

ENVIRONMENTAL ASSESSMENT

Aquatic Invasives in the Great Lakes and the Proposed DNR Ballast Water Discharge General Permit

**Prepared by Wisconsin Department of Natural Resources
Bureau of Watershed Management
February 2009**

PROPOSED ACTION

The Wisconsin Department of Natural Resources (WDNR) is proposing a general permit for commercial vessels which includes effluent discharge standards for ballast water. It also includes an aggressive compliance schedule for implementation. The permit specifies biological effluent discharge standards and biocide effluent limits that are necessary to protect water quality, pursuant to § 283.001, Wis. Stat. and § NR 102.01(2), Wis. Adm. Code. The Department believes a permit for regulating ballast water beyond what EPA has developed is necessary to prevent the release of additional aquatic invasive species (AIS) and protect water quality standards in Wisconsin. A copy of the proposed General Permit is attached to this document.

Wisconsin's General Permit will require discharges of ballast water to meet Wisconsin's water quality standards based upon the number of living organisms in the discharge by 2012 for all ocean-going ships. The proposed permit will also include stricter standards for ocean-going ships built after January 1, 2013. The proposed permit is intended to minimize the further release of aquatic invasive species. The proposed general permit requires all ocean-going vessels to meet discharge standards set at 100 times more stringent than the IMO standards. This discharge standard is similar to that adopted by New York in its § 401 Water Quality Certification. Treatment systems would require approval by an authority, such as the IMO or EPA, to verify the treatment is effective and would comply with the discharge standards.

There is an exemption in this permit when ballast water is pumped from a vessel off-ship for treatment on another vessel or to a ballast water treatment system on-shore. Additionally, the proposed permit allows the owner or operator to request an alternative discharge limit of the vessel if the technology is not available to meet the discharge standards.

The federal general permit (VGP), effective December 19, 2009, that applies to all discharges incidental to the normal operation of a vessel¹ includes a technology based standard for all ocean-going vessels. This standard has been required by the United States Coast Guard (USCG) for all vessels that enter the St. Lawrence Seaway for the past four years and has proven ineffective as the introduction of aquatic invasive species has continued. The Department is proposing a state general permit with water quality based effluent limitations because the federal VGP is not protective of the state water quality standards.

¹ A federal court granted an extension to when a permit was required. Although the federal permit became effective on December 19, 2008, a permit was not required until February 6, 2009.

It is anticipated that the final state general permit will be issued before the next shipping season begins.

AFFECTED ENVIRONMENT

The Great Lakes contain 20 percent of the world's available fresh surface water supply. Because of that, the Great Lakes are critical to the health and welfare of all the Great Lakes states. They provide drinking water for millions of state residents. They support manufacturing and recreational industries providing thousands of jobs. They generate power and assimilate our wastewaters. But most importantly they define and support a huge freshwater system and related terrestrial ecosystem which is unique in the world.

The Great Lakes region, with its inland waters, contains an astonishing array of plants and animals—46 species that are found nowhere else in the world, and 279 globally rare plants, animals and natural communities. Hundreds of millions of birds, including North America's rarest songbird, the Kirtland's warbler, migrate through and breed in the Great Lakes region—making it crucial to their long-term health. One fifth of all fish species in North America are found in the Great Lakes, the lakes hold 20 percent of the worlds and 95 percent of North America's surface fresh water. Lake Superior is the largest and deepest of the Great Lakes.

At the Port of Superior, the lower stretch of St. Louis River includes a 12,000-acre freshwater estuary, which serves as the primary nursery for the fish found in western Lake Superior. The estuary is home to more than 45 native fish species, including walleye, lake sturgeon, muskellunge, northern pike and smallmouth bass. It also is a migratory stopover and breeding area for songbirds, shorebirds, raptors and waterfowl.

The waters and lands of the Door Peninsula harbor has a vast array of rare plants and animals, making it the most biologically rich region in Wisconsin. Globally rare species, such as the Hine's emerald dragonfly and glacial relict land snails, are found here.

BACKGROUND

What is Ballast Water?

Ballast water is water that is taken on by cargo ships to compensate for changes in the ship's weight as cargo is loaded or unloaded, and as fuel and supplies are consumed. Ballast water may be used for a number of different purposes, such as maintaining stability, maintaining proper propeller and bow immersion, and to compensate for off-center weights. Thus, ballast water is essential to the proper functioning of cargo ships, as well as to the safety of its crew.

Because ballast water is primarily used to compensate for changes in cargo, it is generally taken in or pumped out at the ports along a ship's route. When a ship takes on ballast water, whether freshwater or saltwater, organisms found in that water are typically taken in as well. These organisms are carried in the ballast tanks of the ships until the ship arrives at its next port, where, due to changes in the distribution of the ship's cargo, they maybe released into a new ecosystem. Due to the size of ballast tanks on modern cargo ships, and the speed with which these ships can reach their destinations, organisms are increasingly able to survive the journey to a new ecosystem. If these foreign organisms manage to survive and reproduced in the new ecosystem, they can cause severe problems in the natural and human environment.

Why are invasive species an issue in the Great Lakes?

Aquatic invasive species are non-native fish, aquatic animals, and plants that have been introduced into the Great Lakes systems and threaten the ecological integrity and economic future of the Great Lakes region.

AIS are increasingly recognized as a serious problem in Wisconsin. Both intentional and unintentional releases of invasive species pose serious threats to the health, economic welfare, and ecological integrity of Wisconsin waters and interfere with the uses of the waters of Wisconsin as identified in § NR 102.01(2). Particularly problematic is preventing new introductions of AIS into Wisconsin waters and controlling the spread of existing AIS between waterbodies. The key to preventing new AIS introductions is to control the transport mechanisms or pathways of release of AIS into Lakes Michigan and Superior and inland state waters. The highest prevention priority is the control of ballast water discharges.

Once AIS are introduced and established, they compete with the native species for the limited resources and available habitat with the native species, often out competing them and destroying the native population. Several examples of this have proven true with the zebra mussel, quagga mussel, white perch, ruffe, sea lamprey, and eurasian milfoil. This disruption of the natural ecosystem by the non-native species results in our threatened and endangered resources becoming more precarious as they are unable to compete with the invasives. These species not only invade and cause disruption of the Great Lakes, but also are transferred eventually to inland waters.

The impacts from these invaders to the ecosystem and economy are real. Zebra mussels clog water intake pipes costing millions of dollars annually in maintenance costs. Aquatic invasive species compete with native species for food and habitat. Because there are no natural predators to keep them in check, they have a distinct advantage over native species. In many cases, their population explodes after just a few short years and they can dramatically alter the ecosystem. Once in the system, it is almost impossible to eliminate these invaders. The best strategy is to prevent them from entering the system in the first place.

DIRECT AND CUMULATIVE EFFECTS OF THE PROPOSED ACTION

The proposed General Permit requires treatment of ballast water to a specific biological standard prior to discharge. This would significantly change how ballast water is discharged, which currently have no treatment or biological standard of any kind.

Wisconsin's goal for AIS management is, to the maximum extent possible, prevent any new introductions of nuisance exotic species and prevent any new introduced nuisance exotic species from becoming naturalized or spreading to new areas.

Ship and barge-mediated introductions and spread of AIS in the Great Lakes should be eliminated, through the development and implementation of a regulatory permitting system which ensures that ballast waters are adequately treated prior to discharge to waters of Wisconsin.

The primary way aquatic invasive species enter the Great Lakes is through ballast water discharge of ocean-going vessels. The subsequent spread of these introduced species may in part be attributed to Laker vessels (which cannot move through the St. Lawrence seaway because of their size) that are significantly larger and carry up to ten times the volume of ballast water on their ships. More than 185 aquatic invasive species have entered the Great Lakes, disrupting the food chain, fouling beaches and clogging infrastructure, costing citizens, industry, and businesses in excess of \$200 million annually. One new non-native species enters the Great Lakes on average every 28 weeks. The spread of these species is documented by all vessels that carry ballast water throughout the Great Lakes.

Zebra mussels alone cost U.S. taxpayers up to \$5 billion dollars annually. Sea lamprey control costs taxpayers over \$15 million each year. Zebra/Quagga mussels filter out food disturbing food webs, negatively impacting native fish species. In addition, they sequester nutrients in the nearshore, reducing the food availability in the open water.

Table One contains examples of invasive species introduced through ballast water and how they have impacted the Great Lakes ecosystem.

Table One: Invasive Species Introduced by Discharges of Ballast Water and Impact on the Great Lakes Ecosystem

Type	Common Name	Origin	Date	Mechanism	Impacts
Fish	sea lamprey	Atlantic	1830s	Canals, Shipping (Fouling)	Well documented threat to survival of Great Lakes sports fish (esp. trout and salmon); present control measures are costly and imperfect.
	Eurasian ruffe	Eurasia	1986	Shipping (Ballast Water)	Competition for forage, predation on native species
	round goby	Eurasia	1990	Shipping (Ballast Water)	Aggressive predator, out-compete native fish, raids native fish nests, takes over native fish habitat
Zooplankton	spiny water flea	Eurasia	1984	Shipping (Ballast Water)	Competition for forage, predation on native species
Plants	phragmites, common reed, and giant reed	North America and Europe	1800s	Shipping (Ballast Water)	Out-competes and eliminates other marsh species with similar habitat requirements
Macroinvertebrates	quagga mussel	Eurasia	1991	Shipping (Ballast Water)	Dominant benthic settler, crowds out other benthic organisms, changes character of benthic habitat, damages submerged structures, clogs underwater pipelines, eliminates native plankton at bottom of food web, diverts food energy to bottom habitat.
	zebra mussel	Eurasia	1988	Shipping (Ballast Water)	Dominant benthic settler, crowds out other benthic organisms, changes character of benthic habitat, damages submerged structures, clogs underwater pipelines, eliminates native plankton at bottom of food web, diverts food energy to bottom habitat.

This table is adapted from the Great Lakes ANS Panel Research Coordination Committee coordinated through the Great Lakes Commission. These species (among other from other sources) have been identified as priority aquatic nuisance species for the Great Lakes for 2008. In addition, the USGS database identifies 79 species total as known non-indigenous species introduced via ballast water.

Requiring effective treatment of ballast water discharges is intended to prevent the continued introduction of new AIS, and thereby preventing the economic cost of treatment, removal, and monitoring of AIS costing hundreds of millions of dollars each year. Additionally, the potential immeasurable effects to the impaired ecosystems would be prevented.

The US Lake Carriers Association and the Canadian Shipowners Association have both written comments stating that requiring any treatment to their Great Lakes vessels would have economic and environmental consequences. They contend that installing ballast water treatment systems on existing vessels is not feasible within current ship design. Their ballast tanks are not connected to each other and they carry up to 16 million gallons of ballast water in up to 22 different tanks. They are also docked for no more than eight hours and discharge ballast water at high rates to prevent extreme costs. They believe these vessels do not pose a risk of introducing new invasive species into the Great Lakes and, therefore, should be exempt from any requirements for additional treatment to ballast water prior to discharge.

The proposed general permit is not anticipated to result effects on energy usage.

ALTERNATIVES

No Action

On December 19, 2008, the EPA issued a federal general permit which is effective in Wisconsin waters. EPA is responsible for the issuance and enforcement of the VGP. The Wisconsin DNR does not have to take any action. This approach would be consistent with other states that either waived their Section 401 certification, or certified that the VGP was protective of their state water quality standards without the imposition of additional state requirements. None of the other Great Lakes States fall into this category. Both the states and the shipping industry have expressed a preference for a consistent federal approach instead of individual states regulating vessels with potentially differing requirements.

The “no action” alternative would not impose a new program on the state. The federal vessel GP does not require any treatment or discharge standard and only requires ships to flush ballast water tanks in the open ocean. This has been the method used by ocean-going vessels pursuant to Coast Guard regulation. It has not worked well in the past as new species have continued to be introduced into the Great Lakes.

The National Wildlife Federation and the Wisconsin Wildlife Federation have written comments stating that the Great Lakes will not be protected from invasive species by an EPA permit or by requiring IMO standards to all vessels. They believe that unregulated ballast water discharge has had a devastating impact on the Great Lakes and has caused major financial losses to lake shore owners, and Wisconsin municipalities and industries. They believe the EPA’s VGP technology-based effluent limitations—ballast water exchange and saltwater flushing—have been ineffective, and will not be effective in preventing further discharges of non-indigenous aquatic species in vessel ballast water. They also believe that requiring IMO standards to vessel ballast water discharges provides no basis that achieving those performance standards will reduce the risk of future introduction of non-indigenous aquatic species to a level that will reasonable assure compliance with water quality standards.

State General Permit Regulating Discharge of Ballast Water

States, including Wisconsin, have been told by EPA they lack the legal authority to issue a NPDES permit to regulate a ballast water discharges. The proposed state general permit is being issued under the independent state authority to regulate discharges of pollutants of the waters of the state pursuant to Wis. Stat. §283.31. EPA has stated verbally that they will not object to a state permit issued under state authority. Both Michigan and Minnesota have issued state permits regulating ballast water discharges under independent state authority.

Pending federal legislation could also supersede regulation under the Clean Water Act's NPDES permit program, making any work done by the state to regulate ballast water moot. Congressional legislation could shift the legal burden of regulating ballast water from the EPA to the U.S. Coast Guard. If this happened, the permitting functions would lie with the U.S. Coast Guard. Depending on how the legislation is drafted, the state permit options may no longer be a viable option because of federal preemption issues.

In the current regulation of the discharge of ballast water, there are three different discharge standards and one technology based standard. These options are discussed below. Given the extended compliance dates in the discharge standards, immediate environmental benefit would be minimal. The extended compliance schedules are necessary because the current treatment technology is developing.

1. IMO Standards

The International Maritime Organization (IMO) standards, regulation D-2 for the discharge of ballast water, are a proposed set of discharge standards that consists of a set of indicator parameters with limits for how many viable organisms may remain alive or present after treatment. IMO Regulation D-2 also includes a proposed implementation schedule for the larger commercial vessels (>5000 metric tons) which provides that the IMO standards apply to new vessels constructed after January 1, 2012 and to all vessels beginning January 1, 2016. The IMO represents the most widely accepted and tested standards in the world. These standards are proposed standards which require ratification by 30 countries before it has the force of international law. As of September 30, 2008, only 16 countries have signed the IMO convention. The United States has not signed it.

The ocean going vessels owners have indicated that the IMO standards would be acceptable, if adopted by states prior to being ratified and becoming law. Ballast water treatment technology is evolving and the IMO is part of the research effort, including an evaluation and approval process for treatment technologies that would comply with the standard. Several companies from around the world are currently making significant progress in developing treatment systems that would comply with the IMO standards. However, methods to monitor treatment systems to assess the concentration of viable organisms, is often lacking, making performance evaluations difficult.

The availability of technology for on-board treatment to achieve the desired effluent quality, especially for standards more restrictive than the IMO, and the reasonability of the timeline for installation, is a concern of shipping industry. Several treatment methods are being tested now but have not been approved. Several Great Lake states (Illinois, Indiana, Minnesota, Ohio, and Pennsylvania) have included in their Section 401 water quality certification requirements for ballast water treatment to the level of the proposed IMO standards.

The EPA VGP does not include discharge standards for ballast water, because it is EPA's intention to rely on technology based standards of ballast water exchange and flushing for the initial permit issuance. Discharge standards could be added later based on the outcome of the onboard treatment technology and the development of effluent limit guidelines.

2. Enhanced IMO Standard - 100 times (New York)

In New York's water quality certification for the VGP, they adopted numeric discharge limits 100 times more restrictive than the proposed IMO standards. Compliance is required for existing vessels by 2012. California requires compliance with more stringent (1000 times IMO) numeric limits for existing vessels by 2014 or 2016, depending on vessel size. There are several exceptions to New York's certification requirements, including Great Lakes vessels operating exclusively in either Lake Ontario or Lake Erie. Additionally, a time extension beyond 2012 is allowable if technology is not available to comply. For new vessels constructed after January 1, 2013, the numeric discharge limits become more stringent, up to 1000 times IMO standards (similar to California), plus the addition of standards for bacteria and viruses.

New York Department of Environmental Conservation determined in their best professional judgment, the existing best management practices for ballast water exchange and flushing do not ensure compliance with the Clean Water Act, may not be effective, and have highly variable results in preventing the release of viable aquatic invasive species. New York concluded that the proposed IMO standards would only provide a marginal improvement, and are not restrictive enough to protect the water quality according to New York state statutes. The New York staff believes technologies exist that are being developed commercially to comply with concentration based discharge standards 100 to 1000 times more restrictive than the proposed IMO standards. Currently, treatment technologies are being tested, but it is not clear whether there are treatment technologies that meet these limits. The recommendation for standards more restrictive than the proposed IMO standards were also made by U.S. government representatives participating at the IMO Convention, and in proposed legislation in House of Representative Bill 2830 (Coast Guard Authorization Act of 2008).

3. Enhanced IMO Standard - 1000 Times (California)

The California Marine Invasive Species Act of 2003 directed the California State Lands Commission to move expeditiously toward elimination of the discharge of non-indigenous species into the waters of the state based on the best available technology economically achievable that should protect the beneficial uses of the waters. California approved regulations in 2005 that became effective in 2006, which required ballast water management practices, such as ballast water exchange, no discharge, or discharge to a reception facility. The Coastal Ecosystems Protection Act of 2006 directed the Commission to complete rule making on recommended standards and an implementation schedule.

The California Coastal Ecosystem Protection Act also directed the Commission to conduct an assessment of the efficacy, availability and environmental impacts of ballast water treatment systems. In the latest information from the Commission (final report dated January 2009 http://www.slc.ca.gov/Spec_Pub/MFD/Ballast_Water/Documents_of_Interest.html) a total of 30 treatment systems were under evaluation. California will not be approving ballast water treatment systems, but will focus on developing procedures for dockside inspection of

vessels for verifying compliance with the discharge standards. California has provided to technology vendors ballast water treatment technology testing guidelines to standardize the evaluation of treatment systems as they become available commercially.

California's interim discharge standards set a limit 1000 times more restrictive than the proposed IMO standard for organisms 10 to 50 μm in size. For organisms $>50 \mu\text{m}$ the limit is no detection, and for organisms $<10 \mu\text{m}$ the limits are the same or only slightly more restrictive than IMO by 2 or 3 times. California and New York have standards for bacteria and viruses, that neither the IMO nor any other state has adopted. The standards described above apply to large commercial vessels (>5000 metric tons) constructed after January 1, 2012; and to existing vessels beginning January 1, 2016. California's final discharge standard of zero detectable viable organisms goes into effect in 2020.

4. Treatment Technology Based (Michigan)

The Michigan Department of Environmental Quality has adopted a list of treatment methods they believe are environmentally sound and effective in preventing aquatic invasive species, and have include them in their ballast water general permit. This was done in response to state legislation in 2005 that required a state permit for discharges into Michigan waters from oceangoing vessels. To date, Michigan has permitted 607 vessels, for which none have discharged ballast water in the waters of the state. The general permit for regulating ballast water that was issued in 2007, included the following four acceptable treatment methods: hypochlorite treatment, chlorine dioxide treatment, ultra violet light radiation treatment preceded by suspended solids removal, and deoxygenation treatment. If a vessel wanted to use a different technology, an individual permit could be issued, if the treatment performance was equal to or better than the four treatment technologies Michigan approved as acceptable.

If a vessel implements one or more of the treatment practices, and complies with any applicable effluent limit associated with the technology, they would be found in compliance with the ballast water permit. The treatment method Michigan has accepted are based on their review of available information on what technologies could be implemented and be effective. These treatment methods do not reflect the IMO standards. Because of the characteristics of the ship traffic at ports in Michigan, vessels operating in Michigan waters do not discharge ballast water. This is because the ships unload cargo in Michigan and take on water for ballast. Because no vessels in Michigan waters have needed to discharge ballast, none of the vessels have installed or used any of the acceptable treatment methods. The practicality of these treatment methods remains untested.

Several governmental efforts continue to develop, evaluate and approve ballast water treatment technologies. Two federal programs that support the development of treatment technologies are the U.S. Coast Guard Shipboard Technology Evaluation Program, and the EPA Environmental Technology Verification Program. A significant question for the Great Lakes States is whether the treatment systems, especially those proposed for IMO standards or more stringent, is how will they function in a freshwater environment. Currently, the ones under IMO evaluation are only evaluating the proposed standards for two levels of salinity. The Great Ship Initiative project, located at the Port of Superior, has worked to receive validation as a ballast water testing facility, and will be evaluating whether treatment technologies are effective for the Great Lakes and freshwater ballast.

State Individual Permit regulating Discharge of Ballast Water

Instead of the issuing a general permit for the entire category of vessels to regulate the discharge of ballast water, as is allowed under § 283.35(1), Wis. Stats., an individual permit could be issued to each vessel. There could potentially be 300 or more vessels that require permit coverage. The standards requirement contained in an individual permit would most likely be identical to those found in the proposed general permit. However, with the individual permit the Department has the ability to customize the permit to address specific areas for regulation that may be unique to a vessel. Regulation to that level of detail would be extremely resource intensive and time consuming. And there could be little or nothing to be gained environmentally by issuing individual permits. Environmental impacts would be essentially the same whether a vessel was regulated under a general permit or an individual permit. The additional amount of level of effort and resources needed to issue individual permits would be substantial.

Even if a vessel qualifies for coverage under a general permit, the owner or operator of the vessel may request coverage under an individual permit, and the Department must issue an individual permit in accordance with § 283.35(2), Wis. Stats.

SIGNIFICANCE OF CONTROVERSY OVER ENVIRONMENTAL EFFECTS

FedNav, the largest operator of 70 oceangoing vessels in the St. Lawrence Seaway and Great Lakes system had supported the Department's previous proposed requirement of the IMO standards for all vessels. CanforNav, a significant Canadian company, operating ocean going vessels joins FedNav in that support of IMO treatment standards for all vessels.

The Lake Carriers Association in a November 17, 2008 letter, stated their Great Lakes shipping industry in 2007, loaded over 20 million tons of coal and 8.7 million tons of iron ore in Superior Harbor, alone. They represent 63 vessels and stated that requiring IMO standards for these vessels by 2016 would end domestic Great Lakes shipping in Wisconsin's ports. They believe the treatment technologies have been developed for ocean going vessels and salt water treatment, not fresh water treatment, nor for large 16 million gallon ballast tanks. They have requested that Lakers be exempt from the requirement to install ballast water treatment systems. They state that it will bring an end to US-Flag Great Lakes shipping throughout the State's Great Lake Ports and bring economic ruin on the State. They believe the ocean going vessels will have to treat to IMO standards to be able to continue to operate worldwide, while Lakers are not competing on a global market. The Canadian Lakers represent 68 vessels and stated similar concerns and requested that they be exempt from any treatment standards to their vessels.

SUMMARY OF ISSUE COMMUNICATION ACTIVITIES

List agencies, citizen groups and individuals contacted regarding the project (include DNR personnel and title) and summarize public contacts, completed or proposed.

Date	Contact	Comment Summary
2/10/2009	Noel Bassett, VP Operations American Steamship Co	MPCA & WDNR staff toured three vessels and their ballast tanks in Duluth: Indiana Harbor, American Spirit, and American Victory

1/14/2009	Independent maritime consultant - telephone call from John Stewart (954-565-4044)	Representative for U.S. delegation at IMO convention. Inquired about Wisconsin's intentions for regulating ballast water. The Great Ships Initiative is being validated as a facility to test ballast water treatment systems. Off-ship treatment system could work for some vessels, but presents insurmountable problems for others.
1/8/2009	FedNav - telephone call from Marc Gagnon (514-878-6470).	Represents 70 oceangoing vessels. Opposed to 100 times IMO standards due to lack of technology to comply. IMO acceptable.
11/24/2008 and 11/17/2008	Lake Carriers Association - letter and contested case hearing request from James H. I. Weakley.	Represents 63 laker vessels. Great lakes only vessels should be exempt from ballast water treatment because it's not feasible, and they aren't the problem. State authority is questioned. Contested 401 certification.
11/24/2008	Canadian Shipowners Association - letter from Don Morrison.	Canadian laker fleet is not a risk for introducing aquatic invasive species and should be exempt. Ballast water treatment not feasible, and it won't increase protection. If water transportation is shut down and shifts to land transportation modes that's bad for the environment. Contested 401 certification.
11/21/2008	The Development Association - letter from Andrew Lisak.	Represents City of Superior, Douglas County, and over 140 businesses. Supports federal regulation and H.R. 2830. Absent federal regulation supports uniform Great Lake state approach with IMO standards. Economic consequences if shipping industry is reduced or ceases.
11/20/2008	American Great Lakes Ports Association - letter from Steven A. Fisher.	Represents public port authorities on the U.S. side of the Great Lakes. Supports federal regulation and H.R. 2830. Opposed to state regulation of interstate and international maritime commerce. Potential for unworkable conflicting regulations. Appreciates consistency with other Great Lakes states.
11/20/2008	National Wildlife Federation and Wisconsin Wildlife Federation - Contested case hearing request from Andy Buchsbaum and George Meyer.	Represents wildlife interests of more than one million members nationwide. Need to include ballast water effluent limits and monitoring to protect water quality. IMO standards will not reduce the risk of aquatic invasive species. Contested 401 certification.
11/19/2008	Wisconsin Commercial Ports Association - letter Dean R. Haen.	Represents 14 commercial ports in Wisconsin. Supports federal regulation and H.R. 2830. Opposed to state regulation of interstate and international maritime commerce. Potential for unworkable conflicting regulations. Appreciates consistency with other Great Lakes states.
11/17/2008	Polish Steamship Company - letter from Christine A. Fazio	Represents a major oceangoing shipping company. Preference for one consistent federal permit without state conditions. Supports IMO and U.S. Coast Guard requirements, and would comply with treatment standards. Appreciates consistency with other Great Lakes states.
11/17/2008	FedNav - letter from George H. Robichon.	Represents the largest owner of oceangoing vessels in the Great Lakes. Supports IMO standards. Implement at the federal level, not state or provincial level, but understands the state frustration with lack of federal action.
10/9/2008	National Wildlife Federation	Discussed 401 certification with DNR (Susan Sylvester -

	and Wisconsin Wildlife Federation - meeting with Marc Smith, Nick Schroeck, and George Meyer.	Permits Section Chief, Roger Larson - Deputy Bureau Director, Paul Luebke - Permit Drafter, and Marney Hoefer - Legal Services Attorney). State should not certify the EPA vessel general permit because it's inadequate. They provide their recommendation on what the state should do, and supports state issued permits in the absence of adequate federal regulation. Supports 100 time IMO standard
On going.	Minnesota Pollution Control Agency - Mary Jean Fenske, ballast water coordinator.	Wisconsin has frequent discussions with counterparts in Minnesota on their ballast water activities in order to maintain a level of consistency and to share information.
On going.	Other Great Lake States and Organization.	Conference call discussions on ballast water regulation.
On going	U.S. EPA Region 5 and Headquarters.	Conference call discussions and web cast on ballast water regulation.

DOCUMENTS, PLANS, STUDIES OR MEMOS ON WHICH THIS DNR DRAFT GENERAL PERMIT IS BASED:

- Great Lakes Shipping, Trade, and Aquatic Invasive Species 2008 Report by the National Research Council of the National Academies.
- Port of Milwaukee Off-Ship Ballast Water Treatment Feasibility Study Phase I and II Reports.
- U.S. Coast Guard Environmental Standards Update, Ballast Water Activities by the International Maritime Organization (IMO) (Winter 2008).
- EPA Vessel General Permit and Fact Sheet.
- Minnesota Pollution Control Agency State Disposal System Ballast Water Discharge General Permit.
- Michigan Department of Environmental Quality Ballast Water Control General Permit.
- State § 401 Water Quality Certifications to EPA's Vessel General Permit from the following states: Connecticut, Indiana, Michigan, Minnesota, New York, Ohio, and Pennsylvania.
- Shipping Industry Ballast Water Coalition 10/20/2008 response letter to New York § 401 Water Quality Certification.
- 2009 Assessment of the Efficacy, Availability and Environmental Impacts of Ballast Water Treatment Systems for Use in California Waters (Final January 2009).
- New York State Department of Environmental Conservation, Division of Environmental Permits December 17, 2008 letter to USEPA on 401 Water Quality Certification to EPA's VGP.
- January 2006 California State Lands Commission Report on Performance Standards for ballast water discharges in California waters.
- January 5, 2004 International Conference on Ballast Water Management of Ships, Consideration of the draft International Convention for the Control and Management of Ship's Ballast Water & Sediment. Ballast Water Discharge Standards—Regulation D-2
- October 3, 2005 Ballast Water Discharge Standards Report and Recommendation of the the California Advisory Panel on Ballast Water Performance Standards
- May 23, 2003 IMO Marine Environmental Protection Committee, Harmful Aquatic Organisms in Ballast Water
- November 2008 USEPA report: Predicting Future Introductions of Nonindigenous Species to the Great Lakes, Milwaukee and Superior are both named as Great Lakes ports at greatest risk for invasion by the 14 modeled species from ballast water discharges

NEXT STEPS

This Environmental Assessment and the proposed General Permit will be public noticed in the three major port areas in Wisconsin: Superior, Green Bay and Milwaukee, for 30 days. A public hearing will be held on March 23, 2009 at 10:00 am at the DNR Southeast Regional Office conference room 140. The address is:

DNR SER Headquarters, Room 140
2300 N. Dr. Martin Luther King Drive
Milwaukee, WI

It is anticipated that a final permit will be issued Spring 2009.