



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 28, 2012

David M. Webster
Chief, Industrial Permits Branch
Office of Ecosystem Protection
U.S. Environmental Protection Agency - Region 1
1 Congress Street - Suite 1100
Boston, MA 02114-2023

**RE: 401 Water Quality Certification – (Draft) Small Vessel General Permit (sVGP) and (Draft) Vessel General Permit, (VGP) Request for Clean Water Act Section 401 Certification
WQC File No. 12-017**

Dear Mr. Webster:

The Rhode Island Department of Environmental Management, Office of Water Resources has reviewed the above referenced Permits for compliance with Section 401 of the Clean Water Act and Rhode Island's State Water Quality Regulations (Chapter 42-35 pursuant to Chapters 46-12 and 42-17.1 of the Rhode Island General Laws of 1956, as amended.

The USEPA has requested that the state review the conditions and stipulations contained in both the draft Small Vessel General Permit (sVGP) and the draft Vessel General Permit (VGP) respectively, entitled "Proposed Small Vessel General Permit (sVGP)" and Proposed 2013 Vessel General Permit (VGP)." The draft sVGP sets forth conditions and requirements pertaining to discharges from vessels covered by the EPA's National Pollutant Discharge Elimination system (NPDES) for discharges incidental to the normal operation of commercial vessels less than 79 feet in length. The draft VGP sets forth conditions and requirements pertaining to discharges from vessels covered by the EPA's National Pollutant Discharge Elimination System (NPDES) for discharges incidental to the normal operation of commercial and non-commercial vessels greater than or equal to 79 feet in length.

It is the determination of the Water Quality Certification Program that said respective draft Permit conditions for both the sVGP and the VGP are in compliance with the requirements of Section 401 of the Clean Water Act and the State Water Quality regulations provided that the vessels comply with the above referenced general permit documents and the following conditions:

Small Vessel General Permit Conditions:

1. The conditions in the draft sVGP cannot be made less stringent without violating water quality standards and other requirements of Rhode Island State Law (See 40 CFR 124.53(e)(3).

Vessel General Permit Certification Conditions:

The Department finds that the conditions in the draft VGP cannot be made less stringent without potentially violating water quality standards and other requirements of State law, and also establishes other conditions more stringent than those contained in the draft VGP that are needed to meet the requirements of either the Clean Water Act and the Rhode Island Water Quality Regulations for Water Pollution Control, amended December 2010 adopted in accordance with Chapter 42-35 pursuant to Chapters 46-12 and 42-17.1 of the Rhode Island General Laws of 1956, as amended. The purpose of the more stringent conditions below is to comply specifically with Rule 8.D.(1)(a) of the RI Water Quality Regulations which state that

“At a minimum, all waters shall be free of pollutants in concentrations or combinations or from anthropogenic activities subject to these regulations that:

- i. Adversely affect the composition of fish and wildlife;
- ii. Adversely affect the physical, chemical, or biological integrity of the habitat;
- iii. Interfere with the propagation of fish and wildlife;
- iv. Adversely alter the life cycle functions, uses, processes and activities of fish and wildlife; or
- v. Adversely affect human health”

Given that the courts have upheld that ballast water contains pollutants (*Northwest Environmental Advocates vs. EPA, 2008*) and that ballast water has the potential to spread invasive species, disease organisms and other pollutants that have the potential to disrupt the ecological balance of Rhode Island’s waters, the Department finds that the conditions in the draft (and final) VGP cannot be made less stringent without violating water quality standards and other requirements of State law and the requirements of the Clean Water Act or Rhode Island State Law (See 40 CFR 124.53 (e)(2) and (3)). Additionally, studies show¹ that more stringent conditions than the draft VGP are required in order to reduce the unintentional discharge of invasive species contained ballast water.

Conditions More Stringent than the Conditions Contained in the Draft VGP:

1. The operator of any vessel covered under the draft VGP whose voyage originates outside the exclusive economic zone (EEZ) and enters Rhode Island waters shall conduct ballast water exchange or flushing beyond the EEZ, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth. These requirements remain in effect *regardless of whether the*

¹ Most of the water and most of the organisms carried in a vessel’s ballast tanks are physically expelled during mid-ocean exchange or flushing, and many of the remaining organisms are then killed by salinity shock (osmotic stress) from the ocean water with which the ballast tanks are refilled. See paper submitted by Canada to the IMO, BLG 15/5/7, S.A. Bailey et al., “Evaluating Efficacy of an Environmental Policy to Prevent Biological Invasions,” *Environ. Sci. Technol.* 45, 2554–61 (2011), at 2557 and 2559, paragraphs 8 and 9; S.A. Bailey et al. (2011), *op. cit.*, at 2555-56. In our existing certification dated 2008, we indicated that ballast water exchange produces variable results and is “therefore unprotective as an ongoing permit condition;” however, the effectiveness of exchange and flushing has been (re)confirmed by recent work. See S.A. Bailey et al. (2011), *op. cit.*, E. Briski et al., Efficacy of ‘saltwater flushing’ in protecting the Great Lakes from biological invasions by invertebrate eggs in ships’ ballast sediment, *Freshwater Biology* 55, 2414-2424 (2010); S. Ellis and H. MacIsaac, Salinity tolerance of Great Lakes invaders, *Freshwater Biology* 54, 77-89 (2009); S. Santagata et al., Effects of osmotic shock as a management strategy to reduce transfers of non-indigenous species among low-salinity ports by ships, *Aquatic Invasions* 3, 61-76 (2008); D.F. Reid et al., Identifying, Verifying, and Establishing Options for Best Management Practices for NOBOB Vessels, Final Report, NOAA (June 2007).

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

This condition adds no new requirement or deadline for ballast water treatment. The requirements and deadlines for ballast water treatment are those specified in the draft VGP, Section 2.2.3.5 and Table 6. However, in addition to meeting the requirements in Section 2.2.3.5 and Table 6, vessel operators will need to continue performing exchange or flushing. This condition does not apply to vessels that either have no ballast tanks or that carry only permanent ballast water, all of which is contained in sealed tanks that are not subject to discharge, or that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft VGP in their ballast tanks.

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

The above condition combines water quality protection with operational flexibility. They provide flexibility to the industry by allowing further development of treatment technology and testing protocols. While not a mandatory requirement, the Department urges vessel permittees to voluntarily install currently available technologies that go beyond the IMOD-2 standard (e.g., systems that have demonstrated the ability to meet and exceed a 10X IMO level of treatment) as a means of gaining useful experience while contributing to the advancement of treatment technology.

2. The discharge of bilge water from any vessel covered under the draft VGP whose voyage originates outside the exclusive economic zone (EEZ) shall discharge all existing bilge water prior to entering Rhode Island waters. This condition does not apply to the discharge of bilge water if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant conditions. If the operator of the vessel (originating outside of the EEZ) is unable to discharge their bilge water prior to entering Rhode Island waters, the operator is prohibited from discharging bilge water within Rhode Island waters.

The Department finds that this condition is necessary to protect the ecological integrity of RI waters from the discharge of invasive species within bilge water. The BMP's required within the draft VGP include prohibitions on releases of certain chemicals, including dispersants,

detergents, emulsifiers, chemicals, and other substances; however it has been demonstrated² that bilge water is a significant vector for transporting invasive species. The Department has added this condition but isolated it to those vessels that originate outside of the EEZ since the prohibition is intended to restrict the discharge of invasive species to Rhode Island waters.

3. In addition to meeting the draft VGP monitoring requirements in Section 2.2.3.5.1.1.4, all vessels covered under the VGP and operating in Rhode Island waters, after a Ballast Water Treatment System is installed, must sample and analyze the ballast water discharge at least once a year (provided appropriate facilities are available), using the California shipboard sampling protocol, or a compliance monitoring protocol developed by the USCG, whichever is most advanced and available. The monitoring results shall be submitted to EPA and the Department on an annual basis, consistent with the mechanisms used in the VGP for all other submissions. Coordination of sampling/monitoring shall be directed to Kevin Cute of the RI Coastal Resources Management Council. Such live organism monitoring shall include the collection of representative discharge samples and the testing (counting) of live organisms in such samples by qualified personnel in accordance with standard and/or best available sampling and analytical methods. In addition to EPA submissions, the applicant must submit all sampling results to the Office of Water Resources, RI Department of Environmental Management.
4. Graywater discharges to nutrient and pathogen impaired waters from vessels subject to the VGP covered under this permit shall be managed in accordance with Section 2.2.15 of the VGP. All requirements applied to special waters listed in Appendix G of the dVGP apply to Rhode Island waters that are impaired for nutrients and/or pathogens. A specific list identifying impaired waters within the State of Rhode Island is available at <http://www.dem.ri.gov/pubs/305b/index.htm>. This website contains the most recent Integrated Water Quality Monitoring and Assessment Report which shall be used to identify the impaired waterbodies. Specifically, appendixes Category 4A (Impaired but TMDL has been completed) and Category 5 (303{d} listed and impaired). This is necessary to comply with Rule 9b (no further degradation of low quality waters) of the State Water Quality Regulations. This condition shall also support the "No Discharge Area designation of state waters pursuant to Section 312-(f)(3) of Public Law (Federal Water Pollution Control Act) and 92-500 as amended.

General Conditions for both the sVGP and the VGP:

1. Violation of the terms and conditions of this Certification may result in violation of the State's Water Quality Regulations and appropriate enforcement action.
2. This Water Quality Certification does not relieve your obligation to obtain any other applicable local, state, and federal permits prior to actively issuing sVGP and VGP permits.
3. This Water Quality Certification shall expire five (5) years from the date of issuance.

² *Muir, Adrianna A. PhD*, California Research Bureau, Managing Coastal Aquatic Invasive Species in California: Existing Policies and Policy Gaps: Requested by Senate Natural Resources and Water Committee; January 2011. CRB 11-001

4. 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.

In addition to any necessary enforcement actions stemming from the violation of any of the terms or conditions of this Water Quality Certificate, issuance of this Water Quality Certificate does not bar the Department, or any of its various Divisions, from instituting any investigation and /or enforcement actions that it may deem necessary for violations of any and all applicable statutes, regulations and/or permits, including but not limited to violations of the terms or conditions of any previous Water Quality Certificate(s) issued to you as an applicant or for this site.

This is the State's Water Quality Certification, which shall have the full force and effect of a permit issued by the Director. Violation of the terms and conditions of this Certification may result in violation of the State's Water Quality Regulations and appropriate enforcement action.

Sincerely,



Angelo S. Liberti III, P.E., Chief
Surface Water Protection

ec: Margaret McGrath, Programming Services Officer, Office of Boating, RIDEM
Grover Fugate, RI CRMC
Kevin Cute, RI CRMC
John Torgan, The Nature Conservancy
Tom Kutcher, Save the Bay
Edward LeBlanc, U.S. Coast Guard
Howard McVay, RI Pilots Association
Robert Rheault, PhD
Marissa DeSautel, RIDEM
Tom Rich, Chairman, RIMTA