wildlife Refuge	FL
Lake Woodruff National Wildlife Refuge	FL
Lake Zahl National Wildlife Refuge	ND
Las Vegas National Wildlife Refuge	NM
Lee Metcalf National Wildlife Refuge	MT
Leopold Wetland Management District	WI
Leslie Canyon National Wildlife Refuge	AZ
Lewis and Clark National Wildlife Refuge	WA
Litchfield Wetland Management District	MN
Little Pend Oreille National Wildlife Refuge	WA
Little River National Wildlife Refuge	OK
Long Lake National Wildlife Refuge	ND
Lostwood National Wildlife Refuge	ND
Louisiana Wetland Management District	LA
Lower Hatchie National Wildlife Refuge	TN
Lower Rio Grande Valley National Wildlife Refuge	TX
Lower Suwannee National Wildlife Refuge	FL
Mackay Island National Wildlife Refuge	NC
Madison Wetland Management District	SD
Maine Coastal Islands National Wildlife Refuge	ME
Mandalay National Wildlife Refuge	LA
Marin Islands National Wildlife Refuge	CA
Martin National Wildlife Refuge	MD
Mashpee National Wildlife Refuge	MA
Mathews Brake National Wildlife Refuge	MS
Matlacha Pass National Wildlife Refuge	FL
Mattamuskeet National Wildlife Refuge	NC
Maxwell National Wildlife Refuge	NM
McFaddin National Wildlife Refuge	TX
McKay Creek National Wildlife Refuge	OR
McNary National Wildlife Refuge	WA
Medicine Lake National Wildlife Refuge	MT
Meredosia National Wildlife Refuge	IL
Merritt Island National Wildlife Refuge	FL
Michigan Wetland Management District	MI
Michigan Islands National Wildlife Refuge	MI
Middle Mississippi River National Wildlife Refuge	IL
Midway Atoll National Wildlife Refuge	HI
Mille Lacs National Wildlife Refuge	MN
Mingo National Wildlife Refuge	MO
Minidoka National Wildlife Refuge	ID
Missisquoi National Wildlife Refuge	VT
Modoc National Wildlife Refuge	CA
Monomoy National Wildlife Refuge	MA
Montezuma National Wildlife Refuge	NY
Morgan Brake National Wildlife Refuge	MS
Mountain Longleaf National Wildlife Refuge	AL
Muscatatuck National Wildlife Refuge	IN
Nantucket National Wildlife Refuge	MA
National Key Deer Refuge	FL
Navassa Island National Wildlife Refuge	PR
Necedah National Wildlife Refuge	WI
Nestucca Bay National Wildlife Refuge	OR
Ninigret National Wildlife Refuge	RI
Nisqually National Wildlife Refuge	WA
North Platte National Wildlife Refuge	NE
Nowitna National Wildlife Refuge	AK
Noxubee National Wildlife Refuge	MS
Occoquan Bay National Wildlife Refuge	VA
Ohio River Islands National Wildlife Refuge	WV
Okefenokee National Wildlife Refuge	GA
Oregon Islands National Wildlife Refuge	OR
Ouray National Wildlife Refuge	UT
Oxbow National Wildlife Refuge	MA
Oxford Slough Waterfowl Production Area	ID
Oyster Bay National Wildlife Refuge	NY
Panther Swamp National Wildlife Refuge	MS
Parker River National Wildlife Refuge	MA
Pathfinder National Wildlife Refuge	WY
Patoka River National Wildlife Refuge and Wildlife Management Area	IN
Pea Island National Wildlife Refuge	NC
Pee Dee National Wildlife Refuge	NC
Pelican Island National Wildlife Refuge	FL
Piedmont National Wildlife Refuge	GA
Pinckney Island National Wildlife Refuge	GA
Pine Island National Wildlife Refuge	FL
Pocosin Lakes National Wildlife Refuge	NC
Pond Creek National Wildlife Refuge	AR
Port Louisa National Wildlife Refuge	IA
Prime Hook National Wildlife Refuge	DE
Rachel Carson National Wildlife Refuge	ME
Rainwater Basin Wetland Management District	NE
Rappahannock River Valley National Wildlife Refuge	VA
Red River National Wildlife Refuge	LA

Reelfoot National Wildlife Refuge	TN
Rice Lake National Wildlife Refuge	MN
Roanoke River National Wildlife Refuge	NC
Ruby Lake National Wildlife Refuge	NV
Rydell National Wildlife Refuge	MN
Sabine National Wildlife Refuge	LA
Sachuest Point National Wildlife Refuge	RI
Sacramento River National Wildlife Refuge	CA
Salinas River National Wildlife Refuge	CA
Salt Plains National Wildlife Refuge	OK
San Bernard National Wildlife Refuge	TX
San Diego Bay National Wildlife Refuge	CA
San Joaquin River National Wildlife Refuge	CA
San Pablo Bay National Wildlife Refuge	CA
Sandy Point National Wildlife Refuge	VI
Santee National Wildlife Refuge	SC
Savannah National Wildlife Refuge	SC
Seal Island National Wildlife Refuge	ME
Selawik National Wildlife Refuge	AK
Seney National Wildlife Refuge	MI
Sequoyah National Wildlife Refuge	OK
Shell Keys National Wildlife Refuge	LA
Sherburne National Wildlife Refuge	MN
Shiawassee National Wildlife Refuge	MI
Siletz Bay National Wildlife Refuge	OR
Silvio O. Conte National Fish & Wildlife Refuge	MA
Sonny Bono Salton Sea National Wildlife Refuge	CA
St. Catherine Creek National Wildlife Refuge	MS
St. Croix Wetland Management District	WI
St. Johns National Wildlife Refuge	FL
St. Marks National Wildlife Refuge	FL
St. Vincent National Wildlife Refuge	FL
Steigerwald Lake National Wildlife Refuge	WA
Stewart B. McKinney National Wildlife Refuge	CT
Stillwater National Wildlife Refuge	NV
Sunkhaze Meadows National Wildlife Refuge	ME
Supawna Meadows National Wildlife Refuge	NJ
Susquehanna River National Wildlife Refuge	MD
Swan Lake National Wildlife Refuge	MO
Swanquarter National Wildlife Refuge	NC
Tallahatchie National Wildlife Refuge	MS
Tamarac National Wildlife Refuge	MN
Target Rock National Wildlife Refuge	NY
Ten Thousand Islands National Wildlife Refuge	FL
Tennessee National Wildlife Refuge	TN
Tensas River National Wildlife Refuge	LA
Tetlin National Wildlife Refuge	AK
Tewaukon National Wildlife Refuge	ND
Texas Point National Wildlife Refuge	TX
Tijuana Slough National Wildlife Refuge	CA
Tishomingo National Wildlife Refuge	OK
Togiak National Wildlife Refuge	AK
Trempealeau National Wildlife Refuge	WI
Trinity River National Wildlife Refuge	TX
Trustom Pond National Wildlife Refuge	RI
Tualatin River National Wildlife Refuge	OR
Tule Lake National Wildlife Refuge	CA
Two Rivers National Wildlife Refuge	IL
UL Bend National Wildlife Refuge	MT
Umatilla National Wildlife Refuge	OR
Union Slough National Wildlife Refuge	IA
Upper Klamath National Wildlife Refuge	OR
Upper Mississippi River National Wildlife & Fish Refuge	MN
Upper Ouachita National Wildlife Refuge	LA
Upper Souris National Wildlife Refuge	ND
Valentine National Wildlife Refuge	NE
Valley City Wetland Management District	ND
Wallkill River National Wildlife Refuge	NJ
Wapanocca National Wildlife Refuge	AR
Washita National Wildlife Refuge	OK
Wassaw National Wildlife Refuge	GA
Wertheim National Wildlife Refuge	NY
Wheeler National Wildlife Refuge	AL
White River National Wildlife Refuge	AR
Wichita Mountains Wildlife Refuge	OK
Willapa National Wildlife Refuge	WA
Willow Creek-Lurline Wildlife Management Area	CA
Wolf Island National Wildlife Refuge	GA
Yazoo National Wildlife Refuge	MS
Yukon Delta National Wildlife Refuge	AK
Yukon Flats National Wildlife Refuge	AK

G.4 National Wilderness Areas

As of 7/22/2009, there were 776 national wilderness areas in the United States. Section 4(c) of the Wilderness Act of 1964 (16 U.S. C. 1131-1136) strictly prohibits motorized vehicles, vessels, aircrafts or equipment for the purposes of transport of any kind within the boundaries of all wilderness areas. Exceptions to this Act include motorized vehicle use for the purposes of gathering information on minerals or other resources; for the purposes of controlling fire, insects, or disease; and in wilderness areas where aircraft or motorized boat use have already been established prior to 1964.

The following is a list of all National Wilderness Areas within the United States. GIS shape files for each area can be found by accessing the following website: www.wilderness.net/index.cfm?fuse=NWPS&sec=geography#tabs-4.

Alabama

Cheaha Wilderness
Dugger Mountain Wilderness
Sipsey Wilderness

Alaska

Aleutian Islands Wilderness
Andreafsky Wilderness
Becharof Wilderness
Bering Sea Wilderness
Bogoslof Wilderness
Chamisso Wilderness
Chuck River Wilderness
Coronation Island Wilderness
Denali Wilderness
Endicott River Wilderness
Forrester Island Wilderness
Gates of the Arctic Wilderness
Glacier Bay Wilderness
Hazy Islands Wilderness
Innoko Wilderness
Izembek Wilderness
Karta River Wilderness
Katmai Wilderness
Kenai Wilderness
Kobuk Valley Wilderness
Kootznoowoo Wilderness
Koyukuk Wilderness
Kuiu Wilderness
Lake Clark Wilderness
Maurille Islands Wilderness
Misty Fjords National Monument Wilderness
Mollie Beattie Wilderness
Noatak Wilderness
Nunivak Wilderness
Petersburg Creek-Duncan Salt Chuck Wilderness
Pleasant/Lemusurier/Inian Islands Wilderness
Russell Fjord Wilderness
Saint Lazaria Wilderness
Selawik Wilderness
Semidi Wilderness
Simeonof Wilderness
South Baranof Wilderness
South Etolin Wilderness
South Prince of Wales Wilderness
Stikine-LeConte Wilderness
Tebenkof Bay Wilderness
Togiak Wilderness
Tracy Arm-Fords Terror Wilderness
Tuxedni Wilderness
Unimak Wilderness
Warren Island Wilderness
West Chichagof-Yakobi Wilderness
Wrangell-Saint Elias Wilderness

Arizona

Apache Creek Wilderness
Aravaipa Canyon Wilderness
Arrastra Mountain Wilderness
Aubrey Peak Wilderness
Baboquivari Peak Wilderness
Bear Wallow Wilderness
Beaver Dam Mountains Wilderness
Big Horn Mountains Wilderness
Cabeza Prieta Wilderness
Castle Creek Wilderness
Cedar Bench Wilderness
Chiricahua National Monument Wilderness
Chiricahua Wilderness
Cottonwood Point Wilderness
Coyote Mountains Wilderness
Dos Cabezas Mountains Wilderness
Eagletail Mountains Wilderness
East Cactus Plain Wilderness
Escudilla Wilderness
Fishhooks Wilderness
Fossil Springs Wilderness
Four Peaks Wilderness
Galiuro Wilderness
Gibraltar Mountain Wilderness
Grand Wash Cliffs Wilderness
Granite Mountain Wilderness
Harcuvar Mountains Wilderness
Hells Canyon Wilderness
Hellsgate Wilderness
Hummingbird Springs Wilderness
Imperial Refuge Wilderness
Juniper Mesa Wilderness
Kachina Peaks Wilderness
Kanab Creek Wilderness
Kendrick Mountain Wilderness
Kofa Wilderness
Mazatzal Wilderness
Miller Peak Wilderness
Mount Baldy Wilderness
Mount Logan Wilderness
Mount Nutt Wilderness
Mount Tipton Wilderness
Mount Trumbull Wilderness
Mount Wilson Wilderness
Mt. Wrightson Wilderness
Muggins Mountain Wilderness
Munds Mountain Wilderness
Needle's Eye Wilderness
New Water Mountains Wilderness
North Maricopa Mountains Wilderness
North Santa Teresa Wilderness
Organ Pipe Cactus Wilderness
Paiute Wilderness
Pajarita Wilderness
Paria Canyon-Vermilion Cliffs Wilderness
Pine Mountain Wilderness
Pusch Ridge Wilderness
Rawhide Mountains Wilderness
Red Rock-Secret Mountain Wilderness
Redfield Canyon Wilderness
Rincon Mountain Wilderness
Saddle Mountain Wilderness
Saguaro Wilderness
Salome Wilderness
Salt River Canyon Wilderness
Santa Teresa Wilderness
Sierra Ancha Wilderness
Sierra Estrella Wilderness
Signal Mountain Wilderness
South Maricopa Mountains Wilderness
Strawberry Crater Wilderness
Superstition Wilderness
Swansea Wilderness
Sycamore Canyon Wilderness
Table Top Wilderness
Tres Alamos Wilderness
Trigo Mountain Wilderness
Upper Burro Creek Wilderness
Wabayuma Peak Wilderness
Warm Springs Wilderness
West Clear Creek Wilderness
Wet Beaver Wilderness
White Canyon Wilderness

Harquahala Mountains Wilderness
Hassayampa River Canyon Wilderness
Havasu Wilderness
Peloncillo Mountains Wilderness
Petrified Forest National Wilderness Area
Woodchute Wilderness
Woolsey Peak Wilderness

Arkansas

Big Lake Wilderness
Black Fork Mountain Wilderness
Buffalo National River Wilderness
Caney Creek Wilderness
Dry Creek Wilderness
East Fork Wilderness
Flatside Wilderness
Hurricane Creek Wilderness
Leatherwood Wilderness
Poteau Mountain Wilderness
Richland Creek Wilderness
Upper Buffalo Wilderness

California

Agua Tibia Wilderness
Ansel Adams Wilderness
Argus Range Wilderness
Beauty Mountain Wilderness
Big Maria Mountains Wilderness
Bigelow Cholla Garden Wilderness
Bighorn Mountain Wilderness
Black Mountain Wilderness
Bright Star Wilderness
Bristol Mountains Wilderness
Bucks Lake Wilderness
Cache Creek Wilderness
Cadiz Dunes Wilderness
Cahuilla Mountain Wilderness
Caribou Wilderness
Carrizo Gorge Wilderness
Carson-Iceberg Wilderness
Castle Crags Wilderness
Cedar Roughs Wilderness
Chanchelulla Wilderness
Chemehuevi Mountains Wilderness
Chimney Peak Wilderness
Chuckwalla Mountains Wilderness
Chumash Wilderness
Cleghorn Lakes Wilderness
Clipper Mountain Wilderness
Coso Range Wilderness
Coyote Mountains Wilderness
Cucamonga Wilderness
Darwin Falls Wilderness
Dead Mountains Wilderness
Death Valley Wilderness
Desolation Wilderness
Dick Smith Wilderness
Dinkey Lakes Wilderness
Domeland Wilderness
El Paso Mountains Wilderness
Elkhorn Ridge Wilderness
Emigrant Wilderness
Hollow Hills Wilderness
Hoover Wilderness
Ibex Wilderness
Imperial Refuge Wilderness
Indian Pass Wilderness
Inyo Mountains Wilderness
Ishi Wilderness
Jacumba Wilderness
Jennie Lakes Wilderness
John Krebs Wilderness
John Muir Wilderness
Joshua Tree Wilderness
Kaiser Wilderness
Kelso Dunes Wilderness
Kiavah Wilderness
King Range Wilderness
Kingston Range Wilderness
Lassen Volcanic Wilderness
Lava Beds Wilderness
Little Chuckwalla Mountains Wilderness
Little Picacho Wilderness
Machesna Mountain Wilderness
Magic Mountain Wilderness
Malpais Mesa Wilderness
Manly Peak Wilderness
Marble Mountain Wilderness
Matilija Wilderness
Mecca Hills Wilderness
Mesquite Wilderness
Mojave Wilderness
Mokelumne Wilderness
Monarch Wilderness
Mount Lassic Wilderness
Mt. Shasta Wilderness
Newberry Mountains Wilderness
Nopah Range Wilderness
North Algodones Dunes Wilderness
North Fork Wilderness
North Mesquite Mountains Wilderness
Pine Creek Wilderness
Pinnacles Wilderness
Pinto Mountains Wilderness
Piper Mountain Wilderness
Piute Mountains Wilderness
Pleasant View Ridge Wilderness
Red Buttes Wilderness
Resting Spring Range Wilderness
Rice Valley Wilderness
Riverside Mountains Wilderness
Rocks and Islands Wilderness
Rodman Mountains Wilderness
Russian Wilderness
Sacatar Trail Wilderness
Saddle Peak Hills Wilderness
San Gabriel Wilderness
San Gorgonio Wilderness
San Jacinto Wilderness
San Mateo Canyon Wilderness
San Rafael Wilderness
Sanhedrin Wilderness
Santa Lucia Wilderness
Santa Rosa Wilderness
Sawtooth Mountains Wilderness
Sequoia-Kings Canyon Wilderness
Sespe Wilderness
Sheep Mountain Wilderness
Sheephole Valley Wilderness
Silver Peak Wilderness
Siskiyou Wilderness
Snow Mountain Wilderness
South Fork Eel River Wilderness
South Fork San Jacinto Wilderness
South Nopah Range Wilderness
South Sierra Wilderness
South Warner Wilderness
Stateline Wilderness
Stepladder Mountains Wilderness
Surprise Canyon Wilderness
Sylvania Mountains Wilderness

Farallon Wilderness
Fish Creek Mountains Wilderness
Funeral Mountains Wilderness
Garcia Wilderness
Golden Trout Wilderness
Golden Valley Wilderness
Granite Chief Wilderness
Granite Mountain Wilderness
Grass Valley Wilderness
Hauser Wilderness
Havasu Wilderness
Old Woman Mountains Wilderness
Orocopia Mountains Wilderness
Otay Mountain Wilderness
Owens Peak Wilderness
Owens River Headwaters Wilderness
Pahrump Valley Wilderness
Palen/McCoy Wilderness
Palo Verde Mountains Wilderness
Phillip Burton Wilderness
Picacho Peak Wilderness
Thousand Lakes Wilderness
Trilobite Wilderness
Trinity Alps Wilderness
Turtle Mountains Wilderness
Ventana Wilderness
Whipple Mountains Wilderness
White Mountains Wilderness
Yolla Bolly-Middle Eel Wilderness
Yosemite Wilderness
Yuki Wilderness

Colorado

Black Canyon of the Gunnison Wilderness
Black Ridge Canyons Wilderness
Buffalo Peaks Wilderness
Byers Peak Wilderness
Cache La Poudre Wilderness
Collegiate Peaks Wilderness
Comanche Peak Wilderness
Dominguez Canyon Wilderness
Eagles Nest Wilderness
Flat Tops Wilderness
Fossil Ridge Wilderness
Great Sand Dunes Wilderness
Greenhorn Mountain Wilderness
Gunnison Gorge Wilderness
Holy Cross Wilderness
Hunter-Fryingpan Wilderness
Indian Peaks Wilderness
James Peak Wilderness
La Garita Wilderness
Lizard Head Wilderness
Lost Creek Wilderness
Maroon Bells-Snowmass Wilderness
Mesa Verde Wilderness
Mount Evans Wilderness
Mount Massive Wilderness
Mount Sneffels Wilderness
Mount Zirkel Wilderness
Neota Wilderness
Never Summer Wilderness
Platte River Wilderness
Powderhorn Wilderness
Ptarmigan Peak Wilderness
Raggeds Wilderness
Rawah Wilderness
Rocky Mountain National Park Wilderness
Sangre de Cristo Wilderness
Sarvis Creek Wilderness
South San Juan Wilderness
Spanish Peaks Wilderness
Uncompahgre Wilderness
Vasquez Peak Wilderness
Weminuche Wilderness
West Elk Wilderness

Florida

Alexander Springs Wilderness
Big Gum Swamp Wilderness
Billies Bay Wilderness
Bradwell Bay Wilderness
Cedar Keys Wilderness
Chassahowitzka Wilderness
Florida Keys Wilderness
Island Bay Wilderness
J.N. "Ding" Darling Wilderness
Juniper Prairie Wilderness
Lake Woodruff Wilderness
Little Lake George Wilderness
Marjory Stoneman Douglas Wilderness
Mud Swamp/New River Wilderness
Passage Key Wilderness
Pelican Island Wilderness
St. Marks Wilderness

Georgia

Big Frog Wilderness
Blackbeard Island Wilderness
Blood Mountain Wilderness
Brasstown Wilderness
Cohutta Wilderness
Cumberland Island Wilderness
Ellicott Rock Wilderness
Mark Trail Wilderness
Okefenokee Wilderness
Raven Cliffs Wilderness
Rich Mountain Wilderness
Southern Nantahala Wilderness
Tray Mountain Wilderness
Wolf Island Wilderness

Hawaii

Haleakala Wilderness
Hawaii Volcanoes Wilderness

Idaho

Big Jacks Creek Wilderness
Bruneau-Jarbidge Rivers Wilderness
Gospel-Hump Wilderness
Hells Canyon Wilderness
Little Jacks Creek Wilderness
Sawtooth Wilderness
Selway-Bitterroot Wilderness

Craters of the Moon National Wilderness Area
Frank Church-River of No Return Wilderness
North Fork Owyhee Wilderness
Owyhee River Wilderness
Pole Creek Wilderness

Illinois

Bald Knob Wilderness
Bay Creek Wilderness
Burden Falls Wilderness
Clear Springs Wilderness
Crab Orchard Wilderness
Garden of the Gods Wilderness
Lusk Creek Wilderness
Panther Den Wilderness

Indiana

Charles C. Deam Wilderness

Kentucky

Beaver Creek Wilderness
Clifty Wilderness

Louisiana

Breton Wilderness
Kisatchie Hills Wilderness
Lacassine Wilderness

Maine

Caribou-Speckled Mountain Wilderness
Moosehorn (Baring Unit) Wilderness
Moosehorn Wilderness

Massachusetts

Monomoy Wilderness

Michigan

Beaver Basin Wilderness
Big Island Lake Wilderness
Delirium Wilderness
Horseshoe Bay Wilderness
Huron Islands Wilderness
Isle Royale Wilderness
Mackinac Wilderness
McCormick Wilderness
Michigan Islands Wilderness
Nordhouse Dunes Wilderness
Rock River Canyon Wilderness
Round Island Wilderness
Seney Wilderness
Sturgeon River Gorge Wilderness
Sylvania Wilderness

Minnesota

Agassiz Wilderness
Boundary Waters Canoe Area Wilderness
Tamarac Wilderness

Mississippi

Black Creek Wilderness
Gulf Islands Wilderness
Leaf Wilderness

Missouri

Bell Mountain Wilderness
Devils Backbone Wilderness
Hercules-Glades Wilderness
Irish Wilderness
Mingo Wilderness
Paddy Creek Wilderness
Piney Creek Wilderness
Rockpile Mountain Wilderness

Montana

Absaroka-Beartooth Wilderness
Anaconda Pintler Wilderness
Bob Marshall Wilderness
Cabinet Mountains Wilderness
Great Bear Wilderness
Lee Metcalf Wilderness
Medicine Lake Wilderness
Mission Mountains Wilderness
Red Rock Lakes Wilderness
Scapegoat Wilderness
Selway-Bitterroot Wilderness
UL Bend Wilderness

Gates of the Mountains Wilderness
Rattlesnake Wilderness
Welcome Creek Wilderness

Nebraska

Fort Niobrara Wilderness
Soldier Creek Wilderness

Nevada

Alta Toquima Wilderness
Arc Dome Wilderness
Arrow Canyon Wilderness
Bald Mountain Wilderness
Becky Peak Wilderness
Big Rocks Wilderness
Black Canyon Wilderness
Black Rock Desert Wilderness
Boundary Peak Wilderness
Bridge Canyon Wilderness
Bristlecone Wilderness
Calico Mountains Wilderness
Clover Mountains Wilderness
Currant Mountain Wilderness
Death Valley Wilderness
Delamar Mountains Wilderness
East Fork High Rock Canyon Wilderness
East Humboldts Wilderness
Eldorado Wilderness
Far South Egans Wilderness
Fortification Range Wilderness
Goshute Canyon Wilderness
Government Peak Wilderness
Grant Range Wilderness
High Rock Canyon Wilderness
High Rock Lake Wilderness
High Schells Wilderness
Highland Ridge Wilderness
Ireteba Peaks Wilderness
Jarbidge Wilderness
Jimbilnan Wilderness
Jumbo Springs Wilderness
La Madre Mountain Wilderness
Lime Canyon Wilderness
Little High Rock Canyon Wilderness
Meadow Valley Range Wilderness
Mormon Mountains Wilderness
Mount Grafton Wilderness
Mt. Charleston Wilderness
Mt. Irish Wilderness
Mt. Moriah Wilderness
Mt. Rose Wilderness
Muddy Mountains Wilderness
Nellis Wash Wilderness
North Black Rock Range Wilderness
North Jackson Mountains Wilderness
North McCullough Wilderness
Pahute Peak Wilderness
Parsnip Peak Wilderness
Pinto Valley Wilderness
Quinn Canyon Wilderness
Rainbow Mountain Wilderness
Red Mountain Wilderness
Ruby Mountains Wilderness
Santa Rosa-Paradise Peak Wilderness
Shellback Wilderness
South Egan Range Wilderness
South Jackson Mountains Wilderness
South McCullough Wilderness
South Pahroc Range Wilderness
Spirit Mountain Wilderness
Table Mountain Wilderness
Tunnel Spring Wilderness
Wee Thump Joshua Tree Wilderness
Weepah Spring Wilderness
White Pine Range Wilderness
White Rock Range Wilderness
Worthington Mountains Wilderness

New Hampshire

Great Gulf Wilderness
Pemigewasset Wilderness
Presidential Range-Dry River Wilderness
Sandwich Range Wilderness
Wild River Wilderness

New Jersey

Brigantine Wilderness
Great Swamp National Wildlife Refuge Wilderness

New Mexico

Aldo Leopold Wilderness
Apache Kid Wilderness
Bandelier Wilderness
Bisti/De-Na-Zin Wilderness
Blue Range Wilderness
Bosque del Apache Wilderness
Capitan Mountains Wilderness
Carlsbad Caverns Wilderness
Cebolla Wilderness
Chama River Canyon Wilderness
Cruces Basin Wilderness
Dome Wilderness
Gila Wilderness
Latir Peak Wilderness
Manzano Mountain Wilderness
Ojito Wilderness
Pecos Wilderness
Sabinoso Wilderness
Salt Creek Wilderness
San Pedro Parks Wilderness
Sandia Mountain Wilderness
West Malpais Wilderness
Wheeler Peak Wilderness
White Mountain Wilderness
Withington Wilderness

New York

Otis Pike Fire Island High Dune Wilderness

North Carolina

Birkhead Mountains Wilderness
Catfish Lake South Wilderness
Ellicott Rock Wilderness
Joyce Kilmer-Slickrock Wilderness
Linville Gorge Wilderness
Middle Prong Wilderness
Pocosin Wilderness
Pond Pine Wilderness
Sheep Ridge Wilderness
Shining Rock Wilderness
Southern Nantahala Wilderness
Swanquarter Wilderness

North Dakota

Chase Lake Wilderness
Lostwood Wilderness
Theodore Roosevelt Wilderness

Ohio

West Sister Island Wilderness

Oklahoma

Black Fork Mountain Wilderness
Upper Kiamichi River Wilderness
Wichita Mountains Wilderness

Oregon

Badger Creek Wilderness
Black Canyon Wilderness
Boulder Creek Wilderness
Bridge Creek Wilderness
Bull of the Woods Wilderness
Clackamas Wilderness
Copper Salmon Wilderness
Cummins Creek Wilderness
Diamond Peak Wilderness
Drift Creek Wilderness
Eagle Cap Wilderness
Gearhart Mountain Wilderness
Grassy Knob Wilderness
Hells Canyon Wilderness
Kalmiopsis Wilderness
Lower White River Wilderness
Mark O. Hatfield Wilderness
Menagerie Wilderness
Middle Santiam Wilderness
Mill Creek Wilderness
Monument Rock Wilderness
Mount Hood Wilderness
Mount Jefferson Wilderness
Mount Thielsen Wilderness
Mount Washington Wilderness
Mountain Lakes Wilderness
North Fork John Day Wilderness
North Fork Umatilla Wilderness
Opal Creek Wilderness
Oregon Badlands Wilderness
Oregon Islands Wilderness
Red Buttes Wilderness
Roaring River Wilderness
Rock Creek Wilderness
Rogue-Umpqua Divide Wilderness
Salmon-Huckleberry Wilderness
Sky Lakes Wilderness
Soda Mountain Wilderness
Spring Basin Wilderness
Steens Mountain Wilderness
Strawberry Mountain Wilderness
Table Rock Wilderness
Three Arch Rocks Wilderness
Three Sisters Wilderness
Waldo Lake Wilderness
Wenaha-Tucannon Wilderness
Wild Rogue Wilderness

Pennsylvania

Allegheny Islands Wilderness
Hickory Creek Wilderness

Puerto Rico

El Toro Wilderness

South Carolina

Cape Romain Wilderness
Congaree National Park Wilderness
Ellicott Rock Wilderness
Hell Hole Bay Wilderness
Little Wambaw Swamp Wilderness
Wambaw Creek Wilderness
Wambaw Swamp Wilderness

South Dakota

Badlands Wilderness
Black Elk Wilderness

Tennessee

Bald River Gorge Wilderness
Big Frog Wilderness
Big Laurel Branch Wilderness
Citico Creek Wilderness
Cohutta Wilderness
Gee Creek Wilderness
Joyce Kilmer-Slickrock Wilderness
Little Frog Mountain Wilderness
Pond Mountain Wilderness
Sampson Mountain Wilderness
Unaka Mountain Wilderness

Texas

Big Slough Wilderness
Guadalupe Mountains Wilderness
Indian Mounds Wilderness
Little Lake Creek Wilderness
Turkey Hill Wilderness
Upland Island Wilderness

Utah

Ashdown Gorge Wilderness
Beartrap Canyon Wilderness
Beaver Dam Mountains Wilderness
Blackridge Wilderness
Black Ridge Canyons Wilderness
Box-Death Hollow Wilderness
Canaan Mountain Wilderness
Cedar Mountain Wilderness Area
Cottonwood Canyon Wilderness
Cottonwood Forest Wilderness
Cougar Canyon Wilderness
Dark Canyon Wilderness
Deep Creek North Wilderness
Deep Creek Wilderness
Deseret Peak Wilderness
Doc's Pass Wilderness
Goose Creek Wilderness
High Uintas Wilderness
LaVerkin Creek Wilderness
Lone Peak Wilderness
Mount Naomi Wilderness
Mount Nebo Wilderness
Mount Olympus Wilderness
Mount Timpanogos Wilderness
Paria Canyon-Vermilion Cliffs Wilderness
Pine Valley Mountain Wilderness
Red Butte Wilderness
Red Mountain Wilderness
Slaughter Creek Wilderness
Taylor Creek Wilderness
Twin Peaks Wilderness
Wellsville Mountain Wilderness
Zion Wilderness

Vermont

Big Branch Wilderness
Breadloaf Wilderness
Bristol Cliffs Wilderness
George D. Aiken Wilderness
Glastenbury Wilderness
Joseph Battell Wilderness
Lye Brook Wilderness
Peru Peak Wilderness

Virginia

Barbours Creek Wilderness
Beartown Wilderness
Brush Mountain East Wilderness
Brush Mountain Wilderness
Garden Mountain Wilderness
Hunting Camp Creek Wilderness
James River Face Wilderness
Kimberling Creek Wilderness
Lewis Fork Wilderness
Little Dry Run Wilderness
Little Wilson Creek Wilderness
Mountain Lake Wilderness
Peters Mountain Wilderness
Priest Wilderness
Raccoon Branch Wilderness
Ramseys Draft Wilderness
Rich Hole Wilderness
Rough Mountain Wilderness
Saint Mary's Wilderness
Shawvers Run Wilderness
Shenandoah Wilderness
Stone Mountain Wilderness
Three Ridges Wilderness
Thunder Ridge Wilderness

Washington

Alpine Lakes Wilderness
Boulder River Wilderness
Buckhorn Wilderness
Clearwater Wilderness
Colonel Bob Wilderness
Glacier Peak Wilderness
Glacier View Wilderness
Goat Rocks Wilderness
Juniper Dunes Wilderness
Lake Chelan-Sawtooth Wilderness
Mount Adams Wilderness
Mount Baker Wilderness
Mount Rainier Wilderness
Mount Skokomish Wilderness
Noisy-Diobsud Wilderness
Salmo-Priest Wilderness
San Juan Wilderness
Stephen Mather Wilderness
Tatoosh Wilderness
The Brothers Wilderness
Trapper Creek Wilderness
Washington Islands Wilderness
Wenaha-Tucannon Wilderness

Henry M. Jackson Wilderness
Indian Heaven Wilderness
Norse Peak Wilderness
Olympic Wilderness
Pasayten Wilderness
Wild Sky Wilderness
William O. Douglas Wilderness
Wonder Mountain Wilderness

West Virginia

Big Draft Wilderness
Cranberry Wilderness
Dolly Sods Wilderness
Laurel Fork North Wilderness
Laurel Fork South Wilderness
Mountain Lake Wilderness
Roaring Plains West Wilderness
Otter Creek Wilderness
Spice Run Wilderness

Wisconsin

Blackjack Springs Wilderness
Gaylord A. Nelson Wilderness
Headwaters Wilderness
Porcupine Lake Wilderness
Rainbow Lake Wilderness
Whisker Lake Wilderness
Wisconsin Islands Wilderness

Wyoming

Absaroka-Beartooth Wilderness
Bridger Wilderness
Cloud Peak Wilderness
Encampment River Wilderness
Fitzpatrick Wilderness
Gros Ventre Wilderness
Huston Park Wilderness
Jedediah Smith Wilderness
North Absaroka Wilderness
Platte River Wilderness
Popo Agie Wilderness
Savage Run Wilderness
Teton Wilderness
Washakie Wilderness
Winegar Hole Wilderness

G.5 National Wild and Scenic Rivers

Alagnak, Alaska
Alatna, Alaska
Allagash Wilderness Waterway, Maine
Allegheny, Pennsylvania
American (Lower), California
Andreafsky, Alaska
Aniakchak, Alaska
Au Sable, Michigan
Bear Creek, Michigan
Beaver Creek, Alaska
Big and Little Darby Creeks, Ohio
Big Marsh Creek, Oregon
Big Piney Creek, Arkansas
Big Sur, California
Birch Creek, Alaska
Black Butte, California
Black Creek, Mississippi
Black, Michigan
Bluestone, West Virginia
Buffalo, Arkansas
Cache la Poudre, Colorado
Carp, Michigan
Charley, Alaska
Chattooga, Georgia, North and South Carolina
Chetco, Oregon
Chilikadrotna, Alaska
Clackamas, Oregon
Clarion, Pennsylvania
Clarks Fork Yellowstone, Wyoming
Cossatot, Arkansas
Crescent Creek, Oregon
Crooked, Oregon
Delaware (Lower), New Jersey & Pennsylvania
Delaware (Middle), New Jersey & Pennsylvania
Delaware (Upper), New York & Pennsylvania
Delta, Alaska
Deschutes, Oregon
Donner und Blitzen, Oregon
Eagle Creek, Oregon
East Branch Tahquamenon, Michigan
East Fork Jemez, New Mexico
Eel, California
Eleven Point, Missouri
Elk, Oregon
Elkhorn Creek, Oregon
Farmington (West Branch), Connecticut
Feather, California
Flathead, Montana
Fortymile, Alaska
Grande Ronde, Oregon
Great Egg Harbor, New Jersey
Gulkana, Alaska
Horsepasture, North Carolina
Hurricane Creek, Arkansas
Illinois, Oregon
Imnaha, Oregon
Indian, Michigan
Ivishak, Alaska
John Day, Oregon
John, Alaska

Joseph Creek, Oregon
Kern, California
Kings, California
Klamath, California
Klickitat, Washington
Kobuk, Alaska
Lamprey, New Hampshire
Little Beaver, Ohio
Little Deschutes, Oregon
Little Miami, Ohio
Little Missouri, Arkansas
Lostine, Oregon
Loxahatchee, Florida
Lumber, North Carolina
Malheur, Oregon
Manistee, Michigan
Maurice, New Jersey
McKenzie, Oregon
Merced, California
Metolius, Oregon
Middle Fork Clearwater, Idaho
Middle Fork Salmon, Idaho
Middle Fork Vermilion, Illinois
Minam, Oregon
Missouri, Montana
Mulberry, Arkansas
Mulchatna, Alaska
Musconetcong, New Jersey
New, North Carolina
Niobrara, Nebraska
Noatak, Alaska
North Fork American, California
North Fork Crooked, Oregon
North Fork John Day, Oregon
North Fork Koyukuk, Alaska
North Fork Malheur, Oregon
North Fork Middle Fork Willamette, Oregon
North Fork Owyhee, Oregon
North Fork Smith, Oregon
North Fork Sprague, Oregon
North Powder, Oregon
North Sylamore Creek, Arkansas
North Umpqua, Oregon
Nowitna, Alaska
Obed, Tennessee
Ontonagon, Michigan
Owyhee, Oregon
Paint, Michigan
Pecos, New Mexico
Pere Marquette, Michigan
Pine, Michigan
Powder, Oregon
Presque Isle, Michigan
Quartzville Creek, Oregon
Rapid, Idaho
Red, Kentucky
Richland Creek, Arkansas
Rio Chama, New Mexico
Rio de la Mina, Puerto Rico
Rio Grande, New Mexico
Rio Grande, Texas
Rio Icacos, Puerto Rico
Rio Mameyes, Puerto Rico
Roaring, Oregon
Rogue, Oregon
Saint Joe, Idaho
Saline Bayou, Louisiana
Salmon, Alaska
Salmon, Idaho
Salmon, Oregon
Sandy, Oregon
Selawik, Alaska
Sespe Creek, California
Sheenjek, Alaska
Sipsey Fork West Fork, Alabama
Sisquoc, California
Skagit, Washington
Smith, California
Snake, Idaho & Oregon
South Fork John Day, Oregon
Squaw Creek, Oregon
St. Croix (Lower) Minnesota & Wisconsin
St. Croix (Lower), Minnesota & Wisconsin
St. Croix, Minnesota & Wisconsin
Sturgeon, Michigan (Hiawatha National Forest)
Sturgeon, Michigan (Ottawa National Forest)
Sudbury, Assabet, Concord, Massachusetts
Sycan, Oregon
Tinayguk, Alaska
Tlikakila, Alaska
Trinity, California
Tuolumne, California
Unalakleet, Alaska
Upper Rogue, Oregon
Verde, Arizona
Wallowa, Oregon
Wekiva, Florida
Wenaha, Oregon
West Little Owyhee, Oregon
Westfield, Massachusetts
White Clay Creek, Delaware & Pennsylvania
White Salmon, Washington
White, Oregon
Whitefish, Michigan
Wildcat River, New Hampshire
Wildhorse and Kiger Creeks, Oregon
Wilson Creek, North Carolina
Wind, Alaska
Wolf, Wisconsin
Yellow Dog, Michigan

G.6 Outstanding National Resource Water (ONRW) Designated by a State or Tribe

States have an obligation under the antidegradation policy of the CWA to ensure that water quality is maintained and protected where "high quality waters constitute an outstanding national resource, such as water of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance." 40 CFR §131.12(a)(3).

Water Resources Boards may designate certain waters, including wetlands, as outstanding under state and federal law. When waters are designated, their existing water quality shall, at a minimum, be protected and maintained. Because ONRWs are designated by each state, permittees should consult state water quality management agencies to determine if ONRWs exist in the area where they may operate their vessel.

Appendix H – Annual Report

EPA United States Environmental Protection Agency
Washington, DC 20460 Form Approved OMB No.
One Time Report for Discharges Incidental to the Normal Operation 2040-0004
Of a Vessel under the NPDES Vessel General Permit

Owner/Operator and Vessel Information

Date Submitted _____ Vessel NOI Number (if applicable) _____
Vessel Owner/Operator _____ Phone_____
Address_____ E-mail_____
Vessel Name _____ Vessel Type _____
Length _____FEET/METERS (Circle One) Gross Tonnage _____□ gross tons □ gross registered tons
Date of Vessel Construction _____
Calendar Year for which you are submitting the report: _____
Did your vessel operate in waters subject to this permit during the previous calendar year: □ Yes □ No
If you answered No to this question, completion of the remainder the following questions are voluntary; however you must certify the bottom of the report.

Questions

1. Please list your vessel's primary geographical regions of operation in U.S. waters last year and report the approximate percentage of time was your vessel in each region?
□ Gulf Coast ___ □ Pacific Coast ___ □ Atlantic Coast ___ □ Mississippi-Ohio River System ___ □ Great Lakes ___ □ Puerto Rico and the US Virgin Islands □ Other: _____

2a. Did you conduct the following inspections in the last year? (Optional for inland vessels less than 300GT and unmanned, unpowered barges)

Drydock Inspections □ Yes □No Most recent drydock and inspection date: _____
Next scheduled drydocking: _____
Annual Inspections □ Yes □ No Most recent inspection date: _____
All Required Routine Inspections □ Yes □No
If you checked no, how many routine inspections did you miss in the last year?
□ 1-2 □3-4 □5-6 □7 or more
Last below water (or drydock) hull inspection: _____

2b. On average, how often did you conduct routine inspections in the last year?
□ Never □Once per week □Between once per week and once per day □Once per day □More than once per day □Other: _____

3a. Did your vessel discharge ballast water in U.S. waters? □ Yes □No
What is the capacity of your vessel's ballast tanks? _____□ gallons □ $meters^3$
How many ballast tanks are present on your vessel (include holds or other areas that were used to carry ballast water)? _____

For each tank or hold used to carry ballast, list type, capacity, and identifier: _____
Does your vessel have a ballast water treatment system? □ Yes □No □ N/A

If you answered yes, please attach analytical monitoring data for treated ballast water discharges required by Parts 2.2.3.5.1.1 of the permit (see VGP Ballast Water DMR below).
Did you operate outside the EEZ and enter the Great Lakes? □ Yes □No □ N/A
If yes, did you discharge ballast water? □ Yes □No □ N/A
If yes, did you conduct ballast water exchange and/or flushing as applicable? □ Yes □No □ N/A

3b. Does your vessel have an exhaust gas scrubber? □ Yes □No
Did your vessel discharge washwater from its exhaust gas scrubber in U.S. waters? □ Yes □No □ N/A

If you answered yes, please attach analytical monitoring data for exhaust gas scrubber washwater (see VGP Exhaust Gas Scrubber DMR below)

Discharge required by Part 2.2.26 of the permit.

3c. Does your vessel have an oily water separator (OWS)? □ Yes □No
If your vessel is greater than 400 GT did it discharge treated bilgewater within 1 nm of shore? □ Yes □No □ N/A Did you ever discharge into waters subject to this permit (within 3 nm)? □ Yes □No □ N/A
If you discharged within 1 nm, why did you discharge?
□ Never left waters subject to this permit, but the discharge met a 15 ppm standard. □ Technically infeasible or unsafe to hold (if checked, please attach explanation as to why it was technically infeasible or unsafe to hold).
If you discharged within three nautical miles, did you collect analytical oil and grease monitoring data? □ Yes □ No □ No, I qualified for the analytical monitoring waivers found in Part 2.2.2.1 of the permit (not available in the first two years of permit coverage).

If you answered yes, please attach analytical monitoring data for bilgewater sampling (see VGP Bilgewater DMR below)

3d. Did you discharge treated or untreated graywater in U.S. waters? □ Treated □Untreated □None
Does your vessel have and use a treatment system for graywater or graywater mixed with sewage? □ Yes □No □ N/A
If yes, please list the system make and model: _____

Is your vessel subject to analytical monitoring requirements in Parts 2.2.15, 5.1, or 5.2 □ Yes □ No. If yes, please attach analytical monitoring data for treated graywater discharges (see VGP Graywater DMR below).

3e. Do you use anti-foulant coating? Yes □No □ N/A
If so, what is the type of anti-fouling hull coating on vessel and select specific product?

Date last applied: _____

4. Did your vessel store any discharges incidental to the normal operation of vessels on board for onshore disposal?
□ Yes (please list) _____ □No
If yes, please list disposal method (e.g., onshore treatment, pump out truck)_____

5. Did your vessel use environmentally acceptable lubricants for oil to sea interfaces?
□ Yes (please name the brand(s)) _____ □No
If not, why? _____

6. Did you have to claim a safety exemption for any discharge category, and were therefore unable to meet effluent limits of the VGP?
□ Yes (please list discharge types) _____ □No
If yes, reason(s) safety exemptions claimed? _____

7. Did you receive any citations or warnings from EPA or the U.S. Coast Guard for any violations of environmental laws? If yes, please scan and attach.
□ Yes (explain) _____
_____

□No

8. Did you have any instances of noncompliance this year (e.g., discharging untreated bilgewater, exceeding numeric effluent limits)?
□ Yes □No

If you answered yes, please fill out the table below. Please attach additional pages as necessary.

Date	VGP Requirement Affected	Description of Noncompliance	Cause of Noncompliance	Description of Corrective Action Performed or Scheduled

Certification Information

I certify under penalty of law that the information contained in this form is, to the best of my knowledge and belief, true, accurate and complete. Furthermore, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____
Signature and Date

Annual Report: Ballast Water Treatment System Reporting Supplemental Addendum (VGP Ballast Water DMR)

A. Ballast Water Treatment System Information Facility Identifier (i.e., NOI number): _____

Treatment system description: _____

System supplier and model:_____

Installation Date: _____

First date of operation: _____

Technology type (check all that apply):

☐ Akylamines	☐ Deoxygenation	☐ Ozone
☐ Bioremediation	☐ Electric pulse	☐ Peracetic acid
☐ Cavitation	☐ Filtration	☐ Plasma pulse
☐ Chlorine addition/electrochlorination	☐ Heat	☐ Shear
☐ Chlorine dioxide	☐ Hydrocyclone	☐ Ultrasound
☐ Coagulation	☐ Menadione/Vitamin K	☐ Ultraviolet
☐ Other (specify): _____		

Is the ballast water treatment system type approved? Yes No

If you answered "*Yes*" please provide the flag administration(s) that approved that system? _____

Are all type approval data available to US EPA or the US Coast Guard (see Part 2.2.3.5.1.1.1 of this permit)? Yes No Unknown

Has the system been determined by the US Coast Guard to be an "Alternate Management System?" Yes No Unknown

Note: if you responded "*unknown*" to the two questions above, you must follow the monitoring schedule for devices for which high quality data are not available.

B. Monitoring Information

Have all the permit monitoring conditions for the ballast water treatment system(s) that apply to your vessel (Part 2.2.3.5.1.1.1 of this permit) been completed during the previous calendar year? Yes No

Please check which monitoring requirements were completed:

☐ Ballast water system functionality monitoring at least monthly.

☐ Calibration of probes/sensors that measure ballast water treatment performance at least annually.

☐ Biological monitoring. Number of sampling events: ___

☐ Residual biocide and derivative monitoring (if applicable). Number of initial: ___ Number of maintenance: ___

Provide ballast water treatment system functional monitoring information and ballast discharge analytical data for the previous calendar year in the attached tables. Provide any correlations and/or calculations between measured operating parameters and treatment concentrations in the space below (e.g., correlation between measured ORP and chlorine concentration in ballast water):

C. Certifier Name and Title

I certify under penalty of law that this document were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief true, accurate, and complete. I have no personnel knowledge that the information submitted is other than true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name:_____

Title:_____

Signature:_____

Email:_____

Ballast Water Treatment System Functionality Monitoring (provide information for each month for all that apply; attach pages as needed)

Parameter Used to Measure System Functionality[a]	Units[b]	Measurement Method[c]	Month[d]	Number of Measurements per Month[e]	Minimum Monthly Measured Value	Average Monthly Measured Value	Maximum Monthly Measured Value	System Design Operating Range

a. Part 2.2.3.5.1.1.2 and Appendix J of the permit describes the types of measurements required to verify system functionality (e.g., chlorine concentration, ORP, ozone concentration, etc.).
b. Units include items such as mg/L or ppm for chemical concentrations, lbs or gallons/month for chemical dosage amounts, watts/month for power consumption, etc.
c. Measurement methods can include probe, sensor, sample analysis, counts, etc.
d. Vessels need to provide information for only those months that ballast water was discharged into U.S. waters.
e. If continuous measurements are recorded for the parameter, note "continuous" in the provided column.

Biological Monitoring of Ballast Water Discharges (provide information for each sampling event for all that apply; attach pages as needed)

Parameter	Analytical Method	Sample Date(s)[a]	Sample Result(s)[a]	Units	Discharge Location
Total live bacteria					
E. coli					
Enterococci					
Other (specify):					

a. Part 2.2.3.5.1.1.4 of the permit provides the required sampling schedule. If you collected multiple samples during the calendar year, list the samples and corresponding results in order of date collected.

Residual Biocide/Derivative Monitoring of Ballast Water Discharges (provide information for each sampling event for all that apply; attach pages as needed)

Biocide/Derivative[a]	Analytical Method	Sample Date(s)[b]	Sample Result(s)[b]	Units	Discharge Location

a. Section 2.2.3.5.1.1.5 of the permit lists biocides and derivatives the vessel must monitor for based on the type of treatment system (e.g., chlorine, haloacetic acid, trihalomethanes). You must report those results here.
b. Section 2.2.3.5.1.1.5 provides the required sampling schedule. If you collected multiple samples during the calendar year, list the samples and corresponding results in order of date collected.

Annual Report: Exhaust Gas Scrubber Discharge Monitoring Supplemental Addendum (VGP Exhaust Gas Scrubber Discharge Monitoring Report)

Exhaust Gas Scrubber Analytical Monitoring (provide information for all that apply)

Sample Date: _____ Sample Type (inlet water, water after the scrubber, discharge water): _____ Facility Identifier (i.e., NOI number): _____

Sample #:_____ (Please provide a separate page for each sampling event)

Parameter	Analytical Method[a]	Sample Date(s)[b] (MM/DD/YYYY)	Sample Result(s)	Units	Flow Rate	Discharge Location (Lat/Long)[c]	Was the Sample Taken in U.S. Waters?
Nitrate-Nitrite							
pH							
Arsenic							
Cadmium							
Chromium							
Copper							
Lead							
Nickel							
Selenium							
Vanadium							
Zinc							
Acenaphthylene							
Acenaphthene							
Anthracene							
Benz[a]anthracene							
Benzo[ghi]perylene							
Benzo[a]pyrene							
Benzo[b]fluoranthene + benzo[k]fluoranthene							
Chrysene							
Dibenz[a,h]anthracene							
Fluoranthene							
Fluorene							
Indeno[1,2,3,c,d]pyrene							
Naphthalene							
Phenanthrene							
Pyrene							

Additional Detail:

pH Probe Value (at same time sample collected): _____

PAH Probe Value (at same time sample collected): _____

Turbidity Probe Value (at same time sample collected): _____

Maximum continuous rating or 80 percent of the power rating of the fuel oil combustion unit in MWh: _____

Sampling performed downstream of the water treatment equipment but upstream of washwater dilution (or other reactant dosing) prior to discharge? □ Yes □No

a) Part 2.2.26.2.3 of the permit discusses appropriate methods for monitoring. Please select methods that correct for matrix interference.

b) Part 2.2.26.2.2 of the permit provides the required sampling schedule. If you collected multiple samples during the calendar year, list the samples and corresponding results in order of date collected.

c) Provide latitude and longitude of discharge location during sampling.

Exhaust Gas Scrubber Continuous Monitoring (provide information for all that apply)

Month:_____ **(**Please provide a separate page for each month of the discharge)

Parameter	Units[a]	Minimum Monthly Measured Value	Average Monthly Measured Value	Maximum Monthly Measured Value	Did You Operate in US Waters this Month?
pH	Standard Units				
PAH (if available)	µ/L PAHphe				
Turbidity					
Temperature					

Additional Details:

pH probe calibration date: _____

PAH probe calibration date (if available): _____

Turbidity probe calibration date**:** _____

Temperature probe calibration date**:** _____

Maximum continuous rating or 80 percent of the power rating of the fuel oil combustion unit in MWh: _____

Sampling performed downstream of the water treatment equipment but upstream of washwater dilution (or other reactant dosing) prior to discharge? ☐ Yes ☐ No

Exhaust gas scrubber treatment system additives (names of any additives and dosage (if available) used, i.e., coagulant, flocculant, reaction water): ____ _____ _____

a. Units for turbidity are either FNU or NTU, and units for temperature are either °C or °F.

Annual Report: Graywater Discharge Monitoring Supplemental Addendum (VGP Graywater Discharge Monitoring Report)

Graywater Monitoring (provide information for all that apply)

My vessel had to conduct sampling _____ times in year_____Facility Identifier (i.e., NOI number): _____

Sample #:_____ (Please provide a separate form for each sampling event)

Parameter	Analytical Method[a]	Sample Date(s)[b] (MM/DD/YYYY)	Sample Time	Sample Result(s)	Units	Discharge Location[c] (Lat/Long)	Overboard Discharge Port Location[c]	Analysis Date/ Analyst[d] (MM/DD/YYYY)	Was the Sample Taken in U.S. Waters?
pH									
BOD									
Fecal coliform									
Suspended Solids									
Total Residual chlorine[e]									
E. coli[f]									
Total phosphorus(TP)[f]									
Ammonia[f]									
Nitrate + Nitrite[f]									
Total Kjeldahl Nitrogen (TKN)[f]									

a. Part 2.2.15.2, 5.1.2 and 5.2.2 of the permit discusses appropriate methods for monitoring.
b. Part 2.2.15.2, 5.1.2 and 5.2.2 of the permit provides the required sampling schedule.
c. Provide latitude and longitude of discharge location during sampling and the sampled overboard discharge port location
d. Provide both the name of analyst and analysis date in MM/DD/YYYY format.
e. Parameter not required for medium and large cruise ships meeting certain criteria per Parts 5.1.2.2.1 and 5.2.2.2.1.
f. Parameter must be analyzed only by medium and large cruise ships.

Annual Report: Bilgewater Discharge Monitoring Supplemental Addendum (VGP Bilgewater Discharge Monitoring Report)

Bilgewater Monitoring (provide information for all that apply)

Sample #:_____ **(**Please provide a separate form for each sampling event) Facility Identifier (i.e., NOI number): _____

Parameter	Analytical Method[a]	Sample Date(s) (MM/DD/YYYY)	Sample Time	Sample Result(s)	Units	Discharge Location[b]	Overboard Discharge Port Location[b]	Analysis Date/ Analyst Name[c] (MM/DD/YYYY)	Was the Sample Taken in U.S. Waters?
Oil and Grease					ppm				

Additional Details:

OCM Value (at same time sample collected) _____

OCM Make and Model Number _____

OMC calibration date and name of calibrator _____

Oil/water separator additive type (name of any additives used, i.e, solidifier, flocculant): _____

a. Part 2.2.2.1 of the permit discusses monitoring methods. Samples must be analyzed for oil by either Method ISO 9377-2 (2000) Water Quality–Determination of hydrocarbon oil index–Part 2: Method Using Solvent Extraction and Gas Chromatography (incorporation by reference, see 46 CFR §162.050–4) or EPA Method 1664.
b. Provide latitude and longitude of discharge location during sampling and the sampled overboard discharge port location
c. Provide both the name of analyst and analysis date in MM/DD/YYYY format.

Appendix I – Standard Discharge Monitoring Report

EPA's Standard Discharge Monitoring Report is available at:
http://www.epa.gov/compliance/resources/publications/data/systems/icis/quickreference/icis-dmr-overview-and-form.pdf

Appendix J – Ballast Water Treatment System Sensors, Measurement Requirements and Appropriate Equipment for Physical/Chemical Indicator Monitoring

Technology Type	Measurement	Potential Control Sensor, Equipment, or Procedure	Non Discharge Indicators of BWTS Performance	Required Metrics to be Reported
Alkylamines	Alkylamines	Chemical analysis and treatment monitoring	-Alkylamines concentration at injection -Alkylamines dosage and usage	-Alkylamines sample concentration -Alkylamines dosage and usage
	pH	pH sensor	pH	pH readings
Biological agents	Treatment chemical	Chemical analysis and treatment monitoring	-Treatment chemical concentration at injection -Treatment chemical dosage and usage	-Treatment chemical sample concentration -Treatment chemical dosage and usage
Cavitation	Pressure differential	Pressure sensors (before/after)	Pressure differential	Pressure readings
Chlorination: (e.g., sodium chlorite and sodium hypochlorite	Chlorine	In-line N,N diethyl-p-phenylene diamine (DPD) analyzer, sample analysis, and treatment monitoring	-Chlorine concentration at injection -Chlorine dosage on treatment and usage (if chlorine addition)	-Chlorine readings from both on-line sensor and sample analysis -Chlorine dosage on treatment (if chlorine addition)
	Oxidation reduction potential (ORP)	ORP sensor	ORP at injection	ORP readings
	Power consumption, voltage and current	System power diagnostics	Chlorination module power consumption, voltage and current (if electrochlorination)	No Reporting Required
	Total residual oxidizers (TRO)	Amperometric sensor	TRO at injection	TRO readings
	Conductivity/salinity	Conductivity and temperature sensor	Conductivity and temperature at injection	Conductivity/salinity and temperature readings
Chlorine Dioxide	Chlorine Dioxide	On-line chlorine dioxide amperometric sensor, Lissamine Green B (LGB) sample analysis, and treatment monitoring	-Chlorine dioxide concentration at injection - Chlorine dioxide dosage and usage (if chlorine dioxide addition)	-Chlorine dioxide readings from both on-line sensor and sample analysis - Chlorine dioxide dosage and usage (if chlorine dioxide addition)

Coagulation (flocculent)	Coagulant	Chemical analysis and treatment monitoring	-Treatment flocculent concentration at injection -Treatment chemical dosage and usage	- Treatment flocculent concentration -Treatment chemical dosage and usage
	Turbidity (NTU)	Turbidity sensor	Coagulation effluent turbidity	Coagulation effluent turbidities
Deoxygenation	Dose of inert gas (if used)	Treatment monitoring	Deoxygenation gas dosage and usage	Deoxygenation gas dosage and usage
	pH (if CO_2 used)	pH sensor	pH	pH readings
	Dissolved oxygen (DO)	DO sensor	Deoxygenation module dissolved oxygen concentration	Dissolved oxygen concentrations
Electric pulse	Power consumption, voltage and current	System power diagnostics	Electric pulse module power consumption, voltage and current	Electric pulse module power consumption, voltage and current readings
Filtration	Flow rate	Flow meter	Filter effluent flow	Flow readings
	Pressure differential	Pressure sensors (before/after)	Filter pressure differential (e.g., before/after filtration)	Filter pressures (before/after)
	Back flush frequency	Treatment monitoring	Filter backwash frequency	Filter backwash frequencies
Heat	Temperature	Thermistors	Treatment temperature	Temperature readings
Hydrocyclone	Back flush frequency	Treatment monitoring	Hydrocyclone back flush frequency	Hydrocyclone back flush frequencies
	Power consumption, voltage and current	System power diagnostics	Hydrocyclone power consumption, voltage and current	Hydrocyclone power consumption, voltage and current
Menadione/Vitamin K	Menadione/Vitamin K	Chemical analysis and treatment monitoring	-Menadione/Vitamin K concentration at injection -Menadione/Vitamin K dosage and usage	-Menadione/Vitamin K concentration at injection -Menadione/Vitamin K dosage and usage
Ozone	TRO	Amperometric sensor	TRO at ozone injection	TRO readings
	Ozone	On-line ozone sensor (if used) and sample analysis	Ozone concentration at injection	Ozone readings from both on-line sensor (if used) and sample analysis
	Bromate	Sample analysis	Bromate at ozone injection	Bromate measurements
	Power consumption, voltage and current	System power diagnostics	Ozonation module power consumption, voltage and current	No Reporting Required
	Conductivity/salinity	Conductivity and temperature sensor	Conductivity and temperature at injection	Conductivity/salinity and temperature readings
Peracetic acid	Hydrogen peroxide	On-line sensor, chemical	-Hydrogen peroxide	-Hydrogen peroxide readings

		analysis, treatment monitoring	concentration at injection -Hydrogen peroxide dosage and usage	from both on-line sensor and sample analysis -Hydrogen peroxide dosage and usage
	Peracetic acid	On-line sensor, chemical analysis, treatment monitoring	-Peracetic acid concentration at injection -Peracetic acid dosage and usage	-Peracetic acid readings from both on-line sensor and sample analysis -Peracetic acid dosage and usage
	pH	pH sensor	pH at injection	pH readings
Plasma pulse	Power consumption, voltage and current	System power diagnostics	Plasma pulse module power consumption, voltage and current	Plasma pulse module power consumption, voltage and current readings
	Temperature	Thermistors	Treatment temperature	Temperature readings
Shear	Pressure differential	Pressure sensors (before/after)	Pressure differential	Pressure readings
Ultrasound	Power consumption, voltage and current	System power diagnostics	Ultrasound power consumption, voltage and current	Ultrasound module power consumption, voltage and current readings
UV and UV+TiO_2	Power consumption, voltage and current	System power diagnostics	UV module power consumption, voltage and current	UV module power consumption, voltage and current
	Lamp status and age	Treatment monitoring	UV lamp status and age	No Reporting Required
	UV dose, intensity, transmittance	UV sensors and monitors	UV dose, intensity, transmittance	UV dose, intensity, transmittance
	Flow rate	Flow meter	UV effluent flow	Flow readings

Appendix K – Permit Authorization and Record of Inspection Form (PARI) (for vessels which need not complete NOIs)

VGP Authorization and Record of Inspection (PARI) Form

I. **Vessel Owner/Operator Information**
Vessel Owner/Operator _____ Phone _____ Address and Email Address: _____
II. Vessel Information
Vessel Name _____ Vessel Type _____ Vessel Identifier _____ □ Registered number/operating number □ IMO number
III. Owner/Operator Acknowledgement
By signing this form, I acknowledge that I have read and am familiar with the VGP and that I am implementing all permit requirements contained in the VGP.
IV. Certification Information
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. _____ Signature and Date
V. Annual Inspections by Year
A. 2014 I certify that I have completed an annual inspection for 2014 in accordance with Part 4.1.3 of the VGP. _____ Signature and Date
B. 2015 I certify that I have completed an annual inspection for 2015 in accordance with Part 4.1.3 of the VGP. _____ Signature and Date
C. 2016 I certify that I have completed an annual inspection for 2016 in accordance with Part 4.1.3 of the VGP. _____ Signature and Date
D. 2017 I certify that I have completed an annual inspection for 2017 in accordance with Part 4.1.3 of the VGP. _____ Signature and Date
E. 2018 I certify that I have completed an annual inspection for 2018 in accordance with Part 4.1.3 of the VGP. _____ Signature and Date