



# Minnesota Pollution Control Agency

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November 19, 2008

Mr. Tim Henry, Acting Director  
Water Division (W-15J)  
United States Environmental Protection Agency – Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3507

RE: NPDES Vessel General Permit for Discharges Incidental to the Normal Operation of  
Commercial Vessels  
401 Certification

Dear Mr. Henry:

As requested in your letter of July 8, 2008, the Minnesota Pollution Control Agency (MPCA) has examined the U.S. Environmental Protection Agency's (EPA) proposed National Pollutant Discharge Elimination System (NPDES) general permit for Commercial and Large Recreational Vessels (VGP) to determine whether it can certify the VGP under Section 401 of the Clean Water Act (CWA). The MPCA bases its certification decision upon an evaluation of the information provided in the proposed permit, technical fact sheet, other materials contained in Docket ID No. EPA-HQ-OW-2008-0055, and consultation with other Great Lakes states. This letter is submitted by the MPCA under authority of Section 401 of the CWA (33 USC 1251 et seq.), Minn. Stat. chs. 115 and 116, and Minn. R. 7001.1400 through part 1470.

The VGP, as proposed by EPA in June 2008, is applicable for all vessel discharges from all commercial and large recreational vessels, as defined in the permit, that take place within all waters of the State. However, as noted in your letter dated August 22, 2008, Congressional legislation passed in July 2008 eliminates the need for the MPCA to address these vessels in its certification of the VGP:

- Recreational vessels.
- Commercial fishing vessels.
- Commercial vessels less than 79 feet that do not discharge ballast water.

The MPCA certifies the referenced general permit because there is reasonable assurance that the activities authorized by the proposed permit will be conducted in a manner that will not violate applicable water quality standards, provided the following conditions are included in the general permit authorization:

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 um 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).

If you have questions, please contact Mary Jean Fenske of our staff at 651-297-5472.

Sincerely,



Paul Eger  
Deputy Commissioner  
St. Paul Office  
Commissioners Office

PE/MJF:rm/lmg

Enclosure

cc: Sean Ramach, EPA Region 5

# Minnesota Pollution Control Agency (MPCA)

## U.S. Environmental Protection Agency (USEPA)

### Vessel General Permit for Discharges Incidental to the Normal Operation of Commercial Vessels

November 10, 2008

The USEPA requested that the Minnesota Pollution Control Agency (MPCA) make a written determination regarding certification under Section 401 of the federal Clean Water Act for vessel discharges in Minnesota waters that would be authorized by the USEPA's National Pollutant Discharge Elimination System: Vessel General Permit for Discharges Incidental to the Normal Operation of Commercial Vessels (VGP). The USEPA's request for certification was received by the MPCA on July 11, 2008. USEPA established a deadline of August 21, 2008, for the MPCA to issue or deny a Section 401 Water Quality Certification for discharges from vessels covered by the USEPA's VGP. The MPCA requested an extension of the deadline until November 21, 2008, to more thoroughly evaluate the USEPA's VGP and involve the public in the MPCA's certification decision. USEPA Region V granted the MPCA's request in a letter dated September 3, 2008.

The MPCA published the availability of its proposed 401 Certification of the VGP on October 6, 2008, in the *Minnesota State Register*. In addition, on September 29, 2008, the MPCA notified via e-mail nearly 300 persons on the MPCA's ballast water information distribution list of the availability of its proposed 401 Certification for comment. The formal 14-day public comment period ended at 4:30 p.m. on October 20, 2008. Comment letters were received from two parties.

#### **RESPONSE TO COMMENTS RECEIVED ON THE MPCA's PROPOSED SECTION 401 CERTIFICATION OF USEPA's VESSEL GENERAL PERMIT**

1. **Comments by Caroline Gravel, Shipping Federation of Canada, E-mail Received on October 20, 2008.**

The commenter reviewed the MPCA's proposed Section 401 certification of USEPA's VGP and had no further comments on the proposed 401 certification beyond comments expressed in their previous submissions (specifically the submission dated July 30, 2008) on the MPCA's Ballast Water Discharge State Disposal System General Permit. The commenter stated they remain committed on working with the MPCA on the implementation of its general permit for ballast water discharges.

**Response:** The comment is noted. The commenter's July 30, 2008, submission as well as the MPCA's responses can be viewed at: <http://www.pca.state.mn.us/about/board/packet/ballast-boardpacket.pdf>.

2. **Comments by Neil Kagen, National Wildlife Federation. Letter Received via E-mail on October 20, 2008.**

**Comment 1 (Legal Authority):**

The commenter states that USEPA does not have the authority to issue a National Pollutant Discharge Elimination System (NPDES) permit regulating vessel discharges in Minnesota and that USEPA is erroneous in its assertion that states' NPDES delegations do not extend to vessel discharges. The commenter provides a legal argument to support the belief that when USEPA gave Minnesota delegation for the NPDES program, USEPA lost its authority upon delegation. The commenter believes only Minnesota has the authority to issue NPDES permits for vessel discharges in Minnesota waters and that Minnesota must prohibit discharges incidental to normal vessel operation unless it authorizes discharges under a NPDES permit.

**Response:** The NPDES program is a federal program and, as such, USEPA is responsible for decisions with regards to States' NPDES delegations. USEPA, in its Fact Sheet for the proposed Vessel Discharge Permit (VGP), asserts that USEPA is the permitting authority for vessel discharges as vessel discharges are not a part of any authorized state NPDES program. USEPA also sent a letter to the MPCA dated April 30, 2008, explicitly stating that the MPCA is not authorized to issue a NPDES permit for vessel discharges. (To view letter go to: <http://www.pca.state.mn.us/publications/ballast-programscomments-epa-0408.pdf>) The State of Minnesota does not have the authority to override USEPA in this matter. USEPA has informed the MPCA that should it wish to issue NPDES permits for vessel discharges, the MPCA must seek approval for such a delegation by demonstrating it has both the authority and resources to administer such permits. The MPCA is regulating ballast water discharges using its state authorities through its recently issued Ballast Water Discharge State Disposal System General Permit.

**Comment 2 (Compliance with Minnesota Water Quality Standards):**

The commenter believes that even if USEPA had the authority to issue the NPDES VGP, the MPCA cannot certify the VGP because no conditions will assure compliance with Minnesota water quality standards. The commenter states the MPCA has no basis to support the claim that the conditions imposed on ballast water discharges pursuant to the VGP will prevent the introduction of non-indigenous species. The commenter asserts that a Certification can only be issued if it contains conditions that will assure compliance with all three components of the state water quality standards: designated uses, water quality criteria (numeric or narrative), and the antidegradation policy. The commenter believes that Minnesota must deny certification of USEPA's VGP because the VGP's technology-based effluent limitations and related requirements are not stringent enough to assure compliance with Minnesota's water quality standards.

Effluent Limitations The commenter disputes USEPA's claim that the VGP includes water quality-based effluent limitations that are as stringent as necessary to achieve water quality standards and finds USEPA's claim that the VGP's permit limits will control discharges to meet applicable water quality standards not credible. The commenter states that discharges cannot be controlled to meet water quality standards because "the technology simply does not exist." The commenter also asserts that MPCA's condition #1 will not assure compliance with water quality standards either as scientists have not yet determined a method to quantify the risk associated with the introduction of a given concentration of organisms. The commenter states that the MPCA's biological performance standards are completely arbitrary, provide no assurance that invasive species will be prevented, and have no biological basis other than lower is better.

Designated Uses The commenter states that the requirement to fully maintain designated uses is expressed in Minnesota's nondegradation policy which "requires the maintenance and protection of existing uses and the water quality necessary to protect existing uses." (Minn. R. 7050.0185, subpart 1) The purpose of the Clean Water Act would not be served if a State deems a designated use protected even as its usefulness degrades to the point where it is completely eliminated. The commenter states that invasive species found in Minnesota waters impair the designated uses of water quality standards and describes water bodies the Minnesota DNR has designated as infested with invasive species. The commenter describes how existing invasive species such as the zebra mussel and round goby impact these designated uses: public water supply and public health and welfare uses; industrial uses; aquatic and wildlife uses; recreational uses, and other uses. The commenter asserts that the spiny water flea, zebra mussel, round goby and ruffe were all introduced by ballast water and the impairments caused by these species foreshadow adverse impacts from yet-to-be-introduced species that may result due to management practices consisting of ballast water exchange or salt water flushing or those "required only to meet MPCA's biological performance standards."

Nondegradation The commenter states that the type of review required by USEPA's antidegradation policy for high-quality waters is impossible prior to the identification and evaluation of specific discharges into specific waters and, therefore, must be conducted when new individual discharges are proposed. Therefore, since it cannot be conducted on a statewide basis through a general permit, the VGP

is inconsistent with USEPA's antidegradation policy as well as Minnesota's nondegradation policy. The commenter asserts that USEPA's VGP would violate the antidegradation policy (including Minnesota's nondegradation policy) for Tier 1 and Tier 2 waters because discharges of ballast water managed through ballast water exchange or saltwater flushing into a Tier 1 or Tier 2 water body would likely eliminate existing uses by introduction of invasive species.

**Response:** The MPCA believes USEPA's VGP with the additional conditions imposed in its proposed 401 Certification can be certified as meeting Minnesota's water quality standards for these reasons:

- The State performance standards in the recently issued Ballast Water Discharge State Disposal System Permit (Permit), along with the implementation of Best Management Practices, will further reduce the threat currently posed by invasive species to the Minnesota State waters of Lake Superior. The MPCA's 401 Certification Condition #1 requires compliance with the provisions in its Permit. The MPCA recognizes the interim steps in USEPA's VGP, such as ballast water exchange, are interim steps which only partially minimize the number of invasive species in ballast water and does little for the invasive species buried in the residual solids in the bottom of the ballast tanks. Therefore, the MPCA Permit goes beyond interim steps and includes a requirement to install ballast water treatment systems onboard ships that meets biological performance standards and explicitly prohibits sediment discharge into Minnesota waters. In addition, Permit requirement #2 requires ballast water discharges to comply with State water quality standards.
- The biological performance standards and implementation schedule in the Permit represent what the MPCA believes to be achievable by technology currently under development. MPCA staff conducted a thorough evaluation of the available information on numerous treatment technologies, and therefore disagrees that the biological performance standards in the Permit (referred to in Condition #1 of the Certification) are arbitrary. The ballast water management and performance standards in Condition #1 rely on the D-1 and D-2 standards in the International Maritime Organization's 2004 *International Convention for the Control and Management of Ships' Ballast Water and Sediments*, which are generally recognized throughout the international shipping community, as well as the performance standards in the modifications to Canada's Shipping Act promulgated in 2006.
- The MPCA's Permit represents critical progress in regulating ballast water discharges so that designated uses and water quality criteria are maintained. Until the necessary science is completed to determine the risk associated with the introduction of a given concentration of organisms, it is necessary and reasonable to base a discharge standard on what is technically achievable today. If peer-reviewed data that demonstrates the effectiveness of available ballast water treatment systems to meet more stringent biological standards becomes available, the MPCA will consider modifying the Permit to include the more stringent standards. For further explanation of the reasoning for the establishment of the performance standards, the commenter is referred to the Technical Fact Sheet for the MPCA Permit and the Response to Comments received on the Permit. Both documents can be found at:  
<http://www.pca.state.mn.us/programs/ballastwater-archive.html>.
- The proposed conditions imposed on USEPA's VGP are consistent with all applicable Minnesota Rules including Minn. R. 7050.0180 Nondegradation for Outstanding Resource Value Waters and Minn. R. 7052.0300 Lake Superior Basin Water Standards-Nondegradation. USEPA approval of Minnesota's nondegradation rules was provided in a letter dated September 1, 1989, from Charles Sutfin of USEPA Region V to Gerald Willet, Commissioner of the MPCA. For further explanation of the MPCA's nondegradation review for the MPCA's Permit, the commenter is referred to the Technical Fact Sheet for the MPCA Permit and the Response to Comments received on the Permit. Both documents can be found at:  
<http://www.pca.state.mn.us/programs/ballastwater-archive.html>.

