

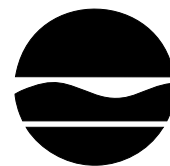
New York State Department of Environmental Conservation

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Joe Martens
Commissioner

September 26, 2012

Mr. John Filippelli, Director
Division of Environmental Planning and Protection
United States Environmental Protection Agency
290 Broadway, 25th Floor
New York, New York 10007-1866

Re: Clean Water Act Section 401 Certification for 2013
Commercial and Large Recreational Vessel General Permit
and Small Vessel General Permit

Dear Mr. Filippelli:

This Certification is issued by the New York State Department of Environmental Conservation (Department) pursuant to Section 401 of the Federal Clean Water Act (CWA or Act), 33 U.S.C. §1341, in response to your letter of December 16, 2011 to Mr. William R. Adriance, Chief Permit Administrator, Division of Environmental Permits, and is based on the information and materials available at <http://cfpub.epa.gov/npdes/vessels/vgpermit.cfm> and, or included in Docket ID No. EPA-HQ-OW-2011-0141, available at <http://www.regulations.gov>. Please note that Mr. Adriance has retired, and I am responding as the Chief Permit Administrator for the Department.

The Department certifies there is a reasonable assurance that discharges from vessels covered by the EPA's National Pollutant Discharge Elimination System (NPDES) Vessel General Permit (VGP) for discharges incidental to the normal operation of commercial and non-commercial vessels greater than or equal to 79 feet in length, and the NPDES Small Vessel General Permit (sVGP), 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 this Certification are met.

Small Vessel General Permit Certification Conditions

The conditions in the draft sVGP cannot be made less stringent without violating water quality standards and other requirements of State law. See 40 CFR 124.53 (e)(3). The Department has not identified any additional conditions that are needed to meet the requirements of either the

CWA or New York State Law, provided the conditions of the final sVGP are at least as stringent as the conditions of the draft sVGP. The Department finds that EPA's supporting analysis has shown that the requirements of the sVGP is sufficiently protective of New York's waters.

Vessel General Permit Certification Conditions

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

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

All studies, reports, authorities and other documents cited herein, including the Department's Fact Sheet dated 2012, are incorporated into this Certification by reference.

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

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

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

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

Conditions more stringent than those contained in the draft VGP:

2. Exchange and flushing for voyages originating beyond the exclusive economic zone (EEZ).

The operator of any vessel covered under the VGP whose voyage originates outside the exclusive economic zone and enters New York waters shall conduct ballast water exchange or flushing beyond the EEZ¹, at least 200 nautical miles from any shore, and in water at least 2,000 meters in depth, resulting in a salinity level of at least 30 parts per thousand (ppt). These requirements remain in effect regardless of whether the vessel is equipped with a ballast water treatment system.

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

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

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

This condition does not apply to vessels:

¹ "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]

- a. that either have no operable ballast tanks or that carry only permanent ballast water, all of which is in sealed tanks that are not subject to discharge, or
- b. that carry only potable water that meets the requirements of section 2.2.3.5.1.3 of the draft VGP in their ballast tanks.

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

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

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

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

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

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

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

- b. During cargo operations while accounting for boom list, hull stress, and bending moments, lighten the ship as much as practical to elevate water intakes before ballasting to minimize sediment uptake and increase water flow.
- c. Ballast water taken aboard in Viral Hemorrhagic Septicemia (VHS) affected waters shall be the minimum needed to ensure the safety of the crew and vessel. Additional ballast water can be taken aboard, once deeper water is reached.
- d. Ballast water shall always be taken aboard or discharged via the pumps and never “gravity fed or drained.” This ensures an organism that somehow makes it past the screen is pulverized by the high speed, high pressure, and tight tolerance pump.

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

- e. The temperature range in which the VHS virus is known to replicate, and in which fish kills have been detected, is quite broad (37°F - 70°F [3°C - 21°C]). Since this range encompasses the majority of water temperatures found in the Great Lakes throughout the year, New York State recommends following this supplemental BMP regardless of water temperatures.
 - i. In order for the VHS disease to spread, an uninfected, yet vulnerable fish must be exposed to an active virus, such as with exposure to the bodily fluids from an infected fish. The virus is most stable in a living fish. It can remain active in dead or macerated fish parts, but for a shorter time. Therefore New York State recommends its vessel operators take all appropriate actions to insure that fish or fish parts do not enter their ballast tanks. This is accomplished by inspecting the ½” openings screening the ballast water intakes and using pumps as macerators during uptake and discharge.
 - ii. Fish populations are denser near shore and significantly less dense more than 3 miles from shore; therefore, New York State recommends its vessel operators, when and where possible, minimize uptake of ballast water in near shore locations. To further reduce risk, when possible:
 - 1) Conduct a ballast water exchange in the deepest, warmest water prior to entering Lake Superior (this practice would specifically preclude exchanging ballast water in Lake St. Clair and the western basin of Lake Erie).
 - 2) If vessel operators are unable to conduct an exchange in the lower Great Lakes, consider doing an exchange in deep, remote waters of Lake Superior.
 - 3) Although it is unlikely a live fish or larger fish particle could have entered the ballast system, consider exchanging ballast water within the ship or re-

circulating it within a ballast tank (pumps act as a macerator to reduce the possibility of discharging fish or larger pieces of fish).

- 4) Continue working with the U.S. Coast Guard and Council of Lake Committees to evaluate additional risk reduction actions.

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

5. Live organism monitoring. In addition to meeting the draft VGP monitoring requirements in section 2.2.3.5.1.1.4, all vessels covered under the VGP and operating in New York waters, after a Ballast Water Treatment System is installed, must sample and analyze the ballast water discharge at least once a year (provided appropriate facilities are available) using the California shipboard sampling protocol, or a compliance monitoring protocol developed by the USCG, whichever is most advanced and available. This monitoring shall include sampling for >50 µm and for 10-50 µm organisms. The monitoring results shall be submitted to EPA and the Department on an annual basis, consistent with the mechanisms used in the VGP for all other submissions. The Department's point of contact is provided at the close of this letter. Such live organism monitoring shall include the collection of representative discharge samples and the testing (counting) of live organisms in such samples by qualified personnel in accordance with standard and/or best available sampling and analytical methods.

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

6. Bilge water. Discharge of bilge water is prohibited in New York waters. This condition does not apply to the discharge of bilge water if the master of the vessel determines that compliance with this condition would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, equipment failure, or any other relevant condition.

New York finds that the discharge prohibition set forth in this condition, coupled with the narrowly defined safety exemption, is needed to prevent impairment of waters for their best usage and is thus needed to comply with the New York State statutes and regulations indicated in the Department's Fact Sheet dated 2012. In accordance with 40 CFR 124.53 (e)(2), this condition cannot be made less stringent and still comply with State water quality standards.

Basis for conditions.

The above conditions combine water quality protection with operational flexibility. They provide flexibility to the industry by allowing further development of treatment technology and test

protocols. While not a mandatory requirement, the Department urges vessel permittees to voluntarily install currently available technologies that go beyond the IMO D-2 standard (e.g., systems that have demonstrated the ability to meet and exceed a 10x IMO level of treatment) as a means of gaining useful experience while contributing to the advancement of treatment technology.

The detailed basis for the above conditions is set forth in a separate Fact Sheet dated 2012.

Contact

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

Mr. Donald E. Tuxill, P.E.
New York State Department of Environmental Conservation
Division of Water, 4th Floor
625 Broadway
Albany, New York 12233-3505
(518)402-8168

The Department reserves the right to challenge the EPA's VGP and sVGP.

Should you require further information regarding this Certification, please feel free to contact Mr. Tuxill.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John J. Ferguson', followed by a horizontal line.

John J. Ferguson
Chief Permit Administrator