

Minnesota Ballast Water General Permit

Working Draft Dated April 10, 2008
Wisconsin DNR Comments and Questions

Thank you for sharing the working draft of the proposed ballast water general permit. Please consider these our initial comments. Because this is an evolving process, as the general permit continues to be developed with new ideas and revisions to resolve issues, additional comments may be provided. Communication and cooperation between the states is beneficial in this effort for consistency. We're committed to work together with Minnesota and other Great Lake States in developing a general permit that may need to be implemented if federal authorities fail to regulate ballast water adequately.

PERMIT PHILOSOPHY

- Focus exclusively on preventing aquatic invasive species.
- The NPDES permit program isn't a good fit, but it's the tool we're forced to use according to the U.S. District Court of Northern California decision ordering EPA to issue permits for discharges from ships beginning September 30, 2008.
- Resist the temptation to tack on other water quality issues that are secondary to the permit's purpose. The imposition of extensive monitoring and site specific water quality based effluent limits is beyond the scope of this permit.
- The first permit should rely on existing best management practices and other feasible emerging cost effective technologies for treating ballast water.
- Specify any acceptable treatment technologies in the permit ships may use, similar to the Michigan permit. And if a ship uses one of these methods they're in compliance.
- Without EPA effluent limit guidelines or an EPA general permit as a template, it's difficult for states to know or understand what permit requirements are appropriate for this new category of discharge.
- Subsequent permits can expand upon what we learn from the first issuance, and EPA regulations and guidance when it's available.
- Monitoring of ballast water discharges should be - minimal to only what's necessary, useful for determining compliance, simple to conduct, and provide quick results.
- Encourage pilot programs during the first permit term to help evaluate ballast management and treatment technologies.
- The characterization of ballast water quality through more extensive monitoring should be limited to pilot studies. This monitoring may identify useful indicator parameters for determining the effectiveness of management practices and treatment technologies.
- States proceeding with ballast water permitting prior a federal permit program should coordinate activities to provide a level of consistency for the permittees. And to avoid inadvertently making some ports preferred ballast water discharge locations because that state's regulation are less restrictive or non-existent.
- Multiple state permits issued to the same ship would cause confusion and unnecessary duplication of effort. Institute a reciprocity agreement between the Great Lake States, so when a state first issues a permit to a ship, that permit is also valid at ports in other states. Permits could have a built-in exemption, that if a ship is covered by an equivalent permit in another state they're covered in all the states. Monitoring information should be provided to each of the states in which they stop.

SPECIFIC COMMENTS

Part I Permit Coverage

1.(a) - Agree with applicability to "Laker" vessels too, since they may be responsible for the spreading of invasive species, and the discharge of ballast with water quality issues.

2.(b) - Determining compliance with "...will not violate surface water quality standards..." should be considered beyond the scope of this permit. Recommend deleting this. It's not enforceable.

7.(b) The restriction of prohibiting the discharge of sediment is very important. The follow-up requirements for a Ballast Water Sediment Management Plan in Part IV 14 is critical. Should there be an approval step? Consideration should also be given to prohibiting the discharge of any sea water ballast. Is it known whether this even occurs?

Part II Surface Water Discharge Limitations and Monitoring Requirements

Table A - Need to evaluate the feasibility of the monitoring requirements. This is a performance standard approach by monitoring the number of living organisms. Have these monitoring parameters been workable in California that is using performance standards similar to the IMO D-2 standards? Is monitoring and confirming the ballast water complies with the limit required before discharging? That wouldn't be feasible and would cause logistic problems. With a monitoring frequency of 2/year it appears this is a performance check of the ballast water management practice or treatment technology the ship is using, in which case the proposed monitoring may be reasonable.

Table B - The monitoring parameters are dependent upon the treatment technology in use, similar to the approach taken by the Michigan general permit. This is reasonable. Is Table B in addition to or an alternative to Table A if a treatment process other than chlorination/oxidant, deoxygenation, or heat is used? Should the appropriate monitoring parameters also be identified for other technologies, such as for: chlorine dioxide, UV radiation, and membrane filtration? If the performance standard approach is taken under Table A, would monitoring under Table B even be needed? We would need some assurance the treatment technology is designed and operated properly; so for example, the discharge wouldn't violate chlorine limits.

Part III General Ballast Water Permit Authorization

Consider moving this part to after Part I "Permit Coverage". If it's possible to have a reciprocity agreement, this could be the location to indicate the permit coverage also applies to other states.

Part IV Ballast Water Management Practices...

The required management practices described in 11 - 14 are very important. Agree that they be consistent with proposed federal requirements. Should there be an approval step for each plan? That could be a considerable workload. Guidance on the development of these plans and examples of what's acceptable could help with consistent implementation.

Part V Compliance Schedule

Clarify the meaning in 16 with a reference to monitoring Table A that includes the performance limits. If a limit is exceeded, expectations on coming into compliance indicate up to 5 years. Is that the intention, such that if treatment is installed by year 2 of the permit they have 3 years to comply with limits? A limit violation should trigger corrective action within a shorter time frame. Up to 5 years is also allowed for the installation of a treatment technology. Should the time frame for installing treatment be shortened? Could there be an incentive to install treatment as soon as possible?

Part VI General Permit Language

Consider changing the title of this part to something more descriptive, such as "General Discharge Requirements", and move the location to after "I Surface Water Discharge Limitations and Monitoring Requirements".

The variable limits are used for total residual oxidant of 200 $\mu\text{g/L}$ for <2 hours and 0.04 mg/L for >2 hours of discharge. These limits, expressed as total residual chlorine, are the similar as those used by Wisconsin and other Region 5 states for power plants that chlorinate condenser cooling water. Since ballast water is an intermittent discharge, extrapolation of this variable limit to ballast water may be appropriate too. However, for our last power plant reissuance in January 2008, EPA Region 5 questioned the inclusion of the 200 $\mu\text{g/L}$ limit for discharges less than 160 minutes (we have data that shows chlorine may be used beyond 2 hours without toxicity). I provided EPA background information on the origin of the limit for <160 minute, but to date EPA has not informed us of a decision. Consequently, our limit may be restricted to the water quality based acute limit of 38 $\mu\text{g/L}$ (your permit expresses it 0.040 mg/L).

Standard Conditions

All the standard conditions were not thoroughly reviewed. This appears to be standard template for individual NPDES permits, and some of these may not be appropriate for inclusion in a general permit or may need to be revised appropriately.

Approval of plans and specifications for treatment systems is described in number 70. Wisconsin has a similar requirement. However, the approval of potentially hundreds of on-board ballast water treatment systems isn't feasible because of the considerable workload and questionable value in this effort. The Wisconsin DNR is proposing a self-approval process in the permit for acceptable treatment technologies. Treatment systems are expected to be package systems or simple chemical addition that need not be subject to individual reviews. As an alternative for ballast water treatment systems, if we identify criteria for a self plan approval in the permit, that should be an effective means to comply with our legal requirements. We've already implemented a self approval process for holding tanks and oil/water separators.

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