

## 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 provisions provided by States and Tribes in their CWA § 401 certifications; those that constitute effluent or other limitations or monitoring requirements are enforceable conditions of this permit.

The VGP is effective in every State and Indian Country Land except in Alaska, Hawaii and Taos Pueblo Tribal Lands (New Mexico). 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 Bishop Paiute Tribe:

The Bishop Paiute Tribe certified the VGP with the following additional permit condition:

Copies of Notice of Intents for proposed VGP and RGP must be submitted to the Bishop Paiute Tribe's Environmental Management office for review and comment.

### 6.2 California

California certified the VGP with the following additional permit conditions:

1. The VGP is only applicable to discharges incidental to the normal operation of non-military vessels engaged in transportation. Vessels in the U.S. Department of Transportation's Maritime Administration fleet, including but not limited to those located in Suisun Bay, do not qualify and must not be covered by the VGP. All vessels authorized under this permit that are less than 300 gross tons or have a capacity of less than eight cubic meters of ballast water that enter California waters must also submit an NOI to USEPA. USEPA must provide the State Water Board access to its database to get information on vessels that have submitted NOIs.
2. All discharges are prohibited in State Water Quality Protection Areas as defined in the Public Resources Code (PRC) and the California Ocean Plan (Ocean Plan).

3. Vessel discharges must be in accordance with the requirements of PRC section 72400 et seq. None of the 28 discharges covered by the VGP may contain hazardous waste as defined under California law, as well as hazardous substances listed in Attachment 2 of this document. The following other wastes are prohibited from discharge: sewage sludge, used or spent oil, garbage or trash (including plastic), photo-developing wastes, dry cleaning wastes, noxious liquid substance residues, and medical wastes. The vessel owner or operator must submit a certification stating that hazardous wastes as defined under California law, and prohibited wastes, will not be discharged.
4. Vessel discharges must 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 PRC section 71200 et seq. and in the CCR sections 2270 through 2291, inclusive (See Attachment 3 of this document).
5. If the ballast water receives chlorination treatment, the discharge must not exceed a maximum level of 8 micrograms per liter of total residual chlorine.
6. Propeller cleaning is allowed until January 1, 2012, after which, propeller cleaning is allowed as specified in regulations adopted by SLC. All other in-water hull cleaning is prohibited unless conducted using the best available technologies economically feasible, as determined by both SLC and the State Water Board. This prohibition includes underwater ship husbandry discharges (Discharge #25).
7. Vessel discharges must comply with all statewide and regional water quality control plans (Basin Plans). Attachment 4 lists the narrative water quality objectives that must be met in the receiving water. Attachment 5 lists the numeric effluent limitations that must be met in the effluent discharged into the receiving water depending on the type of water body into which the discharge occurs.
8. Cruise ship graywater discharges are prohibited in State waters.<sup>1</sup> Graywater discharges from oceangoing vessels that weigh 300 gross tons or more are also prohibited if such vessels have sufficient holding capacity. All other oceangoing vessels (those that weigh 300 gross tons or more and do not have sufficient holding capacity and those that weigh less than 300 gross tons) must not exceed the effluent limitations in Attachment 5 when discharging graywater.
9. Any co-mingling of black water (sewage) and graywater waste streams will be considered graywater for purposes of these conditions, and must comply with Additional Condition 8 above.
10. Dye tabs shall be placed in graywater systems when ships are in port.
11. There must be no oily sheen from any discharge, and oil and grease must not exceed 15 milligrams per liter (mg/L) from any discharge.

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<sup>1</sup> “State waters” extend three nautical miles into the Pacific Ocean. State water quality authority applies to any discharges or threats of discharges into such waters or outside the boundaries of the state that could affect the quality of state waters. (Cal. Const., art. III, § 2; Gov. Code, § 160 et seq.; Wat. Code, § 13260, subd. (a)(2).)

12. Detergents must 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 in the Sacramento and San Joaquin Delta, methylene blue active substances (MBAS) should not exceed 0.5 mg/L in all waterbodies.
13. Effluent monitoring must be performed on all waste streams discharged into State waters to determine waste stream quantity and quality. In the case of discharges that do not lend themselves to effluent sampling, such as antifouling hull coating leachate (Discharge #4), cathodic protection (Discharge #7), and sonar dome (Discharge #23), reporting according to Attachment 6, Additional Monitoring and Reporting Requirements, will suffice. For effluent that results from in-water maintenance near or below the water line, such as propeller hydraulic fluid (Discharge #9), rudder bearing lubrication (Discharge #19), and stern tube discharge (Discharge #24), receiving water sampling and analysis must be performed according to Attachment 6.
14. In addition to the other monitoring requirements, the volume of each discharge into State waters must be measured or estimated, and the constituents in Attachment 5 must be monitored according to the table in Attachment 6 when any discharge into State waters occurs. For discharges to enclosed bays, estuaries, and freshwater streams (defined in Attachment 5), except for polynuclear aromatic hydrocarbons (PAHs) and solvents (benzene, toluene, ethylbenzene, and xylene), the vessel owner or operator may submit to USEPA and the State Water Board a certification stating that the discharge does not contain specific volatile and semi-volatile organic constituents in lieu of monitoring for those constituents. For samples collected when a discharge occurs while a vessel is underway in State waters, the sample may be held until the vessel arrives at its next port at which time the sample shall be analyzed and the appropriate reports submitted to USEPA and the State Water Board or SLC as shown in Additional Condition 16 below. When in a California port or ocean terminal, samples must be analyzed by, or sent for analysis to, a certified laboratory as soon as possible.
15. When the manifest for vessel cargo indicates the presence of any hazardous substances as set forth in Title 22, Chapter 11, Appendix X of the California Code of Regulations, the discharges must also be monitored for those specific substances (see Attachment 2).
16. All monitoring and reporting information shall be submitted to USEPA. Vessels entering the State of California shall also submit reports using the following forms:
  - **7.1 – State Water Board Discharge Type Reporting Form**
  - **7.2 – State Water Board Constituent Type Reporting Form**  
Submit annually or whenever a report is submitted to USEPA.

Attention: NPDES Unit  
Division of Water Quality  
State Water Resources Control Board

1001 "I" Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814

- **7.3 – SLC Marine Invasive Species Program Hull Husbandry Reporting Form**  
Submit annually within 60 days of receiving a written or electronic request from the California State Lands Commission.
- **7.4 – SLC Ballast Water Reporting Form**  
Upon departure from each port or place in California waters.

California State Lands Commission  
Marine Facilities Division  
200 Oceangate, Suite 900  
Long Beach, CA 90802

17. This Certification includes Attachments 1-7<sup>2</sup>. 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, Title 22, Chapter 11, Appendix X, California Code of Regulations
  - Attachment 3 – California State Lands Commission’s Ballast Water Performance Standards;
  - Attachment 4 – Narrative Discharge Objectives in the California Ocean Plan and Basin Plans;
  - Attachment 5 – Numeric Effluent Limitations;
  - Attachment 6 – Sampling and Monitoring Requirements; and
  - Attachment 7 – Vessel Discharge Reporting Forms.

### 6.3 Connecticut:

Connecticut certified the VGP with the following additional permit conditions:

**1. Rights.** This certificate is subject to and does not derogate any present or future property rights or other rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state, or local laws or regulations pertinent to the property or activity affected hereby. This certification does not comprise the permits or approvals as may be required by Chapters 440, 446i, 446j and 446k of the Connecticut General Statutes.

**2. Expiration of Certificate.** This Section 401 Water Quality Certification shall be valid for five (5) years or until such time as the VGP issued by EPA on or about December 19, 2008 expires or is modified, suspended, revoked or reissued.

<sup>2</sup> These attachments are available as a PDF file with California’s full 401 certification letter. This information is available by linking to EPA’s website at: [www.epa.gov/npdes/vessels](http://www.epa.gov/npdes/vessels).

**3. Compliance with Certificate.** All work and all activities authorized herein conducted by the permittees in accordance with the VGP shall be consistent with the terms and conditions of this certificate. Any regulated activities carried out in a manner inconsistent with the Best Management Practices identified in the VGP constitute a violation of this certificate.

**4. Reliance on Application.** In evaluating the EPA's application for this certificate, the Commissioner has relied on information provided by the EPA. If such information subsequently proves to be false, deceptive, incomplete or inaccurate, this certificate may be modified, suspended or revoked.

**5. Best Management Practices.** In conducting the activities authorized by the VGP, the permittees shall employ all applicable best management practices, consistent with the terms and conditions of the VGP and this certificate as applicable.

**6. Ballast Water Management Requirements.** The ballast water management requirements in the Draft VGP section 2.2.3 shall be the minimum standard for covered vessels operating in Connecticut waters. All vessels covered by the VGP that have a ballast water treatment system installed for any reason, including but not limited to compliance with the conditions of any VGP 401 Water Quality Certificate issued by any other jurisdiction, or compliance with International Marine Organization (IMO) standards, shall utilize such treatment system to treat ballast water to the highest level afforded by such installed treatment system prior to discharge into Connecticut waters.

7. Effective upon issuance of the VGP, graywater as defined in 33 USC § 1322 (a)(11) shall not be discharged into Connecticut waters from a vessel covered under the VGP unless such vessel is not equipped to hold such graywater for processing ashore or for discharge outside Connecticut waters.

Effective January 1, 2012, graywater from any vessel covered under the VGP operating in Connecticut waters shall not be discharged into such waters unless such discharge is granted an extension under the limited circumstances described herein. This prohibition shall be in effect regardless of a vessel's traveling speed.

No extensions will be made to the above implementation date, unless an entity covered under the VGP makes a request for an extension to the Commissioner and can provide sufficient justification for such a request. Any such extension request shall state and demonstrate that: (1) there is a shortage in supply of the technology necessary to meet the limits set forth in this certification, or a vessel-specific engineering constraint or other factor related to the availability and installation of technology beyond the vessel owner/operator's control, that delays the technology being available and installed in time to comply with this standard; (2) the unavailability of supply or installation constraint is the only reason the January 1, 2012 date cannot be met; and (3) the vessel has exhausted all other options to comply with this standard. Any extension request must be made no later than June 30, 2010, and the extension request shall indicate when the vessel will come into compliance with this deadline.

**6.4 Florida:**

Florida certified VGP with the following additional permit conditions:

“Effluent limitations established in Section 2.1.4 Discharges of Oil Including Oily Mixtures, and Section 2.2.16 Motor Gasoline and Compensating Discharge of the VGP, are not as stringent as the State of Florida Requirements. Florida’s surface water quality standard for oil and grease in Rule 62-302-.530(50) F.A.C., state that dissolved or emulsified oils and greases shall not exceed 5.0 mg/L.”

**6.5 Georgia:**

Georgia certified the VGP with the following additional permit conditions:

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.

**6.6 Guam:**

Guam certified the VGP with the following additional permit condition:

We note that discharges to coral spawning areas during coral mass spawning shall be avoided.

In regards to the Clean Water Act Section 401 Water Quality Certification (WQC) for this activity, we find these proposed NPDES permits tentatively to be acceptable, in accordance with the Guam Water Quality Standards, as amended in 2001. Based on the proposed numerical criteria, permit narrative, monitoring requirements, and the current Guam Water Quality Standards, Guam Environmental Protection Agency believes that there is reasonable assurance that the NPDES permitted discharge activity will not violate applicable water quality standards. Therefore, we hereby issue Section 401 Water Quality Certification for the proposed NPDES for VGP.

**6.7 Hualapai Tribe:**

Hualapai Tribe certified with the following conditions:

In response to the U.S. Environmental Protection Agency (EPA) request for certification of two National Pollutant Discharge Elimination System (NPDES) general permits: The Vessel General Permit (VGP) and Recreational Vessel General Permit (RGP) for Discharges Incidental to the Normal Operation of Commercial and Large Recreational Vessels. Water bodies within the jurisdiction of the Hualapai Tribe, the Hualapai Tribes water quality standards and corresponding mitigation measures will be adhered to in accordance with all rights and obligations stemming from tribal sovereignty and Treatment as a State under the Clean Water Act. The Tribe requires that all permits issued in close proximity to Hualapai waters, be consistent with the Tribes’ water

quality standards set forth in the Hualapai Environmental Review Code, Subtitle I. Water Resources and Wetlands, Part 1. Water Resources Ordinance; 401 certification is hereby given.

## 6.8 Idaho:

Idaho certified the VGP with the following additional permit conditions:

### Reporting of Discharges Containing Hazardous Substances or Oil

Any discharges containing hazardous substances or oil must be reported to the Idaho State Communications Center (1-800-632-8000) or to the appropriate DEQ Regional Office (IDAPA 58.01.02.850).

Regional Office	Phone Number	Regional Office	Phone Number
Boise	(208) 373-0550	Lewiston	(208) 799-4370
Coeur d'Alene	(208) 769-1422	Pocatello	(208) 236-6168
Idaho Falls	(208) 528-2650	Twin Falls	(208) 736-2190

### Regulations Prohibiting Discharges on Certain Water Bodies

Owners or operators of vessels covered by this general permit must be aware of and comply with applicable Idaho Administrative Code provisions 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.*)

## 6.9 Illinois:

Illinois certified the VGP with the following additional permit conditions:

1. Discharges of wastestreams containing Bioaccumulative Chemicals of Concern (BCCs) from vessels covered by the Vessel General Permit shall be consistent with the provisions of 35 Ill. Adm. Code 302.520, 302.521, and 302.530.
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.
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. Color, odor and turbidity must be reduced to below obvious levels, pursuant to 35 Ill. Adm. Code 304.106.
4. Any vessel covered by the Vessel General Permit discharging ballast water employing ballast water treatment systems using chlorine shall not exceed a maximum total residual chlorine limit of 0.05 mg/l. 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, pursuant to 35 Ill Adm. Code 302.210, 302.410, and 302.540.

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. No bilge or ballast water from vessels covered by the Vessel General Permit which fails to meet the effluent standards of Part 304 shall be discharged to waters of the State pursuant to 35 Ill. Adm. Code 308.103.
7. Except as provided in Condition No. 8, discharges of ballast water from vessels covered by the Vessel General Permit to the Illinois portion of Lake Michigan must meet the International Maritime Organization certified treatment standard according to the following schedule:
  - a. For vessels constructed prior to January 1, 2012, meeting the applicability criteria in the federal NPDES permit, treatment shall be installed and operational to meet the performance standards for organisms included in Table A by January 1, 2016.
  - b. For vessels constructed after January 1, 2012, meeting the applicability criteria in the federal NPDES permit, treatment shall be installed and operational to meet the performance standards for organisms included in Table A prior to commencement of vessel operation.

Table A. Biological Performance Standards for Ballast Water Treatment Technology

Parameter	Limit	Limit Type	Sample Type
Organisms > 50um in minimum dimension	<10 viable/m <sup>3</sup>	Daily Average	Composite
Organisms 10-50 um in minimum dimension	<10 viable/ml	Daily Average	Composite
Escherichia coliform	<250 cfu/100ml	Daily Average	Composite
Intestinal enterococci	<100 cfu/100 ml	Daily Average	Composite

Analysis required by the above table shall be performed consistent with current protocols.

8. If ballast water treatment technologies, standards or limitations are adopted or approved by the USEPA, the U.S. Coast Guard, or other duly authorized Federal Agency and incorporated into the Vessel General Permit, the Agency will review the new or modified Vessel General Permit to ensure compliance with applicable Illinois laws and regulations. Based on that review, the Agency will waive, modify the existing certification or issue a new certification pursuant to Section 401 of the Clean Water Act.
9. Discharges of blackwater and graywater from vessels covered by the USEPA Vessel General Permit are prohibited in waters of the State of Illinois.
10. If the IEPA determines that vessel discharges covered by the Vessel General Permit cannot comply with the conditions of this certification or the Illinois Water Quality



Standards, then this certification may be amended to include different limitations, conditions, or requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice any proposed amendments to the certification.

11. 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:

The following conditions shall apply to any activity that qualifies under this general permit.

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 certifications;
  - c. to inspect, at reasonable times, any monitoring or operational equipment or method; collections, 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.
2. This granting of WQC does not relieve permittee from the responsibility of obtaining any other permits or authorizations that may be required for the project or related activities from the IDEM or any other agency or person.
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.
4. The IDEM, for any vessel that qualifies under the terms and conditions of this certifications, 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.
5. Activities authorized by the general permit shall **not** violate or exceed Indiana's Water Quality Standards at 327 IAC 2.
6. Discharges of ballast water to the Indiana portion of Lake Michigan must meet the International Maritime Organization certified treatment standard according to the following schedule:
  - a. For ocean-going vessels constructed prior to January 1, 2012, 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 Table 1 by January 1, 2016.

- b. For ocean-going vessels constructed after January 1, 2012, 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 Table 1 prior to commencement of vessel operation in Indiana State waters.

Analysis required by Table 1 shall be performed consistent with the protocols currently being validated by the EPA Environmental Technology Verification Program (EPA/U.S. Coast Guard/Naval Research Laboratory) and/or the following Great Ships Initiative protocols: The Procedure for Algae/Small Protozoan Sample Analysis, the Procedure for Zooplankton Sample Analysis, the Procedure for the Detection and Enumeration of *E. coli* by Membrane Filtration available online at <http://www.nemw.org/GSI/protocols.htm>

- c. If the federal government adopts treatment standards more stringent than IMO, then those standards shall replace those in Table 1 for new treatment systems installed after the date those federal standards go into effect.

Table 1. Biological performance standards for ballast water treatment technology

Parameter	Limit	Limit Type	Sample Type
Organisms > 50um in minimum dimension	<10 viable <sup>3</sup> /m <sup>3</sup>	Daily Average	Composite <sup>4</sup>
Organisms 10-50 um in minimum dimension	<10 viable/ml	Daily Average	Composite
Escherichia coliform	<250 cfu/100ml	Daily Average	Composite
Intestinal enterococci	<100 cfu/100 ml	Daily Average	Composite

7. Any ocean-going vessel discharging ballast water employing ballast water treatment systems using chlorine, shall not exceed a maximum total residual chlorine limit of .02 mg/l. The usage of other biocides shall not be discharged in concentrations considered to be toxic or harmful to aquatic life or in concentrations that would violate applicable water quality standards.

## 6.11 Iowa:

Iowa certified the VGP with the following additional permit conditions:

Conditions:

<sup>3</sup> “Viable organism” means organisms that are living and able to reproduce.

<sup>4</sup> “Composite” sample type is a combination of individual grab samples taken at periodic intervals over the specified time period. Either samples taken at equal time intervals shall be combined using a volume of each sample that is proportional to the flow that sample represents, or equal volume samples shall be combined that are taken at intervals of equal flow volumes.

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.
2. **If the vessel discharges oil or hazardous substances in the water, immediately call the U.S. Coast Guard at 1-800-424-8802 and the IDNR Emergency Response Unit at 1-515-281-8694.**
3. Discharge of ballast water into Iowa's waters is authorized only if there has been an open sea exchange or if the vessel has treated its ballast water to meet water quality standards set by the IDNR in 567~ 61.3 (455B). See [www.iowadnr.com/water/standards/files/chapter61.pdf](http://www.iowadnr.com/water/standards/files/chapter61.pdf).
4. It is illegal for anglers to possess, introduce, purchase, sell, or transport aquatic invasive species in Iowa except when a species is being removed from watercraft or equipment, is caught and immediately killed or returned to the water from which it came, or is being transported in a sealed container for identification purposes. It is also illegal to introduce any live fish, except for hooked bait, into public waters.
5. It is illegal to dump trash into federally controlled or state waters.
6. It is illegal to discharge oil or hazardous substances into the water.
7. Oil may not be dumped into the bilge of the vessel without means for proper disposal.
8. Oil waste must be disposed of at an approved reception facility. On recreational vessels, a bucket or bailer is adequate for temporary storage.
9. Recreational vessels with installed toilets must have an operable marine sanitation device on board. All installed devices must be U.S. Coast Guard-certified.
10. The United States Coast Guard's Mandatory Practices for all vessels with ballast tanks on all waters of the United States, regardless of Exclusive Economic Zone (EEZ) Entry (33 CFR 151.2035(a)) must be followed.
11. The United States Coast Guard's Additional Mandatory Practices for all vessels transiting to U.S. waters with ballast water that was taken on within 200 nautical miles of any coast after operating beyond the U.S. EEZ (33 CFR 151.2035(b)) must be followed.

## 6.12 Kansas:

Kansas certified the VGP with the following conditions:

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

- (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.
- (2) Hazardous materials derived from artificial sources, including toxic substances, radioactive isotopes, and infectious 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.
- (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.

- (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.
- (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) Surface waters shall be free of deposits of sludge or fine solids attributable to artificial sources of pollution.
- (7) Taste-producing and odor-producing substances of artificial origin shall not occur in surface waters at concentrations that interfere with the production of potable water by conventional water treatment processes, 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.
- (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:

1. Large Commercial Passenger Vessels that provide overnight accommodations for 250 or more overnight passengers are prohibited from discharging graywater or a mixture of graywater and blackwater to the coastal waters unless they first obtain authorization to discharge through Maine Department of Environmental Protection General Permit #W008222-5Y-A-N dated December 22, 2005.<sup>5</sup>
2. Large Commercial Passenger Vessels 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.
3. Large Commercial Passenger Vessels must report discharges of blackwater or graywater not authorized through Permit #W008222-5Y-A-N, or discharges to No Discharge Areas, to the Department.<sup>6</sup>
4. No vessel covered by the VGP may discharge pollutants to Class GPA or class SA waters.<sup>7</sup>
5. 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 potential toxic to the marine environment.

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<sup>5</sup> 38 MRS §423-D

<sup>6</sup> 38 MRS §423-D

<sup>7</sup> 38 MRS §465-A (1) and 38 MRS §465-B(1)

## 6.14 Massachusetts:

Massachusetts certified the VGP subject to the following conditions:

### **Unnumbered section**

The discharge of tetrachloroethylene (TCE) from all activities (not just drycleaning) is prohibited.

### **Section 2.2.3.8 Vessels Engaged in Pacific Nearshore Voyages with Unpumpable Ballast Water and Residual Sediment (including NOBOBs)**

Ballast water exchange requirements similar to those proposed for Pacific near-shore voyages (section 2.2.3.8) are required for vessels engaged in coastwise trade on the Atlantic or Gulf Coasts that will discharge to waters subject to this permit.

### **Section 2.2.15 Graywater**

Vessels that have the capacity to store graywater are prohibited from discharging it in areas listed in Part 12.1. In Massachusetts these areas include: the Boston Harbor Islands National Recreation Area, the Cape Cod National Seashore, and the Essex National Heritage Area.

### **Section 2.2.15 Graywater**

The discharge of untreated graywater within 3 nautical miles (nm) for vessels greater than 400 gross tons is prohibited, regardless of the speed of the vessel. Treated graywater must meet the graywater treatment standards included in Section 5.1.1.1.2 of the VGP.

### **Section 2.2.21 Seawater Piping Biofouling Prevention**

All seawater piping biofouling discharges shall meet the same chlorine discharge limit of 10 µg/l as is proposed in the graywater treatment standards (e.g., Section 5.1.1.1.2).

### **Section 2.2.25 Underwater Ship Husbandry Discharges**

Discharges associated with Underwater Ship Husbandry are prohibited in waters within 3 nm. Specifically, the removal of fouling organisms is prohibited within 3 nm in order to prevent the spread of invasive species. In addition, all hull cleaning shall occur while a vessel is in drydock or at another landside facility so that wash water and hull cleaning residuals can be collected and disposed of properly.

### **Section 2.2.27 Graywater Mixed with Sewage from Vessels**

Graywater commingled with sewage is not allowed to be discharged in No Discharge Areas. As of December 2008, three quarters of Massachusetts' coastal waters have been designated as NDAs. A map of No Discharge Areas in Massachusetts can be found at <http://www.epa.gov/region01/eco/nodiscrg/index.html>.

### **Section 5.1.1.1.1 Graywater Discharge Location and Rate (for large cruise ships)**

The discharge of all (treated and untreated) graywater from large cruise ships is prohibited within 3 nm of shore unless the discharge meets the graywater treatment standards in Section 5.1.1.1.2.

**Sections 5.1.1.1.2 Graywater Treatment Standards** (for large cruise ships)

All discharges of graywater for large cruise ships shall meet the state water quality standard for fecal coliform of 14 fecal coliform colony forming units (cfu) per 100 ml with not more than 10 percent of the samples exceeding 28 fecal coliform cfu per 100 ml.

**Section 5.2.1.1.1 Graywater Discharge Location and Rate** (for medium cruise ships)

The discharge of all (treated and untreated) graywater from medium-sized cruise ships (those authorized to carry 100-499 passengers) is prohibited within 3 nm of shore unless the discharge meets the graywater treatment standards in Section 5.2.1.1.2.

**Sections 5.2.1.1.2 Graywater Treatment Standards** (for medium cruise ships)

All discharges of graywater from medium cruise ships shall meet the state water quality standard for fecal coliform of 14 fecal coliform cfu per 100 ml with not more than 10 percent of the samples exceeding 28 fecal coliform cfu per 100 ml.

**Section 5.3.1.2.1 Graywater Discharge Location and Rate** (for large ferries)

The discharge of all (treated and untreated) graywater from large ferries (those authorized to carry more than 100 tons of land transportation vehicles or greater than 250 people) is prohibited within 3 nm of shore unless the discharge meets the graywater treatments standards in Section 5.2.1.1.2.

**Section 5.8.1 Authorization of Residual Biocides Associated with Experimental Ballast Water Treatment Systems**

All discharges from experimental ballast water treatment systems shall contain no more than 10 ug/l total residual chlorine (TRC, as is proposed in the graywater treatment standards (e.g., Sections 5.1.1.1.2 and 5.2.1.1.2).

**6.15 Michigan:**

Michigan certified the VGP with the following additional permit conditions:

1. Discharges of blackwater and graywater from vessels covered by the USEPA's VGP are prohibited in Michigan waters. (Part 95, Watercraft Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, [NREPA])
2. Oceangoing vessels covered by the USEPA's VGP are prohibited from discharging ballast water in Michigan 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 NREPA)
3. Non-oceangoing vessels covered by the USEPA's VGP that operate experimental ballast water treatment systems are prohibited from discharging ballast water in Michigan waters with total residual chlorine concentrations above 38 micrograms per liter ( $\mu\text{g/l}$ ) when the ballast water discharge duration exceeds 160 minutes, or above 200  $\mu\text{g/l}$  when the ballast water discharge duration is less than or equal to 160 minutes. Non-oceangoing vessels covered by the USEPA's VGP that operate experimental ballast water treatment systems

are prohibited from discharging ballast water in Michigan waters with chlorite concentrations above 13 µg/l. (R 323.1057 of the MWQS)

4. Each vessel required to operate a ballast water treatment system pursuant to Condition No. 2 of the Certification 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. In the event ballast water monitoring results indicate the discharge of aquatic nuisance species to Michigan waters is not being effectively prevented as determined by the MDEQ, the vessel operator shall cease any further discharges of ballast water until an aquatic nuisance species discharge prevention plan, submitted to, and approved by the MDEQ, is implemented. (R 323.2149 of the Part 21 rules, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA)
5. All vessels covered by the USEPA's VGP are prohibited from lowering the water quality of Michigan's Outstanding State Resource Waters or their tributaries. The following water bodies in Michigan are designated as Outstanding State Resource Waters: (R 323.1098 of the MWQS)
  - The Carp River (Mackinac County) – The 7.5 mile segment from Michigan State Highway 123, T42N, R5W, Section 2, to one-quarter mile upstream from Forest Development Road 3119, T42N, R4W, Section 4.
  - The Carp River (Mackinac County)- the 4.9-mile segment from one-quarter mile downstream of Forest Development Road 3119, T42N, R4W, Section 3 to McDonald Rapids.
  - The east branch of the Ontonagon River (Houghton and Ontonagon Counties) – the 25.5 mile segment from the east branch of the Ontonagon River's confluence with and unnamed stream in T48N, R37W, Section 30, to the Ottawa National Forest boundary, T50W, R38W, Section 33.
  - The middle branch of the Ontonagon River (Ontonagon County)- the 17.4 mile segment from Trout Creek, T48N, R38W, Section 20, to the northern boundary of the Ottawa National Forest, T48N, R39W, Section 12.
  - The Sturgeon River (Baraga and Houghton Counties) – The 16.5 mile segment from the Sturgeon River's entry into the Ottawa National Forest, T48N, R35W, Section 12, to Prickett Lake.
  - The east branch of the Tahquamenon River (Chippewa County) – the 3.2 mile segment from the center of T46, R6W, Sections 20, to the boundary of the Hiawatha National Forest, T46N, R6W, Section 19.
  - The Yellow Dog River (Marquette County) – the 4 mile segment from the Yellow Dog River's origin at the outlet of Bulldog Lake Dam, T50N, R29W, Section 31, to the boundary of the Ottawa National Forest. T50N, R29W, Section 17.
  - The main, north, south, east, and west branches of the Two Hearted River and Dawson Creek from their headwaters to the mouth of the river at Lake Superior.
  - Water bodies within the designated boundaries of the following national parks or lakeshores: Sleeping Bear Dunes National Lakeshore, Picture Rocks National Lakeshore, and Isle Royale National Park.
6. All Discharges in Michigan waters from vessels covered by the USEPA's VGP are prohibited from causing or contributing to exceedances of the MWQS. (Part 4 rules)

7. No condition in the USEPA's VGP may be made less restrictive because such action may violate the requirements of Michigan state law, including the MWQS.
8. Nothing in this Certification diminishes, negates, or precludes the state of Michigan from bringing civil and/or criminal actions for violations of state law and/or state issued permits. (Part 31 of the NREPA)
9. If the MDEQ determines that vessel discharges covered by this Certification can no longer comply with this Certification, the MDEQ may revoke or modify the Certification after appropriate public notice. (CWA, Section 401)
10. The MDEQ reserves the right to modify this Certification, after appropriate public notice, to require non-oceangoing vessels covered by the USEPA's VGP to install and operate ballast water treatment systems to prevent the discharge of aquatic nuisance species to Michigan waters, if a determination is made by the MDEQ's Director that such ballast water treatment systems are necessary, available, and cost effective.
11. All conditions of this Certification apply in all Michigan waters regardless of their distance from shore. (Part 4 rules)
12. 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 other MDEQ permits, or approvals from other units of government as may be required by law. (Part 31 of the NREPA)
13. The contact point for consultation, submittals, an approvals as referred to in this Certification is:  
MDEQ                    Chief, Surface Water Assessment Section  
                                 P.O Box 30273  
                                 Lansing, Michigan 48909-7773  
                                 Phone: 517-335-4121

#### 6.16 Minnesota:

Minnesota certified the VGP with the following additional permit conditions:

1. Vessels covered by the EPA's VGP must obtain any permits required by the state of Minnesota for vessel discharges. (Minn. Stat. § 115.07). The MPCA's ballast water discharge general permit MNG300000 requires vessels meeting the permit's applicability criteria to comply with the following biological performance standards and implementation schedule:
  - a. Table A Biological Performance Standards for Ballast Water Treatment Technology

Parameter	Limit	Limit Type	Sample Type
Organisms >50um in minimum dimension	<10 viable /m <sup>3</sup>	Daily average	Composite
Organisms 10-50 urn in minimum dimension	<10 viable / ml	Daily average	Composite
Escherichia coliform	<250 cfu / 100 ml	Daily average	Composite
Intestinal enterococci	<100 cfu / 100 ml	Daily average	Composite



- b. For vessels constructed prior to January 1, 2012, and meeting the applicability criteria in the permit, treatment shall be installed and operational to meet the performance standards for organisms included in Table A by January 1, 2016.
- c. For vessels constructed after January 1, 2012, and meeting the applicability criteria in the permit, treatment shall be installed and operational to meet the performance standards for organisms included in Table A prior to commencement of vessel operation in the Minnesota state waters of Lake Superior.

2. Vessels covered by the EPA's VGP must comply with a ballast water and sediment management plan approved by the MPCA and maintain a ballast record book meeting the requirements prescribed by the MPCA. (Minn. Stat. § 115.0306, 115.0307).
3. Discharge of ballast water from vessels employing ballast water treatment systems using chlorine must meet a maximum total residual oxidants limit, measured as total residual chlorine, of 0.038 mg/L. (Minn. R. 7050.0220).
4. Each condition in the proposed permit cannot be made less stringent without potentially violating the requirements of Minnesota State law, including water quality standards.
5. If the MPCA determines that vessel discharges covered by this Certification can no longer comply with Section 401 of the Clean Water Act or Minnesota laws and regulations, then this Certification may be revoked or modified. (Minn. R. 7001.1450, Minn. R. ch. 7050, 7052, and 7053).

### **6.17 Missouri:**

Missouri certified the VGP with the following additional permit conditions:

1. The National Pollutant Discharge Elimination System (NPDES) permit is written such that limitations do not cause the general or numeric criteria to be exceeded nor impair beneficial uses established in the Water Quality Standards, 10 CSR 20-7.031.
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.
3. This Water Quality Certification shall not be construed or interpreted to imply the requirements for other permits are replaced or superceded. Any NPDES Permits, Land Disturbance General Permits, or other requirements shall be complied with.

### **6.18 Nebraska:**

Nebraska certified the VGP with the following 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. 73, No. 117, pp 34296 through 34304. Vessels on these waters will need to discharge to these wastewaters into sanitary dump stations that do not result in 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.

With that condition observed, use of these General Permits for vessels operating on streams of the State of Nebraska is acceptable.

We therefore, by this letter, provide Section 401 Water Quality Certification. This certification does not constitute authorization to conduct your project. It is a statement of compliance with the Surface Water Quality Standards only, which is one requirement to gain authorization from the U.S. Army Corps of Engineers in the form of a Section 404 permit.

#### **6.19 Nevada:**

Nevada certified the VGP with the following additional permit conditions:

1. The proposed discharges permitted by the VGP will comply with all applicable State, Local, Interstate Agency and Federal laws, policies and regulations governing the protection of the beneficial uses of the State's Waters.
2. If in the opinion of the State the Final VGP does not adequately protect the Waters of the State or does not achieve compliance with the Nevada Water Quality Standards and other applicable provisions of state law, the 401 WQC may be modified or revoked.
3. This 401 WQC is valid until the VGP is modified, reissued, suspended or revoked. EPA must reapply for a new 401 WQC if any of these actions occur.

#### **6.20 New Hampshire:**

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

Upon final issuance by the federal EPA, the New Hampshire Department of Environmental Services assumes EPA will include the following provision: “On September 30, 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 miles of the New Hampshire shoreline and Isles of Shoals. In the No Discharge Area, all boat sewage discharge, whether treated or untreated, is prohibited.”

### **6.21 New Jersey:**

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

#### **Certification Conditions for the VGP**

New Jersey Water Pollution Control Act (NJWPCA) requires the NJDEP to develop water quality standards for the waters of the State of New Jersey.

New Jersey Statutory Authority requires the NJDEP to develop effluent limits for discharges from point sources to the waters of New Jersey. Section 58:10A-6a of the NJWPCA requires no discharge to the waters of New Jersey may violate water quality standards. The discharge limitations, and other conditions set forth in this certification, are required to comply with New Jersey’s regulations, set forth at N.J.A.C. 7:9B, which state no toxic or other deleterious substances may be discharged that impair the waters for their best usages. Conditions of this Certification are needed to comply with the more stringent New Jersey statutes and regulations. In accordance with 40 CFR 124.53 (e)(3), these conditions cannot be made less stringent and still comply with State water quality standards.

1. Any vessel covered under the VGP permit that operates in New Jersey waters may NOT discharge treated or untreated graywater into waters of New Jersey State within three nautical miles of shoreline. This limit is in effect regardless of the speed the vessel is traveling.
2. Any vessel covered under the VGP operating in New Jersey waters may not discharge bilge water into embayments, as designated in the VGP, or into NY-NJ Harbor (Newark Bay, Raritan Bay, Arthur Kill, Kill Van Kull, saline portions of the Passaic, Hackensack, and Hudson Rivers and saline portions of tributaries to all of these waters) and Delaware Bay regardless of speed the vessel is traveling.

### **6.22 New York:**

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

DEC certifies there is a reasonable assurance that discharges from vessels covered by the United States Environmental Protection Agency General Permit for discharges incidental to the normal operation of commercial vessels and large recreational vessels (VGP) will comply with the applicable provisions of 33 U.S.C §§ 1311, 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 the Certification are met.

The CWA’s “objective . . . is to restore and maintain the chemical, physical and biological integrity of the Nation’s waters (and) [i]n order to achieve this objective . . .

- (1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;
- (2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;
- (3) it is the national policy that the discharge of toxic pollutants in toxic amount be prohibited.

33 U.S.C. § 1251 (a). In addition, the Act requires that “[i]n order to carry out (its) objective . . . there shall be achieved

– not later than July 1, 1977, any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations (under authority preserved by section 1370 of this title) or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.

33 U.S.C. § 1311 (b)(1)(C). The CWA further requires that “water quality standard(s) shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based on such uses.” 33 U.S.C. § 1313(c)(2)(A). Moreover, EPA regulations implementing the Act’s requirements to “maintain” the chemical, physical, and biological integrity of the nation’s waters require States to include in their water quality standards an antidegradation policy. 40 C.F.R. 131.6(d); 40 C.F.R. 131.12. Among other aspects of the required antidegradation policy is the protection of existing uses, 40 C.F.R. 131.12(a)(1), defined as “those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” 40 C.F.R. 131.3(e).

New York Environmental Conservation Law (ECL) Article 17 is entitled “Water Pollution Control.” Its declaration of policy states:

It is declared to be the public policy of the state of New York to maintain reasonable standards of purity of waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of fish and wild life, including birds, mammals and other terrestrial and aquatic life, and the industrial development of the state, and to that end requires the use of all known available and reasonable methods to prevent and control the pollution of the waters of the state of New York.

ECL § 17-0101. Department regulations adopted pursuant to ECL Article 17 define “pollution” as follows:

Pollution means the presence in the environment of conditions and/or contaminants in quantities of characteristics that are or may be injurious to human, plant or animal life or to property or that unreasonably interfere with the comfortable enjoyment of life and property throughout such areas of the State as shall be affected thereby.

6 NYCRR § 700.1(a)(47). Both the CWA and the ECL define “pollutant” to include “biological materials”. 33 U.S.C. § 1362 (6); ECL § 17-0105 (17). The ECL further defines “pollutant” to include “ballast”. *Id.*

Pursuant to ECL Section 17-0301, DEC has developed water quality standards for the waters of New York State. Title 5 of ECL Article 17 makes unlawful any discharges that violate those water quality standards, providing that:

[i]t shall be unlawful for any person, directly or indirectly, to throw, drain, run or otherwise discharge into such waters organic or inorganic matter that shall cause or contribute to a condition in contravention of the standards adopted by the department pursuant to section 17-0301.

ECL § 17-0501. Department regulations adopted pursuant to ECL Article 17 broadly define effluent limitations that serve to, inter alia, control the discharges prohibited under ECL § 17-0501.

Effluent limitations mean any restriction on quantities, qualities, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into or allowed to run from an outlet or point source or any other discharge within the meaning of section 17-0501 of the Environmental Conservation Law into surface waters, groundwater or unsaturated zones.

6 NYCRR § 700.1(a)(15).

New York’s water quality standards establish classifications and designated uses of New York waters. 6 NYCRR Part 701. New York’s water quality standards also include the water quality criteria set forth at 6 NYCRR Part 703. Included therein is the criteria, that, for numerous identified classes of waters, limits the discharge of “toxic or other deleterious substances” to “none in amounts that will . . . impair the waters for their best usages.” 6 NYCRR § 703.2. The best usages of the classes of waters specified in 6 NYCRR § 703.2 include fish, shellfish and wildlife propagation and survival, fishing, drinking water supply, and primary and secondary contact recreation. Further, consistent with the requirements of the CWA, New York’s Water Quality Antidegradation Policy, implemented through State laws including ECL Article 17 and Department regulations adopted pursuant thereto, operates to ensure existing instream water uses and the level of water quality necessary to maintain and protect those existing uses. See DEC Organization and Delegation Memorandum No. 85-40, Water Quality Antidegradation Policy, September 9, 1985.

As further explained herein, Conditions #1-6 of this Certification are needed to assure compliance with the CWA and the provisions of New York State law set forth above. In accordance with 40 CFR § 124.53(e)(2), the CWA and State law provisions cited above form the basis for each of Conditions #1-6 of this Certification. In accordance with 40 CFR § 124.53 (e)(3) these conditions cannot be made less stringent and still comply with the requirements of State law, including State water quality standards. Since the requirements of New York State

law, including water quality standards, are more stringent than the protections the VGP would provide, this water quality certification is necessary.

This certification shall expire five years after the date of issuance of the EPA's VGP.

Note that all studies, reports, authorities and other documents cited herein are incorporated into this Certification by reference.

### **Certification Conditions for the VGP**

1. The operator of any vessel covered under the VGP whose voyage originates from within the exclusive economic zone<sup>8</sup> and enters New York waters with ballast on board, shall conduct ballast water exchange at least 50 nautical miles from shore and in water at least 200 meters in depth. Such vessels that carry only residual amounts of ballast water and/or sediments shall conduct saltwater flushing of their ballast water tanks, at least 50 nautical miles from shore and in water at least 200 meters in depth.

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 a 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 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 does not apply to vessel(s):**

- (i) that operate exclusively in the Great Lakes - St. Lawrence Seaway System upstream of a line drawn from Cap-de-Rosiers to West Point, Anticosti Island and then to the north shore of the St. Lawrence River along a meridian of longitude 63 degrees West, or
- (ii) operating exclusively within waters of New York Harbor and Long Island Sound, or
- (iii) entering New York waters from ports of call within New Jersey and Connecticut waters which are included in the definition of "waters of New York Harbor and Long Island Sound," provided that the vessel has met the requirements of this condition prior to entering the waters of New York Harbor and Long Island Sound, or
- (iv) that have met the requirements of Condition #2 or Condition #3, or

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<sup>8</sup> "Exclusive Economic Zone" (EEZ) means the area established by Presidential Proclamation Number 5030, dated March 10, 1983 (48 FR 10605, 3 CFR, 1983 Comp., p. 22) which extends from the base line of the territorial sea of the United States seaward 200 miles, and the equivalent zone of Canada. [source: 33 C.F.R. 151.2025]

- (v) that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or
- (vi) of the National Defense Reserve Fleet that are scheduled to be disposed of through scrapping or sinking.

This condition does not apply to the discharge of ballast 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. If a vessel is unable to conduct ballast water exchange, or flushing, as specified, 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 purposes of this condition, “waters of New York Harbor and Long Island Sound” means waters in and around New York City, consisting of the waters, tributaries, bays, harbors, inlets, coves, channels, and other waterways within Lower and Upper New York Bay, Jamaica Bay, Raritan Bay, Newark Bay, Hudson River south of the Tappan Zee Bridge, Harlem River, East River, Gravesend Bay, Flushing Bay, Eastchester Bay, the Kills, and Long Island Sound.

2. By not later than January 1, 2012, each vessel covered under the VGP that operates in New York waters, shall have a ballast water treatment system that meets the following standards, subject to the exceptions listed below.

(A) *Standard for organisms 50 or more micrometers in minimum dimension:* Any ballast water discharged shall contain less than 1 living organism per 10 cubic meters.

(B) *Standard for organisms less than 50 micrometers in minimum dimension and more than 10 micrometers in minimum dimension:* Any ballast water discharged shall contain less than 1 living organism per 10 milliliters.

(C) *Standards for indicator microbes:*

- (i) Any ballast water discharged shall contain less than 1 colony-forming unit of toxicogenic *Vibrio cholera* (serotypes O1 and O139) per 100 milliliters or less than 1 colony-forming unit of that microbe per gram of wet weight of zoological samples;
- (ii) Any ballast water discharged shall contain less than 126 colony-forming units of *escherichia coli* per 100 milliliters; and
- (iii) Any ballast water discharged shall contain less than 33 colony-forming units of intestinal enterococci per 100 milliliters.

**(D) This condition does not apply to vessel(s):**

- (i) operating exclusively within waters of New York Harbor and Long Island Sound. For purposes of this condition, “waters of New York Harbor and Long Island Sound” has the same meaning as in Condition #1, or
- (ii) that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

(iii) of the National Defense Reserve Fleet that are scheduled to be disposed of through scrapping or sinking.

No extensions will be made to this implementation date, unless an entity covered under the permit makes a request for an extension to the Department and can provide sufficient justification for such a request. Any such extension request shall state and demonstrate that: (1) there is a shortage in supply of the technology necessary to meet the limits set forth in this certification, or a vessel-specific engineering constraint, or other factor related to the availability and installation of technology beyond the vessel owner/operator's control, that delays the technology being available and installed in time to comply with this standard; (2) the unavailability of supply or installation constraint is the only reason the January 1, 2012 date cannot be met; and (3) the vessel has exhausted all other options to comply with this standard. Any extension request must be made no later than June 30, 2010, and the extension request shall indicate when the vessel will come into compliance with this deadline.

3. Each vessel constructed on or after January 1, 2013 that is covered under the VGP and operates in New York waters, shall have a ballast water treatment system that meets the following standards, subject to the exceptions listed below.

(A) *Standard for organisms 50 or more micrometers in minimum dimension:* Any ballast water discharged shall contain no detectable living organisms.

(B) *Standard for organisms less than 50 micrometers in minimum dimension and more than 10 micrometers in minimum dimension:* Any ballast water discharged shall contain less than 0.01 living organism per milliliter.

(C) *Standards for indicator microbes:*

- (i) Any ballast water discharged shall contain less than 1 colony-forming unit of toxicogenic *Vibrio cholera* (serotypes O1 and O139) per 100 milliliters or less than 1 colony-forming unit of that microbe per gram of wet weight of zoological samples;
- (ii) Any ballast water discharged shall contain less than 126 colony-forming units of *escherichia coli* per 100 milliliters; and
- (iii) Any ballast water discharged shall contain less than 33 colony-forming units of intestinal enterococci per 100 milliliters.

(D) *Standard for bacteria:* Any ballast water discharged shall contain less than 1,000 bacteria per 100 milliliters.

(E) *Standard for viruses:* Any ballast water discharged shall contain less than 10,000 viruses per 100 milliliters.

(F) For purposes of this condition, "Constructed" means a stage of vessel construction where:

- (i) the keel is laid; or
- (ii) construction identifiable with a specific vessel begins; or
- (iii) assembly of the vessel has commenced comprising at least 50 tonnes or 1 percent of the estimated mass of all structural material, whichever is less; or



(iv) the vessel undergoes a major conversion.

(G) In the context of this condition, “Major Conversion” means a conversion of a vessel;

(i) which changes its ballast water carrying capacity by 15 percent or greater; or

(ii) which changes the vessel type; or

(iii) which, in the opinion of the Department, is projected to prolong its life by ten years or more; or

(iv) which results in modifications to its ballast water system other than component replacement-in-kind.

**(H) This condition does not apply to vessel(s):**

(i) operating exclusively within waters of New York Harbor and Long Island Sound. For purposes of this condition, “waters of New York Harbor and Long Island Sound” has the same meaning as in Condition #1, or

(ii) that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or

(iii) of the National Defense Reserve Fleet that are scheduled to be disposed of through scrapping or sinking.

No extensions will be made to this implementation date, unless an entity covered under the permit makes a request for an extension to the Department and can provide sufficient justification for such a request. Any such extension request shall state and demonstrate that: (1) there is a shortage in supply of the technology necessary to meet the limits set forth in this certification or other factor related to the availability and installation of technology beyond the vessel owner/operator’s control, that delays the technology being available and installed in time to comply with this standard; (2) the unavailability of supply is the only reason the January 1, 2013 date cannot be met; and (3) the vessel has exhausted all other options to comply with this standard. Any extension request must be made no later than June 30, 2011, and the extension request shall indicate when the vessel will come into compliance with this deadline.

4. Effective January 1, 2012, any vessel covered under the VGP that operates in New York waters may not discharge treated or untreated graywater into New York waters within 3 nautical miles of shoreline, or within Long Island Sound or New York Harbor. This limit is in effect regardless of a vessel’s traveling speed.

No extensions will be made to this implementation date, unless an entity covered under the permit makes a request for an extension to the Department and can provide sufficient justification for such a request. Any such extension request shall state and demonstrate that: (1) there is a shortage in supply of the technology necessary to meet the limits set forth in this certification, or a vessel-specific engineering constraint or other factor related to the availability and installation of technology beyond the vessel owner/operator’s control, that delays the technology being available and installed in time to comply with this standard; (2) the unavailability of supply or installation constraint is the only reason the January 1, 2012 date cannot be met; and (3) the vessel has exhausted all other options to comply with this standard. Any extension request must be made no later than June 30, 2010, and the extension request shall indicate when the vessel will come into compliance with this deadline.

5. Effective January 1, 2012, any vessel covered under the VGP that operates in New York waters may not discharge treated or untreated bilge water into 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.

No extensions will be made to this implementation date, unless an entity covered under the permit makes a request for an extension to the Department and can provide sufficient justification for such a request. Any such extension request shall state and demonstrate that: (1) there is a shortage in supply of the technology necessary to meet the limits set forth in this certification, or a vessel-specific engineering constraint or other factor related to the availability and installation of technology beyond the vessel owner/operator's control, that delays the technology being available and installed in time to comply with this standard; (2) the unavailability of supply or installation constraint is the only reason the January 1, 2012 date cannot be met; and (3) the vessel has exhausted all other options to comply with this standard. Any extension request must be made no later than June 30, 2010, and the extension request shall indicate when the vessel will come into compliance with this deadline.

6. Pursuant to the Clean Water Act, the inclusion of a state water quality certification requirement in the draft VGP appropriately preserves the lawful authority of the individual States to implement more protective ballast water pollution controls as part of the EPA general permit within their respective waters. Pursuant to the Clean Water Act, the States also have the authority to adopt more stringent ballast water requirements than currently proposed under the draft VGP.

As part of New York's certification of the draft VGP, DEC finds that the additional discharge standards set forth as conditions in this certification letter are necessary to reduce the unintentional discharge of invasive species, disease organisms and other pollutants that have the potential to disrupt the ecological balance of New York's waters and negatively impact the fish and wildlife resources of the State, as well as other states, and to comply with the requirements of federal and State law, including State water quality standards.

The additional discharge standards set forth as conditions in this certification letter are necessary for the following reasons. First, there is overwhelming evidence that water quality, including fish, shellfish, and wildlife propagation and survival, has been impaired in recent decades in New York's waters by invasive species. Second, there is evidence that direct discharge of invasive species into New York waters is not a necessary condition for impairment by invasive species; discharges into adjacent, connected waters have severely impaired New York waters for their best usage such as fish, shellfish, and wildlife propagation and survival. Third, the above points provide a reasonable basis for inferring that water quality will be further impaired by additional, future introductions of invasive species and that impairments to New York's water quality will be caused by discharges of such species to adjacent, connected waters.

The ability of various invasive species to spread into adjacent, connected waters is well known. The zebra mussel is a prime example. This mussel, introduced in or near Lake St. Clair where it was discovered in 1988,<sup>9</sup> quickly spread into New York waters and throughout the Great Lakes and beyond. The rapid spread of the zebra mussel during the past twenty years can be seen, for example, on a series of maps available on the website of Sea Grant's National Aquatic Nuisance Species Clearinghouse.<sup>10</sup> As another example, the round goby was introduced into the St. Clair River in 1990, "probably via contaminated ballast water of transoceanic ships."<sup>11</sup> Following this discharge in adjacent, connected waters, the round goby has moved into New York waters and contributed to the impairment of these waters for their best usage such as fish, shellfish, and wildlife propagation and survival.<sup>12</sup> Round gobies "have shown a rapid range of expansion through the Great Lakes"<sup>13</sup> and have been found in the upper St. Lawrence River and the lower Genesee River, among other New York waters.<sup>14</sup> Yet another example is the spiny water flea, "first found in Lake Huron in 1984 – probably imported in the ballast water of a trans-oceanic freighter. Since then, populations have exploded and the animal can now be found throughout the Great Lakes and in some inland lakes,"<sup>15</sup> including New York waters.

As recognized by EPA,<sup>16</sup> the predominant pathway for aquatic invasive species entry into the Great Lakes is the ballast water of oceangoing ships.<sup>17</sup> Invasive species introduced into the Great Lakes from vessels' untreated ballast water discharges have created serious, damaging impacts that threaten the resource's ecological and economic health.<sup>18</sup> Because the Great Lakes contain fresh water, some of the most damaging ballast water- induced species are native to other fresh or brackish waters, particularly those in the Ponto-Caspian region (the Black, Caspian and Azov Seas).<sup>19</sup> These Ponto-Caspian invaders are now abundant in European waters used extensively by ships destined for the Great Lakes, and their continued invasion into the Lakes is considered highly probable.<sup>20</sup>

<sup>9</sup> NOAA, National Center for Research on Aquatic Invasive Species, Great Lakes Aquatic Nonindigenous Species List ([www.glerl.noaa.gov/res/Programs/ncrais/great\\_lakes\\_list.html](http://www.glerl.noaa.gov/res/Programs/ncrais/great_lakes_list.html)).

<sup>10</sup> New York Sea Grant, National Aquatic Nuisance Species Clearinghouse ([www.aquaticinvaders.org](http://www.aquaticinvaders.org)).

<sup>11</sup> Great Lakes Information Network, "Goby in the Great Lakes Region" ([www.great-lakes.net/envt/florafauna/invasive/goby.html](http://www.great-lakes.net/envt/florafauna/invasive/goby.html)).

<sup>12</sup> U.S. Geological Survey, Nonindigenous Aquatic Species (NAS) Program, Species Fact Sheet, "Apollonia (Neogobius) melanostomus (Pallas 1814); Common Name: round goby," (<http://nas.er.usgs.gov/queries/FactSheet.asp?speciesID=713>); M. Walsh et al., Occurrence and Food Habits of the Round Goby in the Profundal Zone of Southwestern Lake Ontario, 33 *J. of Great Lakes Research* 83 (2007).

<sup>13</sup> U.S. Geological Survey, Species Fact Sheet, op. cit..

<sup>14</sup> U.S. Geological Survey, Nonindigenous Aquatic Species (NAS) Program (<http://nas.er.usgs.gov/AlertSystem/default.asp>), NAS Alert System results for New York.

<sup>15</sup> Great Lakes Information Network, "Spiny Water Flea in the Great Lakes Region" ([www.greatlakes.net/envt/flora-fauna/invasive/spinyflea.html](http://www.greatlakes.net/envt/flora-fauna/invasive/spinyflea.html)); DEC, Spiny Flea Confirmed in First "Inland" Water (October 30, 2008).

<sup>16</sup> EPA, Aquatic Nuisance Species in Ballast Water Discharges: Issues and Options, 4, 6 (September 10, 2001), identified at 66 Fed. Reg. 49381 (September 27, 2001).

<sup>17</sup> E. Mills, et al., Exotic Species in the Great Lakes: A History of Biotic Crises and Anthropogenic Introductions, 19 *J. of Great Lakes Research* 1 (1993).

<sup>18</sup> E. Mills, et al., Exotic Species in the Great Lakes: A History of Biotic Crises and Anthropogenic Introductions, 10 *J. of Great Lakes Research* 1 (1993).

<sup>19</sup> 16 U.S.C. §4701(a)

<sup>20</sup> A. Ricciardi and H. MacIsaac, Recent Mass Invasion of the North American Great Lakes by Ponto-Caspian Species, 15 *Trends in Ecology and Evolution* 62 (2000).

<sup>21</sup> Id.

Such invasive species have competed with, preyed upon and otherwise altered the Great Lakes' environment, resulting in population declines and compromised species viability of the region's native plants, fish and wildlife.<sup>21</sup> They have harmed the region's commercial and recreational fishing industries and damaged its public water and energy generating infrastructure.<sup>22</sup> The insidious effects of these species have been costly to deal with and show no signs of dissipating. The harm caused by exotic nuisance species such as the zebra mussel, round goby, and spiny water flea in the Great Lakes is widespread.

For example, large zebra mussel populations reduce food and oxygen for native fauna, and have been observed completely covering native mussels and snails, threatening their survival.<sup>23</sup> The zebra mussel readily attaches to submerged hard surfaces including rocky shoals, water intake pipes and docks, forming dense layered colonies that have approached one million mussels per square meter.<sup>24</sup> Power companies and others must repeatedly remove mats of these mussels from their infrastructure. In addition, selective feeding by zebra mussels has been implicated in recurring nuisance algae blooms in the Great Lakes, causing taste and odor problems and increased treatment costs for municipal water supplies.<sup>25</sup> Congress estimates that the economic disruption to communities, just from the zebra mussel, has already cost billions of dollars.<sup>26</sup> The round goby, an invader from the Black and Caspian Seas, feeds on mollusks, crustaceans, and lake trout eggs and fry, injuring Great Lakes native species through competition for food and predation.<sup>27</sup>

Another exotic invader from the Black and Caspian Seas, the spiny water flea, rarely more than a centimeter in length, competes with newly hatched Great Lakes native fish populations by feeding on zooplankton. The sharp spines characteristic of the spiny water flea prevent most small fish from swallowing it, thereby allowing this invader to reach a disproportionate population abundance.<sup>28</sup>

Since 2000, significant mortality of lake sturgeon, Common Loon, Red-breasted Merganser, and other fish and waterbirds have been documented on Lake Erie. More recently, since 2002, similar mortality events have been noted, with increasing regularity, distribution and magnitude on Lake Ontario. Over the last three years Caspian Tern, and several other waterbird species, have been impacted. Nonnative invasive species, the

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<sup>21</sup> 16 U.S.C. §4701(a).

<sup>22</sup> *Id.*

<sup>23</sup> U.S. Dept. of the Interior, National Biological Survey, A. Benson, et al., "Invasion of the Zebra Mussel into the United States," *Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of U.S. Plants, Animals and Ecosystems*, 445-46 (1995).

<sup>24</sup> *Id.*; D. Pimentel, et al., *Environmental and Economic Costs of Non-Indigenous Species in the United States*, 50 *Bioscience* 53, 58 (2000).

<sup>25</sup> National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, *Aquatic Invasive Species (AIS) and the Great Lakes: Simple Questions, Complex Answers*, (September 2002).

<sup>26</sup> 16 U.S.C. §4701(a)(4).

<sup>27</sup> M.L. Corn et al., "Invasive Non-Native Species: Background and Issues for Congress," Congressional Research Service, Report for Congress, RL30123 (updated November 25, 2002); Michigan Dept. of Natural Resources, *Annual Report, State of the Great Lakes*, 32 (1993).

<sup>28</sup> Corn et al., *op. cit.*; Michigan Dept. of Natural Resources, *op. cit.*

quagga mussel and round goby, appear to be the biological transport mechanism bringing deadly Type E botulism toxin from the benthic environment to within foraging range of nesting and migrating waterbirds.<sup>29</sup>

Aquatic invasive species also pose a serious threat to the ecological health and biodiversity of native ecosystems of Long Island Sound and can affect the economic interests and public health of residents. To date, more than 50 non-native and 40 cryptogenic species have been identified in Long Island Sound.<sup>30</sup> The Asian shore crab, believed to have been introduced via ballast water discharge, was first found in the U.S. in 1988 in southern New Jersey and is now found from Maine to North Carolina.<sup>31</sup> The Asian shore crab arrived in New York Harbor and Long Island Sound in 1994 or 1995, and has since become the dominant crab in the intertidal zone in these areas, reaching densities greater than 300 per square meter in western Long Island Sound and causing population declines of native crabs such as common mud crab, green crab, and Atlantic rock crab. Atlantic rock crab has not been found since 1998, green crab densities have decreased 50% from 1998 to 2001, and common mud crab densities are down 96%. Overall, the diversity of the intertidal crab community in portions of western Long Island Sound have dropped greatly since 1998.<sup>32</sup>

In the Hudson River basin, at least 113 nonindigenous species have established populations.<sup>33</sup> Most came from Eurasia or the Mississippi-Great Lakes basin, and some are ballast-water invaders, many of which cause large economic damage and irreversible ecological changes. The best-known of these is the zebra mussel, which appeared in the Hudson in 1991 following introduction to the Great Lakes via ballast water. Zebra mussels now constitute more than half of consumer biomass in the river, and have completely altered the river's ecosystem by consuming 80% of the plankton in the river,<sup>34</sup> causing large declines in valuable open-water fish species such as American shad<sup>35</sup> and the destruction of hundreds of millions of native bivalves.<sup>36</sup> Economic costs of the zebra mussel invasion to water intakes alone have been estimated at \$267

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<sup>29</sup> K. Roblee, W. Stone and D. Adams, "Waterbird Mortality as a Result of Type E Botulism in Lake Erie and Lake Ontario," Northeast Natural History Conference IX, New York State Museum, Albany, NY (2006).

<sup>30</sup> Balcom, Nancy. 2007. Long Island Sound Interstate Aquatic Invasive Species Management Plan. New England Interstate Water Pollution Control Commission, US Environmental Protection Agency, Long Island Sound Study, State of Connecticut and New York State.

<sup>31</sup> Science Daily, Japanese Shore Crabs Invade Penobscot Bay, Maine, <http://www.sciencedaily.com/releases/2002/07/020719073146.htm> (July 19, 2002).

<sup>32</sup> Long Island Sound Study, 2001 Fall Update, <http://www.longislandsoundstudy.net/pubs/news/fall01txt.htm>.

<sup>33</sup> Mills, E., M. Scheuerell, D. Strayer and J. Carlton. 1996. Exotic Species in the Hudson River Basin: A History of Invasions and Introductions. 18 *Estuaries* 814-823.

<sup>34</sup> Strayer, D.L., N.F. Caraco, J.J. Cole, S. Findlay, and M.L. Pace. 1999. Transformation of freshwater ecosystems by bivalves: a case study of zebra mussels in the Hudson River. 49 *BioScience* 19-27.

<sup>35</sup> Strayer, D.L., K. Hattala, and A. Kahnle. 2004. Effects of an invasive bivalve (*Dreissena polymorpha*) on fish populations in the Hudson River estuary. 61 *Canadian Journal of Fisheries and Aquatic Sciences* 924-941.

<sup>36</sup> Strayer, D.L., and H.M. Malcom. 2007. Effects of zebra mussels (*Dreissena polymorpha*) on native bivalves: the beginning of the end or the end of the beginning? *Journal of the North American Benthological Society* 26: 111-122.

million in North America<sup>37</sup> and in the range of \$100,000-\$1,000,000 per year in the Hudson River alone.<sup>38</sup>

Other invaders that are thought to have arrived in ballast water have caused large ecological changes in the Hudson River; these include the Asian shore crab, now very common along the lower Hudson, where it displaces native crabs, the wedge rangia (*Rangia cuneata*), which dominates the waters of the lower Hudson, and the Chinese mitten crab, which appeared in numbers in the Hudson for the first time in 2008, and which has the potential to damage infrastructure (levees and embankments) as well as harm native populations of plants and shellfish.<sup>39</sup> Many other species now traveling around the world in ballast water (e.g., the golden mussel *Limnoperna fortunei*, the amphipod *Corophium curvispinum*, and the ruffe *Gymnocephalus cernuus*) would be able to survive and prosper in the Hudson, where they could contribute to further economic and ecological damage.<sup>40</sup>

Less stringent conditions than those set forth in this certification letter are not sufficient to prevent the impairment of New York's waters for their best usage such as fish, shellfish, and wildlife propagation and survival for the following reasons. As stated in a recent California report on ballast water standards, "Reports submitted as part of the IMO Convention suggest that the standards adopted by IMO would only be a marginal improvement on current management practices of ballast water exchange for the largest organisms (>50 µm) and may be similar to unmanaged ballast water for the smaller organisms (<50 µm) (Table V-1, MEPC 49/2/12003) (Section VII 'Scientific Considerations')." <sup>41</sup> These IMO standards – considered to be no more than a marginal improvement over the practice of ballast water exchange – are not included in this certification. The IMO standards are concentration-based, which is beneficial, yet they are not sufficiently protective. More stringent concentration-based standards are needed to protect New York's waters and are specified as conditions in this certification.

In general, concentration-based numerical discharge standards are needed as a replacement for ballast water exchange because the results of ballast water exchange are so highly variable<sup>42</sup> and therefore unprotective as an ongoing permit condition. As stated in the California report, "Concentration based standards...would specify a specific concentration of organisms that could be discharged following treatment, regardless of source port concentrations.... Concentration

<sup>37</sup> Connelly, N.A.; O'Neill, C.R.; Knuth, B.A. and Brown, T.L. 2007. Economic impacts of zebra mussels on drinking water treatment and electric power generation facilities. 40 *Environ. Mgmt.* 105-112.

<sup>38</sup> Strayer, D.L. 2006. Alien species in the Hudson River, pp. 296-310 in: J.S. Levinton and J.R. Waldman (eds.). *The Hudson River estuary*. Cambridge University Press.

<sup>39</sup> Id.; MacDonald, J.A., R. Roudez, T. Glover, and J.S. Weis, 2007, The invasive green crab and Japanese shore crab: behavioral interactions with a native crab species, the blue crab. 9 *Biological Invasions* 837-848; NOBANIS, 2008, Invasive species fact sheet. *Eriocheir sinensis*. [http://www.nobanis.org/files/factsheets/Eriocheir\\_sinensis.pdf](http://www.nobanis.org/files/factsheets/Eriocheir_sinensis.pdf).

<sup>40</sup> Ricciardi, A., 1998, Global range expansion of the Asian mussel *Limnoperna fortunei* (Dunker, 1857) (Bivalvia: Mytilidae): another fouling threat to freshwater systems, 13 *Biofouling* 97-106; Ricciardi, A., and J.B. Rasmussen, 1998, Predicting the identity of future biological invaders: a priority for aquatic resource management, 55 *Canadian Journal of Fisheries and Aquatic Sciences* 1759-1765.

<sup>41</sup> M. Falkner et al., "California State Lands Commission Report on Performance Standards for Ballast Water Discharges in California Waters," California State Lands Commission, Marine Facilities Division, January 2006, at 34.

<sup>42</sup> Id., esp. Fig. VII-1 at 18.

based standards allow for the consideration of both a protection level to reduce risk, as well as technical consistency, such as detection limits.”<sup>43</sup> Both New York and California routinely use concentration-based standards for protection of water and air quality.

The State of California recently promulgated relatively stringent concentration-based standards<sup>44</sup> that “encompass several...desirable characteristics: they are significantly better than ballast water exchange, they are in-line with the best professional judgment from the scientific experts participating in the IMO Convention, and they do approach a protective zero discharge standard.”<sup>45</sup> These standards are based primarily on recommendations made by U.S. government representatives participating in the IMO Convention<sup>46</sup> and were subsequently recommended by the California Performance Standards Advisory Panel in its Majority Report.<sup>47</sup> The standards, considered to be approximately a 1000-fold improvement over ballast water exchange,<sup>48</sup> provide a reasonable basis for protection of New York waters and are adopted as a condition (Condition #3) for new ships constructed after January 1, 2013 that operate in New York waters. New York finds that the standards set forth in Condition #3 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 set forth 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.

New York has set a reasonable compliance schedule for ships operating in New York waters and has allowed an additional year or more beyond the California implementation schedule. This additional time is intended to alleviate possible congestion problems for shipyards or possible supply problems for equipment vendors that might occur if simultaneous compliance were required in New York and California.

Other standards, considered to be approximately a 100-fold improvement over ballast water exchange, are adopted as a condition that must be met by all ships covered by the VGP that operate in New York waters after January 1, 2012. These standards are based partly on recommendations made by the International Study Group on Ballast Water and Other Ship Vectors<sup>49</sup> and partly on the widely discussed numeric limits proposed in the recent House of Representatives bill #H.R. 2830. The standards, which provide a reasonable basis for protection of New York waters and are implemented on a reasonable compliance schedule, are adopted as Condition #2 in this certification. New York finds that the standards set forth in Condition #2 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 set forth 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.

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<sup>43</sup> Id. at 16.

<sup>44</sup> California Title 2, Division 3, Chapter 1, Article 4.7, Performance Standards for the Discharge of Ballast Water For Vessels Operating in California Waters (2007).

<sup>45</sup> M. Falkner et al., op. cit., at 36-37.

<sup>46</sup> Id. at 19; Submission by the United States to IMO on Ballast Water Discharge Standards, Regulation D-2, document BWM/CONF/14 (2004).

<sup>47</sup> M. Falkner et al., op. cit., at 32; Report and Recommendations of the California Advisory Panel on Ballast Water Performance Standards, October 2005.

<sup>48</sup> M. Falkner et al., op. cit., at 19.

<sup>49</sup> Id.

It should be noted that this certification is only effective for the next five years. Since some period of time is required to allow vessels to install the technology needed to meet the conditions of this certification, the Department has sought to provide reasonable notice and time allowance. It is the Department's intention to apply the relatively stringent standards set forth in Condition #3 to all ships operating in New York waters in the next water quality certification to be filed after the expiration of this one.

Ballast water exchange or flushing, as already required by the VGP for many vessels, is widely recognized as a beneficial but imperfect way to reduce invasive species introductions in ballast water discharges. Condition #1 extends the requirement of exchange or flushing to certain other vessels that enter New York waters on coastal voyages, thereby reducing the likelihood of invasions from other coastal waters such as Chesapeake Bay. New York finds that the standards set forth in Condition #1 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 set forth 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.

Condition #4 and Condition #5 restrict discharges of bilge water and graywater in order to protect New York's coastal waters from contaminants, nutrients, and bacterial and viral agents. New York finds that the standards set forth in Condition #4 and Condition #5 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 set forth above. In accordance with 40 CFR 124.53 (e)(3), these conditions cannot be made less stringent and still comply with State water quality standards. It should be noted that the discharge of sewage is not covered by either this certification or the VGP because sewage discharge is governed by the Marine Sanitation Devices requirements of the Clean Water Act, 33 U.S.C. 1322.

### **6.23 Ohio:**

Ohio certified the VGP with the following additional permit conditions:

#### **I. WATER QUALITY STANDARDS AND IMPACTS**

##### **a. 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 does not adequately prevent the introduction of new non-indigenous species.



b. 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(D)].

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.

c. Chlorine Limits, Biocides and Experimental Ballast Water Treatment:

The discharge limits for residual chlorine do not meet Ohio WQS for continuous discharges. The federal NPDES permit’s total residual chlorine discharge standard is 100 ug/l for discharges from experimental ballst water treatment systems. This limit meets Ohio WQS for 2 hour/day 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 (less than 2 hours/day). This criterion for exposures less than 2 hours/day is 200 ug/l; the otherwise applicable criterion is 38 ug/l. [OAC 3745-1-35 and -36]

Discharges of other biocides must meet the narrative water quality standard for toxicity noted above. [OAC 3745-1-04(D)].

## II. SPECIFIC CONDITIONS

a. 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. A system of ballast water treatment 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)]

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.

Ohio EPA believes that the IMO certification is sufficient demonstration that these treatment standards are “practical and possible” methods for meeting ballast water treatment standards for ocean-going ships. More restrictive standards proposed or adopted by certain other states (such as California and New York) have not been demonstrated to be “practical and possible”, and can not be applied 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 than 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 is not “practical and possible” at this time for existing vessels operating exclusively within the Great Lakes;

These factors may or may not apply to new vessels in the Great Lakes. Ohio EPA is extending the schedule for treatment on new Great Lakes-only vessels to gain extra time to evaluate these discharges for treatment. The schedule for these new vessels is given below.

The treatment standards in Table A apply to vessels operating exclusively in the Great Lakes, launched after January 1, 2016.

Discharges of ballast water from vessels that operate outside of the Great Lakes must meet an International Maritime Organization-certified treatment standard according to the following schedule:

For vessels launched prior to January 1, 2012, 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 Table A by January 1, 2016.

For vessels launched after January 1, 2012, 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 Table A prior to commencement of vessel operation in Ohio State waters of Lake Erie.

Table A Biological Performance Standards for Ballast Water Treatment Technology

Parameter	Limit	Limit Type	Sample Type
Organisms >50 microns in minimum dimension	<10 viable /m <sup>3</sup>	Daily average	Composite
Organisms 10-50 microns in minimum dimension	<10 viable / ml	Daily average	Composite
Escherichia coliform	<250 cfu / 100 ml	Daily average	Composite
Intestinal enterococci	<100 cfu / 100 ml	Daily average	Composite

Note 1- Analysis required by the above table shall be performed consistent with the protocols currently being validated by the EPA Environmental Technology Verification

Program (EPA/U.S. Coast Guard/Naval Research Laboratory) and/or the following Great Ships Initiative protocols:

- Procedure for Algae/Small Protozoan Sample Analysis, Procedure for Zooplankton Sample Analysis, Procedure for the Detection and
- Enumeration of Enterococci by Membrane Filtration, Procedure for Microbial Analysis using the Heterotrophic Plate Count Method, and
- Procedure for the Detection and Enumeration of E. coli by Membrane Filtration available online at <http://www.nemw.org/GSI/protocols.htm>

“Composite” sample type is a combination of individual grab samples taken at periodic intervals over the specified time period. Either samples taken at equal time intervals shall be combined using a volume of each sample that is proportional to the flow that sample represents, or equal volume samples shall be combined that are taken at intervals of equal flow volumes.

“Viable organism” means organisms that are living and able to reproduce.

Until these standards are effective, all vessels shall meet the Best Management Practices (BMP) requirements of the federal NPDES Permit, including the salt water ballast exchange or salt water flushing requirements for ocean-going vessels.

In addition to the discharge standards in Table A, discharges of any biocide or toxic chemical shall not be toxic to organisms in ambient waters, or rapidly lethal within the mixing zone [OAC 3745-1-04(D)]:

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.

**b. Salt Water Discharges**

It is likely that discharges of ballasted sea water will not meet the toxicity narrative water quality standard if discharge 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.

c. Ballast Treatment - Chlorine Discharge Limits

For experimental ballast water treatment systems using chlorine, discharges must meet a maximum chlorine limit of 38 micrograms per liter (ug/l) if the discharge lasts for more than 2 hours/day; the limit is 200 ug/l if the discharge is 2 hours/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(B)(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.

Ohio EPA acknowledges that the limit of 38 ug/l is less than the Ohio EPA practical quantification level for residual chlorine analysis (50 ug/l). Analyses less than or equal to 50 ug/l are judged to be in compliance with this certification.

d. Ballast Treatment- Other Biocides

Biocides other than chlorine 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.

## 6.24 Pennsylvania:

Pennsylvania certified the VGP with the following additional permit conditions:

This certification shall expire five years after the date of issuance of the EPA's VGP. However, the Department reserves the right to amend, modify or withdraw certification of the VGP in order to protect the waters of the Commonwealth or if for any reason further changes to the draft VGP are made upon issuance of the final VGP. Furthermore, the Department reserves the right to modify this Certification to require vessels covered by the VGP to install and operate ballast water treatment systems to prevent the discharge of aquatic nuisance species to Pennsylvania waters provided a determination is made by the Department that such ballast water treatment systems are necessary, available and cost effective.

The issuance of the Certification does not authorize violation of any federal, state and local laws or regulations, nor does it rule out the necessity of obtaining applicable permits, including any other Department permits, or approvals from other units of government as may be required by law.

### Certification Conditions for the VGP

1. The operator of any vessel covered under the VGP whose voyage originates from within the United States exclusive economic zone and enters Pennsylvania waters with ballast on board, shall conduct ballast water exchange at least 50 nautical miles from shore and in water of at least 200 meters in depth. Such vessels that carry only residual amounts of

ballast water and/or sediments shall conduct saltwater flushing of their ballast tanks at least 50 nautical miles from shore and in water of at least 200 meters in depth.

Ballast water exchange is defined as at least one empty and refill cycle of each ballast tank of a vessel that contains ballast water, resulting in a salinity level of at least 30 parts per thousand (ppt). If the master of a 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 ballast water in ballast tanks of the vessel, resulting in a salinity level of at least 30 ppt.

All vessels entering Pennsylvania waters must maintain a salinity level in each tank onboard the vessel of at least 30 ppt.

**This condition does not apply to vessels:**

- (i) that operate exclusive in the Great Lakes, or
- (ii) operate exclusively within waters of Pennsylvania, or
- (iii) enter Pennsylvania waters from ports of call on the Delaware River within the States of New Jersey and Delaware, provided that the vessel has met the requirements of this condition prior to entering waters of Pennsylvania, or
- (iv) have met the requirements of Condition No. 2, or
- (v) that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge,
- (vi) of the Armed Forces, or
- (vii) of the National Defense Reserve Fleet.

This condition does not apply to the discharge of ballast water if the master of the vessel reasonably 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 the operator of a vessel is unable to conduct ballast water exchange or flushing as specified due to serious safety concerns as stated above, the operator of any such vessel with ballast on board shall take reasonable measures to avoid discharge of organisms in ballast water and shall inform the Department and EPA in writing of the measures taken

2. By no later than January 1, 2016, each vessel covered under the VGP that operates in Pennsylvania waters and is constructed prior to January 1, 2012 shall have a ballast water treatment system that meets the following IMO standards, subject to the exceptions listed below.
  - (A) *Standard for organisms 50 or more micrometers in minimum dimension:* Any ballast water discharged shall contain less than 10 viable organisms per cubic meter.
  - (B) *Standard for organisms less than 50 micrometers in minimum dimension and 10 or more micrometers in minimum dimension:* Any ballast water discharged shall contain less than 10 viable organisms per milliliter.

- (C) *Standards for indicator microbes:*
- i. Any ballast water discharged shall contain less than 1 colony-forming unit (cfu) of toxicogenic *Vibrio cholera* (serotypes O1 and O139) per 100 milliliters or less than 1 colony-forming unit of that microbe per gram of wet weight of zoological samples;
  - ii. Any ballast water discharged shall contain less than 250 colony-forming units of *Escherichia coli* per 100 milliliters; and
  - iii. Any ballast water discharged shall contain less than 100 colony-forming units of intestinal enterococci per 100 milliliters.
- (D) *This condition does not apply to vessels:*
- i. Operating exclusively within waters of Pennsylvania, or
  - ii. That carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or
  - iii. Of the Armed Forces, or
  - iv. Of the national Defense Reserve Fleet, or
  - v. Operating exclusively within Lake Erie.

If compliance with this condition can't be achieved immediately, the permittee may request an extension from the Department and EPA within six months of the issuance of the VGP to comply with this condition. The request shall provide written justification for an extension and shall demonstrate there is a shortage in supply of technology necessary to meet the limits set forth in this certification, or indicate a vessel specific engineering constraint that must be addressed, or demonstrate another factor related to the availability and installation of technology and parts is beyond the vessel owner/operator's control, or provide reasoning for a delay in the technology being available and installed in time to comply with this condition.

3. Each vessel covered under the VGP that operates in Pennsylvania waters and is constructed after January 1, 2012 shall have a ballast water treatment system that meets the following standards, subject to the exceptions listed below.
  - (A) *Standard for organisms 50 or more micrometers in minimum dimension:* Any ballast water discharged shall no detectable living organisms.
  - (B) *Standard for organisms less than 50 micrometers in minimum dimension and 10 or more micrometers in minimum dimension:* Any ballast water discharged shall contain less than .01 viable organisms per milliliter.
  - (C) *Standards for indicator microbes:*
    - i. Any ballast water discharged shall contain less than 1 colony-forming unit (cfu) of toxicogenic *Vibrio cholera* (serotypes O1 and O139) per 100 milliliters or less than 1 colony-forming unit of that microbe per gram of wet weight of zoological samples;
    - ii. Any ballast water discharged shall contain less than 126 colony-forming units of *Escherichia coli* per 100 milliliters; and
    - iii. Any ballast water discharged shall contain less than 33 colony-forming units of intestinal enterococci per 100 milliliters.

- (D) *Standards for bacteria:* Any ballast water discharged shall contain less than 1,000 bacteria per 100 milliliters.
- (E) *Standards for viruses:* Any ballast water discharged shall contain less than 10,000 viruses per 100 milliliters.
- (F) *This condition does not apply to vessels:*
- i. Operating exclusively within waters of Pennsylvania, or
  - ii. That carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or
  - iii. Of the Armed Forces, or
  - iv. Of the national Defense Reserve Fleet, or
  - v. Operating exclusively within Lake Erie.

If compliance with this condition can't be achieved immediately, the permittee may request an extension from the Department and EPA within six months of the issuance of the VGP to comply with this condition. The request shall provide written justification for an extension and shall demonstrate there is a shortage in supply of technology necessary to meet the limits set forth in this certification, or indicate a vessel specific engineering constraint that must be addressed, or demonstrate another factor related to the availability and installation of technology and parts is beyond the vessel owner/operator's control, or provide reasoning for a delay in the technology being available and installed in time to comply with this condition.

4. The permittee may not discharge floating materials, oil, grease, scum, foam, sheen and substances which produce color, taste, turbidity or settle to form deposits in concentrations or amounts sufficient to be, or creating a danger of being, inimical to the water uses to be protected or to human, animal, plant or aquatic life.

The conditions set forth in this certification letter are necessary to ensure compliance with the requirements of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.1 – 691.1011) as well as to reduce water degradation, unintentional discharge of invasive species, nutrient loading, disease organisms and other pollutants discharged from vessels covered by the VGP that have the potential to disrupt the ecological balance of Pennsylvania's waters and the Great Lakes and negatively impact the fish and wildlife resources of this Commonwealth.

## **6.25 Rhode Island:**

Rhode Island certified the VGP with the following additional permit conditions:

1. In accordance with the Rhode Island Water Quality Regulations (including but not limited to Rule 17) and all other applicable laws and regulations, the Director may modify, suspend, or revoke, in whole or in part this water quality certification for a specific vessel that is authorized or is seeking authorization to discharge under the VGP.
2. In accordance with the Rhode Island Water Quality Regulations (including but not limited to Rule 17) and all other applicable laws and regulations, the Director may modify, suspend, or revoke, in whole or in part this water quality certification for the VGP.
3. Nutrient impaired waters shall be those referenced in the State's most current 303D list.

4. A map identifying all nutrient impaired waters and biodiversity-impaired waters within the State of Rhode Island shall be included in all permits issued under this general permit.

5. This Water Quality Certificate shall expire five (5) years from the date of issuance.

### **6.26 Utah:**

Utah certified the VGP subject to the following additional permit conditions:

The 2008 Utah Legislature passed the Aquatic Invasive Species Interdiction Act (S.B. 238) and subsequently the Utah Wildlife Board passed associated rule (R657-60, Aquatic Invasive Species Interdiction), both with a purpose to define procedures and regulations designed to prevent and control the spread of aquatic invasive species, particularly *Dreissena* mussels, within the State of Utah. The aforementioned act and rule establish a situation in Utah that is more restrictive than the Vessel General Permits. It is unlawful to possess or transport *Dreissena* mussels within the State of Utah. Additionally, all boats having been used anywhere within the last 30 days on a *Dreissena* mussel infested water, either marine or fresh, and subsequently launching on any waters in Utah must certify prior to launch that they have been properly decontaminated. Launch is denied until certification can be met. The only two accepted decontamination protocols in Utah as per Rule R657-60 are as follows:

#### Do-it-yourself Decontamination

- Clean all plants, fish, mussels and mud from boat or equipment before leaving water body area (discard unused bait in the trash where you fished);
- Drain all water from boat (equipment storage areas, ballast tanks, bilge, livewells and motor) before leaving water body area;
- Dry boat and equipment at home or at suitable storage area (7 days summer, 18 days spring and fall, and 30 days winter or expose boat and equipment to freezing conditions for a continuous 72 hour period) prior to another launch.

#### Professional Decontamination

- Use a professional to apply scalding water (140<sup>0</sup> Fahrenheit) to wash equipment, boat and trailer and to flush equipment storage areas, ballast tanks, bilge, livewells and motor or other raw water circulation systems.

Either of the aforementioned decontamination protocols will kill aquatic invasive species either already inhabiting Utah or threatening to arrive, including adult, juvenile and microscopic life forms.

In the State of Utah it is unlawful to discharge any volume of water, which is laden with viable aquatic invasive species, into any waters within the State of Utah. Thus, any discharge for any volume of ballast, bilge or other raw water suspected of harboring aquatic invasive species must not occur unless it has been heated to at least 140<sup>0</sup> Fahrenheit. Since ballast and bilge waters frequently contain other undesirable materials (e.g. oil and grease, solvents and soaps, etc.), it is



preferable that such water discharges be made onshore into an appropriate, approved wastewater treatment system. If there are any questions regarding these procedures related to the control of invasive aquatic species please contact the Utah Division of Wildlife Resources.

Lake Powell has been designated as a "no discharge" waterbody by the National Park Service. As such, there will be no discharge of wastewater, treated or untreated, within the legal boundary of Lake Powell.

#### **6.27 Vermont:**

Vermont certified the VGP subject to the following additional permit conditions:

1. This Certification is valid only for those activities that fully comply with all terms and conditions of the Vessel General Permit 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.
2. Discharges that are not eligible for coverage under the Vessel General Permit and that require an individual permit must obtain an individual Water Quality Certification or waiver from the Department.
3. This Water Quality Certification shall be valid until such time as the Vessel General Permit is modified, suspended, revoked or reissued.
4. 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 from other governmental entities.
5. This Water Quality Certification may be revoked or modified if it is found, in the opinion of the Department, that the process and conditions of the Vessel General Permit do not achieve compliance with the Vermont Water Quality Standards and other applicable provisions of state law.

#### **6.28 Wyoming:**

Wyoming certified the VGP subject to the following additional conditions:

In accordance with the provisions of the state certification program for boating activities and discharges incidental to the normal operation of vessels, this office has reviewed the proposed nationwide permits and had made the following determinations:

In view of the current state water quality standards and regulations, we have found that the nationwide permits are acceptable as written with the stipulation that certification of permits for eligible large (over 79 feet in length) and commercial vessels operating within Class 1 waters must be deferred for agency review and public notice. For all eligible small recreational vessels

and those large and commercial vessels operating outside of Class 1 waters, we waive our right to individually certify.

### **DEFERAL OF CERIFICATION ON CLASS 1 WATERS**

Class 1 waters are defined in Chapter 1 of the Wyoming Water Quality Rules and Regulations as those in which no further water quality degradation by point source discharges other than from dams will be allowed. Nonpoint source discharges will be controlled by the implementation of the best management practices designed to maintain existing water quality. Because of the high level of protection afforded to these waters by the regulations, authorization of the activities covered by the above Nation Wide Permits (NWP) requires individual departmental review.

Therefore, 401 certification for NWP, Vessel General Permit Discharges Incidental to the Normal Operation of Commercial Vessels and Large Recreational Vessels (VGP) is deferred when operation occurs on Wyoming Class 1 waters. This nationwide permit is certified for use on Wyoming class 2, 3, and 4 waters (all other waters) provided that the general conditions, management practices, and other provisions of the nationwide program are strictly followed.

The following is a listing of current class 1 waters in Wyoming:

1. All surface waters located within the boundaries of national parks and congressionally designated wilderness areas as of January 1, 1999;
2. The main stem of the Snake River through its entire length about U.S. Highway 22 Bridge (Wilson Bridge);
3. The main stem of the Green River, including the Green River Lakes from the mouth of the New Fork River upstream to the wilderness boundary;
4. The main stem of the Wind River from the Wedding of the Waters upstream to Boysen Dam;
5. The main stem of the North Platte River from the mouth of Sage Creek (approximately 15 stream miles downstream of Saratoga, Wyoming) upstream to the Colorado state line;
6. The main stem of the North Platte River from the headwaters of Pathfinder Reservoir upstream to Kortez Dam (Miracle Mile segment);
7. The main stem of the North Platte River from the Natrona County Road 309 bridge (Goose Egg bridge) upstream to Alcova Reservoir;
8. The main stem of Sand Creek above the U.S. Highway 14 bridge;
9. The main stem of the Middle Fork of the Powder River through its entire length above the mouth of Buffalo Creek;
10. The main stem of the Tongue River, the main stem of the North Fork of the Tongue River, and the main stem of the South Fork of the Tongue River above the U.S. Forest Service Boundary;
11. The main stem of the Sweetwater River above the mouth of Alkali Creek;
12. The main stem of the Encampment River from the northern U.S. Forest Service boundary upstream to the Colorado state line;
13. The main stem of the Clarks Fork River from the U.S. Forest Service Boundary upstream to the Montana state line;
14. All waters within the Fish Creek (near Wilson, Wyoming) drainage;

15. The main stem of Granite Creek (tributary to the Hoback River) through its entire length;
16. Fremont Lake;
17. Wetlands adjacent to the above listed Class 1 waters.

#### WAIVED 401 CERTIFICATION

State Certification of General Permit for Discharges Associated with Recreational Vessels is waived. The Wyoming Department of Environmental Quality certifies that these permits are acceptable as described above. The Department also reserves the right to amend, modify, suspend or revoke this certification or any of its terms or conditions as may be appropriate or necessary to protect water quality and associated beneficial uses. Upon adoption of updated standards, this certification may be revoked and modified appropriately.

Please be aware that this letter constitutes state certification of these permits as required by Section 401 of the federal Clean Water Act. It does not provide an exemption from any other federal, state or local laws or regulations, nor does it provide exemption from legal action by private citizens for damage to property which the activity may cause.