



Michigan's New Ballast Water Regime: Navigating the Treacherous Waters of States' Rights, Federal Preemption, and International Commerce

A White Paper Prepared by

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This white paper was commissioned by Dale Bergeron of the Minnesota Sea Grant Extension Program to support the Program's ongoing maritime research, education, and outreach activities. The following information is intended as advisory research only and does not constitute legal representation of Minnesota Sea Grant or any of its constituents by the National Sea Grant Law Center. It represents our interpretation of the relevant laws.

Due to the unsettled nature of this issue and pending legislative initiatives, this white paper will be revised and expanded as necessary. Any questions, comments, or suggestions may be directed to Stephanie Showalter, Director of the National Sea Grant Law Center.

Beginning January 1, 2007, all ocean-going vessels engaging in port operations in Michigan will be required to obtain a permit from the Michigan Department of Environmental Quality (MDEQ). The MDEQ's permitting regime under development raises complex questions regarding the authority of states to regulate international shipping. The following legal analysis was commissioned by Minnesota Sea Grant to support research, education and outreach activities. The Law Center was specifically asked to examine the legality of Michigan's program under U.S. and international law and Michigan's capacity to enforce its laws.

I. State Regulation of Ballast Water

A. Michigan

Michigan Senate Bill 332, enacted into law June 2, 2005, requires all ocean-going vessels engaging in port operations in Michigan after January 1, 2007 to obtain a permit from the MDEQ. To receive a permit, the vessel must show that it will not discharge aquatic invasive species (AIS) into state waters. If a ship intends to discharge ballast water, it must demonstrate that it uses "environmentally sound technology and methods" to prevent the discharge of AIS into state waters.

The MDEQ responded to Senate Bill 332 by developing a Ballast Water Control General Permit under the Michigan Natural Resources and Environmental Protection Act. The permit is applicable to ocean-going vessels that (1) engage in port operations and do not discharge ballast water or (2) discharge ballast water treated with a method approved by the MDEQ. The general permit sets forth ballast water discharge limitations, reporting requirements, and other conditions.

In the draft permit issued on May 28, 2006, the MDEQ identified four treatment methods it views as adequate to prevent the discharge of AIS: (1) hypochlorite; (2) chlorine dioxide; (3) ultraviolet (UV) light radiation; and (4) deoxygenation. MDEQ has established effluent limitations and monitoring requirements for each treatment method. For example, if a vessel is using hypochlorite as a ballast water biocide, the ballast water must be dosed to a level of 10 parts per million (ppm) total residual chlorine and held in the ballast tanks for a minimum of 19 hours before discharge. If using chlorine dioxide, the water must be dosed to a level of 5 ppm and held a minimum of 24 hours. For UV treatment the water must receive a dose of greater than or equal to 200,000 microwatts-sec/cm². As for deoxygenation, the intake ballast water must be injected with sufficient gaseous nitrogen to reduce the dissolved oxygen in the ballast water to be discharged to 1 mg/l or below and water held in the tanks for a minimum of 48 hours.

B. Other States

Other Great Lakes states may follow Michigan's lead. Although no other state has passed similar legislation, bills are pending or have been introduced in Indiana, Minnesota, and Wisconsin. Indiana Senate Bill No. 219 would permit a vessel to enter state waters only if (1) ballast water and sediment had been treated through filtration, UV, biocides, or other method approved by the state and (2) the vessel

has a permit from the Indiana Department of Environmental Management for any planned discharges. SB 219 was first read on January 9, 2006 and referred to the Committee on Energy and Environmental Affairs. Minnesota H.F. No. 3705, introduced on March 20, 2006, would prohibit ocean-going vessels equipped with ballast water tanks or capable of discharging ballast water from operating in state waters of Lake Superior unless a permit has been issued by the state. In Wisconsin, Assembly Bill 919, which did not pass the last legislative session, would have required the operator of an ocean-going vessel using a Wisconsin port to obtain a permit from the Department of Natural Resources. In order to obtain that permit, the operator would have had to demonstrate that the vessel was either not capable of taking on ballast water or equipped with environmentally sound technology to prevent the introduction of aquatic nuisance species.

In September, California enacted the Coastal Ecosystems Protection Act, which will require the State Lands Commission (SLC) to adopt ballast water discharge standards for ships traveling in state waters. The performance standards, recommended by the SLC last January, include a requirement of zero detectable marine organisms in discharged ballast water by 2020. The Act also directs the SLC to consult with the Coast Guard to adopt regulations regarding experimental ballast water treatment systems. Ships using experimental ballast water treatment systems approved by the SLC on or before January 1, 2008, will be in compliance with the SLC standards for five years from the date of the application of interim performance standards.

These new state efforts to regulate ballast water to prevent environmental harm are quite different from actions states have taken in the past. In 2000 and 2001, several states passed legislation to complement and enhance the Coast Guard's efforts at the time. Washington State requires vessels over 300 gross tons to conduct an open sea exchange at least 50 miles offshore, although beginning in 2007, ships may discharge treated ballast water in lieu of an exchange. Maryland's and California's (until recently) requirements are identical to the Coast Guard's, although California also accepts discharges to onshore treatment facilities. Oregon requires open sea or coastal exchanges, but exempts vessels that discharge ballast water treated to remove organisms in a manner approved by Coast Guard. None of the existing state programs, however, require vessels to obtain a permit from a state agency.

II. Federal Regulation of Ballast Water

A. Coast Guard

The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA), as reauthorized and amended by the National Invasive Species Act of 1996 (NISA), authorized the Secretary of Transportation to issue regulations "to prevent the introduction and spread of aquatic nuisance species into the Great Lakes through the ballast water of vessels."¹ The Secretary of Transportation delegated responsibility to the Coast Guard.

¹ 16 U.S.C. § 4711 (b)(1).

Coast Guard regulations require vessels carrying ballast water and operating in the Great Lakes or on the Hudson River to employ one of the following ballast water management options: (1) carry out an exchange of ballast water in waters more than 200 miles from shore (beyond the U.S. Exclusive Economic Zone) and more than 2,000 meters deep; (2) retain ballast water on board; or (3) use an alternative environmentally sound method of ballast water management that has been approved by the Coast Guard.² The Coast Guard has yet to approve any alternative ballast water methods.

The primary difference between Michigan's laws and the federal laws is that the Coast Guard program does not require ships that claim No Ballast Onboard (NOBOB) to comply with their ballast discharge programs. NOBOBs are vessels which have discharged ballast water in order to carry cargo and, as a result, have only unpumpable residual water and sediment remaining in the tanks. The Coast Guard has taken preliminary steps to regulate these vessels, however. NOBOBs must submit ballast water reporting forms and the Coast Guard recently established voluntary best management practices for NOBOB vessels, which include mid-ocean water exchange and saltwater flushing of empty tanks.³ However, although the Coast Guard may monitor the NOBOB ships, the requirements are not mandatory and vessels that are loaded with cargo may avoid the ballast water requirements. The MDEQ's draft permit will address this gap and requires *all* ocean-going ships to obtain a permit.

B. EPA

The Clean Water Act (CWA) prohibits the discharge of pollutants from a point source into the navigable waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. Although vessels are considered point sources, the EPA has by regulation exempted from the NPDES permit requirements discharges "incidental to the normal operation of a vessel."⁴ The discharge of ballast water falls within this exemption.

In January 1999, a number of environmental groups petitioned the EPA to repeal § 122.3(a) claiming it conflicts with the CWA, which does not exempt incidental discharges from vessels. The EPA denied the petition in September 2003, citing policy considerations and Congress's preference that the Coast Guard regulate routine, operational discharges, as evidenced by NANPCA and the Act to Prevent Pollution from Ships.⁵

² 33 C.F.R. § 151.1510.

³ Ballast Water Management for Vessels Entering the Great Lakes That Declare No Ballast Onboard; Environmental Assessment and Finding of No Significant Impact, 71 FR 4605 (Jan. 27, 2006).

⁴ 40 C.F.R. § 122.3(a).

⁵ EPA, Decision on Petition for Rulemaking to Repeal 40 C.F.R. 122.3(a) (2003).

In its petition, EPA noted that states are not preempted by the CWA from acting to regulate discharges incidental to the normal operation of a vessel. States may operate a program with a greater scope of coverage than that required under the NPDES state program regulations.⁶ States are not precluded by the CWA from adopting or enforcing “any standard or limitation respecting discharges of pollutants or “any requirement respecting control or abatement of pollution” as long as those standards are no less stringent than the federal standards.⁷ “A NPDES-authorized State that identifies the discharge of invasive species in ballast water as a significant concern in its waters may act to address those discharges through its NPDES program.”⁸

However, three pages later EPA makes the following statement:

EPA reasonably interprets the CWA to authorize the exclusion of discharges incidental to the normal operation of a vessel because otherwise every vessel engaged in interstate commerce would be required to apply for and obtain a different, and potentially conflicting, NPDES permit for each of the various State waters through which they travel. There is no provision under the CWA that would enable EPA to issue any type of general permit to establish consistent, nationwide standards for vessels in State waters. Under Section 303 of the CWA, States have adopted varying water quality standards. 33 U.S.C. § 1313. Given the structure of the CWA permitting and standards provisions, and the nature of incidental discharges from vessels, the EPA's interpretation of the CWA not to require an NPDES permit for every discharge from a vessel that simply operates normally as a means of transportation in the navigable waters avoids the burden of different, and potentially conflicting, requirements from every State through which such a vessel passes.⁹

Read together, these passages suggest that EPA believes that ballast water discharges are better regulated by the Coast Guard, but recognizes that Congress has preserved state authority under the Clean Water Act.

A federal district court in California recently ruled that the EPA must regulate ballast water under the Clean Water Act (CWA). In *Northwest Environmental Advocates v. EPA*, 2005 U.S. Dist. LEXIS 5373 (N.D. Cal. March 30, 2005), the U.S. District Court for the Northern District of California ordered the EPA to repeal § 122.3, finding that ballast water discharges constitute a “discharge” of “pollutants” (because it can contain biological materials) into the navigable waters of the U.S. from a “point source.” “Given the clear language of the CWA, the statute requires that discharges of pollutants from non-military vessels into the nation’s lakes, rivers, and harbors occur only under the regulation of a NPDES permit.” The court found that although NANPCA/NISA directed the Coast Guard, not the EPA, to oversee the development

⁶ 40 C.F.R. § 123.1(i)(2).

⁷ 33 U.S.C. § 1370.

⁸ EPA, Decision on Petition for Rulemaking at 9.

⁹ *Id.* at 12.

of regulatory requirements for ballast water, NISA was not intended to limit the CWA with respect to ballast water discharges. 16 U.S.C. § 4711(b)(2)(C) clearly states that “the regulations issued under this subsection shall . . . not affect or supersede any requirements or prohibitions pertaining to the discharge of ballast water into waters of the United States under the Federal Water Pollution Control Act.” The court also pointed out that NISA only addresses AIS and not the other types of ballast water pollutants, such as sediment, rust, etc. and is therefore not comprehensive.

The EPA also raised the issue of preemption by the Act to Prevent Pollution from Ships (APPS), which implements U.S. obligations under the International Convention for the Prevention of Pollution from Ships (MARPOL). The court rejected this argument as well, finding that although Congress delegated responsibility for implementing MARPOL to the Coast Guard, the APPS contains a savings clause that states “remedies and requirements of this chapter supplement and neither amend nor repeal any other provisions of law, except as expressly provided in this chapter.”¹⁰ Therefore EPA’s authority under the CWA to regulate pollutants from vessels was preserved. The Court ordered the EPA to repeal 40 C.F.R. § 122.3(a).

On September 18, 2006 Judge Illston granted Northwest Environmental Advocates’ motion for permanent injunctive relief and remanded the case to the EPA.¹¹ After refusing to limit the scope of her order to ballast water discharges only, Judge Illston set a two-year deadline for EPA action. The challenged regulation, 40 C.F.R. § 122.3(a), will be set aside as of September 30, 2008. Judge Illston dismissed the shipping industry’s concerns regarding the impact of the ruling on global shipping as “dramatically overstated,” finding they were based on the assumption that ballast water discharges would be absolutely and immediately prohibited. Judge Illston recognized that a two-year time frame is “ambitious,” but concluded that it would not impose an undue burden on the EPA because the agency is intimately familiar with the ballast water problem and the Coast Guard already requires several measures the EPA could adopt. EPA has not filed an appeal at this time.

III. State Authority to Regulate International Shipping

The Tenth Amendment to the U.S. Constitution states that “the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” State governments have broad powers to legislate to protect the health, safety, and welfare of their citizens, commonly referred to as the police power. The state powers reserved under the Tenth Amendment, however, often overlap with the federal commerce and foreign relations clause powers. Federal law can preempt a validly enacted state law if it conflicts with federal law or interferes with interstate commerce. State regulation of commercial shipping operations is constrained by

¹⁰ 33 U.S.C. § 1907(f).

¹¹ *Northwest Environmental Advocates v. EPA*, No. C 03-05760, Order Granting Plaintiffs’ Motion for Permanent Injunctive Relief (N.D. Cal. Sept. 18, 2006).

three constitutional principles: the Commerce Clause, the Supremacy Clause, and the Foreign Affairs Clause.

A. Federal Preemption

The Supremacy Clause of Article VI of the U.S. Constitution provides that the Constitution, including laws and treaties made pursuant to it, are the supreme law of the land. It is within the police power of states to regulate areas affecting the health and safety of its citizens; however, pursuant to the Supremacy Clause, state laws that conflict with federal laws are generally preempted by federal law. Even if state laws do not actually conflict with federal law, states may be barred from regulating areas in which the federal government has regulated.

States have some authority to regulate international shipping. In 1960, the U.S. Supreme Court in *Huron Portland Cement Co. v. City of Detroit* (362 U.S. 440 (1960)) upheld a local smoke abatement ordinance which applied to ships. A Michigan vessel owner had challenged the constitutionality of Detroit's Smoke Abatement Code. Plaintiff's vessels had been inspected, approved, and licensed by the Coast Guard to operate in interstate commerce and were equipped with hand-fired Scotch marine boilers. The boilers, however, emitted smoke which exceeded the maximum standards of the Detroit code.

The Supreme Court found that the Detroit ordinance was enacted to promote the health and welfare of the city's inhabitants and therefore fell within the state's police power. "In the exercise of that power, the states and their instrumentalities may act, in many areas of interstate commerce and maritime activities, concurrently with the federal government." The Court noted that "evenhanded local regulation to effectuate a legitimate local public interest is valid unless preempted by federal action." "The mere possession of a federal license, however, does not immunize a ship from the operation of the normal incidents of local police power, not constituting a direct regulation of commerce."

The plaintiff argued that the Detroit ordinance was preempted by the federal inspection program because it required vessels to replace equipment approved by the Coast Guard. The Court held that the ordinance was not preempted by the federal inspection program. While comprehensive, the court found that the inspection program was designed primarily to "insure the seagoing safety of vessels subject to inspection." In contrast, the court found that the primary purpose of the ordinance was the "elimination of air pollution" and "enhance[ing] the cleanliness of the local community." The Court therefore concluded that there was "no overlap between the scope of the federal ship inspection laws and that of the municipal ordinance here involved."

Two justices dissented, arguing that the requirements of the Detroit ordinance were squarely in conflict with the federal licensing statute. Even though the boiler had been approved by the Coast Guard, Detroit would not issue a certificate of operation. The dissenters would have held that the ordinance was preempted

because “equipment approved and licensed by the Federal Government for use on navigable waters cannot pass muster under local law.”

The Supreme Court has held that state laws attempting to regulate the design, size, and movement of oil tankers are preempted by federal law. In *Ray v. Atlantic Richfield*, 435 US 151 (1978), the Court invalidated Washington state laws regulating tankers in Puget Sound. The oil tankers were already regulated under the Port and Waterways Safety Act of 1972 (PWSA). The court found that the PWSA allowed states to regulate if the regulations concerned peculiarities of local waters that call for precautionary measures, and the Coast Guard had not adopted regulations on the subject or had determined that regulation is unnecessary or inappropriate. The Court found that the enforcement of some of the Washington state laws would frustrate the congressional intent to establish a uniform federal regime controlling the design of oil tankers. For example, one of the Washington laws required oil tankers operating in the Puget Sound to take on a state licensed pilot. This was in direct conflict with two federal laws that gave the federal government exclusive authority to regulate pilots on registered vessels and that precluded a state from imposing its own requirements.

However, the Court did allow certain provisions of Washington’s law to stand, despite the federal regulation, finding that vessels must conform to “reasonable, nondiscriminatory conservation and environmental protection measures” imposed by a state. For example, one of the Washington rules required the tankers to be escorted by a tug when in Puget Sound. The Court upheld this provision, holding that a tug-escort is not a design requirement, but rather an “operating rule arising from the peculiarities of local waters that call for special precautionary measures.”

State regulation of ballast water discharges has also passed muster, at least in the Ninth Circuit. In 1984, in *Chevron U.S.A. v. Hammond*, 726 F.2d 483 (9th Cir. 1984), the Ninth Circuit upheld an Alaska statute that prohibited oil tankers from discharging ballast water into state waters if the ballast had been stored in oil cargo tanks. Alaska was attempting to regulate ballast water discharges under its CWA authority and through its NPDES permit system.

Recognizing that the Supreme Court in *Ray* found that Congress had entirely occupied the field of tanker design, the Ninth Circuit construed the holding narrowly. The court stated that “there are significant differences between the subject matter regulated in *Ray* – vessel design features – and that regulated here – ocean pollutant discharges.” The court found that the PWSA is only a small part of the overall federal marine environmental protection scheme, of which the CWA was at the heart. Under the CWA, “states maintain primary responsibility for abating pollution in their jurisdictions; they have authority to establish and administer their own permit systems and to set standards stricter than the federal ones.”

The court found that the CWA demonstrates a “congressional intent that there be joint federal/state regulation of ocean waters within three miles of shore” which undermines the argument that Congress intended to occupy the field of regulating tanker pollution in a state’s territorial waters.” The court based its holding on the

logic that “while design standards need to be uniform nationwide so that vessels do not confront conflicting requirements in different ports and so that the Coast Guard can promote international consensus on design standards, there is no corresponding dominant national interest in uniformity in the area of coastal environmental regulation.”

The Ninth Circuit concluded that the potential effect of Alaska’s statute on international trade was distinguishable from the effect of the tanker design provisions in *Ray*. “Once a ship is constructed, it cannot meet new or different design requirements in various ports. A ship’s discharge of pollutants can, however, be varied according to environmental standards and conditions in different jurisdictions. Hypothetically, state regulation regarding the discharge of pollutants could possibly interfere with the establishment of nationally uniform design requirements. But, for the most part local environmental regulations can co-exist – as they do here – with federal regulations without impinging on the exclusively federal concerns of vessel design and traffic safety.” The court highlighted the fact that no party asserted that it was impossible to comply with both the Coast Guard and the Alaska statute. Unlike in *Ray*, Alaska neither set nor sought to impose design features. “Alaska has left all designing of vessels and equipment to the Coast Guard and has only prohibited the discharge of polluted ballast.”

In a footnote, the court gave the regulation of Marine Sanitation Devices (MSDs) as an example of the co-existence of state and federal regulation. Congress authorized the EPA through the CWA, after consultation with Coast Guard to promulgate federal standards of performance for MSDs.¹² The Coast Guard was directed to promulgate regulations governing the design, construction, installation, and operation of MSDs. After the effective date of the standards and regulations, no state may adopt or enforce a statute or regulation with respect to design, manufacture, installation or use. However, if a state determines that the protection and enhancement of the quality of some or all of the waters within a state require greater environmental protection, a State may completely prohibit discharge from all vessels of any sewage, whether treated or not. The prohibition, however, may not come into effect until the EPA determines there are adequate facilities for safe and sanitary removal of sewage are reasonable and available.

In a more recent Supreme Court case, *U.S. v. Locke*, 529 U.S. 89 (2000), the Court held that where state and federal laws have the same purpose, federal laws preempt state laws. The State of Washington had again adopted regulations for tanker design, equipment, reporting, and operations because of its concerns over oil spills. Tankers are regulated by a number of federal statutes, including the Tank Vessel Act and the PWSA. The PWSA consists of two titles. Title I concerns vessel traffic “in any port or place under the jurisdiction of the United States.”¹³ Title II requires the Coast Guard to issue regulations addressing the “design, construction,

¹² 33 U.S.C. § 1322.

¹³ 33 U.S.C. § 1223(a)(1).

alteration, repair, maintenance, equipping, personnel qualifications, and manning” of tanker vessels.¹⁴

The Court began its analysis by stating that “state laws now in question bear upon national and international maritime commerce, and in this area there is no beginning assumption that concurrent regulation by the State is a valid exercise of police power. Rather we must ask whether the local laws in question are consistent with the federal statutory structure, which has as one of its objectives a uniformity of regulation for maritime commerce.” The Court noted that states may regulate in areas covered by federal law only if the federal law contains a saving clause authorizing state regulation. In addition, states may regulate areas of unique local concern, unless the state law conflicts with federal law, and can regulate ports and waterways so long as regulation based on “the peculiarities of local waters that call for special precautionary measures.” “Peculiarities of local waters” include such things as water depth and narrowness.

In *Locke*, the Court overturned the Washington state laws regulating tanker design, equipment, reporting, and operating requirements for oil tankers in state waters. The state’s English language proficiency requirements, navigation watch requirements, and casualty reporting requirements were also preempted. The laws also included sanctions for non-compliance, which included restriction of the vessel’s operation in state waters. The Court found that the laws were already covered by the Tank Vessel Act of 1936, the PWSA, and the Oil Pollution Act of 1990. The Court found that the state laws would frustrate Congress’ intent to establish a uniform federal regime for the design of oil tankers.

The court stated that rules requiring tug escorts and local pilots are distinguishable from design requirements because they do not require a vessel to do anything different outside a state’s jurisdiction. “A regulation within the State’s residual powers will often be of limited extraterritorial effect, not requiring the tanker to modify its primary conduct outside the specific body of water purported to justify the local rule.” The court summarized the preemption test as follows: “local rules not preempted under Title II of the PWSA pose a minimal risk of innocent noncompliance, do not affect vessel operations outside the jurisdiction, do not require adjustment of systemic aspects of the vessel, and do not impose a substantial burden on the vessel’s operation within the local jurisdiction itself.”

In July 2006, the First Circuit Court of Appeals permanently enjoined the State of Massachusetts from enforcing several provisions of the state’s Oil Spill Prevention Act (OSPA), ruling that the provisions were preempted by federal law.¹⁵ The OSPA was enacted in 2004 in response to an oil spill in Buzzards Bay. The OSPA, among other things, prohibits certain vessels from docking, loading, or unloading in Massachusetts waters, sets manning and navigation watch requirements, requires drug and alcohol testing, and sets mandatory vessel routes.

¹⁴ 46 U.S.C. § 3703(a).

¹⁵ *U.S. v. Mass.*, 2006 U.S. Dist. LEXIS 50093 (9th Cir. July 24, 2006).

The First Circuit held that the challenged provisions of the OSPA were preempted by the PWSA. First, a requirement that coastwise vessels take on a Massachusetts-licensed pilot was preempted because “a State may not adopt a regulation or provision that requires a coastwise vessel to take a pilot licensed or authorized by the laws of the State” if the vessel is subject to inspection by the Coast Guard.¹⁶ Tankers are subject to inspection and therefore Massachusetts may not require those vessels to take on state-licensed pilots.

The court found that the manning and navigation requirements were preempted under Title II of the PWSA, which covers personnel qualifications, manning and duties of crew members aboard tankers.¹⁷ The preemption analysis under Title II is fairly straightforward. “If the state law intrudes into the comprehensive sphere of Title II it is preempted and unconstitutional.”¹⁸

As for the drug and alcohol testing provisions, Congress required the Coast Guard to establish procedures for testing following certain marine accidents. The court held that 46 U.S.C. § 2303a is evidence of Congressional intent that “Coast Guard regulations regarding chemical testing after serious marine incidents [] stand as the exclusive source of a vessel’s testing obligations.”¹⁹ Because Massachusetts’ testing provision directly conflicts with the Coast Guard regulations, those provisions of the OSPA are preempted. The First Circuit found that the drug and alcohol testing provisions would also fail under Title II preemption analysis. In order to conduct the testing required by the OSPA, tank vessels would have to carry the necessary equipment and train the crew to conduct the tests. The court concluded that this impermissibly intrudes into the exclusive federal fields of tanker vessel equipment, crew training, and vessel operations.

The OSPA prohibits vessels that are not in compliance with federal design standards for double hulls from docking, loading, or unloading in state waters. The court stated that “state regulation of tank vessel design, whether different, more stringent, or identical to federal rules of the subject, are facially unconstitutional.”²⁰ Massachusetts attempted to save this OSPA provision by arguing that it was not a design requirement, but rather a regulation of local docking and mooring practices. The court gave no credence to this argument finding that the provision mandates direct design requirements on tankers seeking to use Massachusetts ports. Unless vessel owners design their vessels in accordance with Massachusetts law, they must completely forego conducting business in the state.

The OSPA also requires all tank barges carrying more than 6,000 barrels of oil to have a tug escort when traveling in state waters deemed “areas of special interest.” The Coast Guard has detailed regulations regarding tugboat escorts which apply to all waters within the First Coast Guard District, which extends from Maine to the

¹⁶ 46 U.S.C. § 8501(d).

¹⁷ *Id.* § 3703(a).

¹⁸ *U.S. v. Mass.*, 2006 U.S. Dist. LEXIS 50093 at *16.

¹⁹ *Id.* at *43.

²⁰ *Id.* at *38.

New York-New Jersey border. The First Circuit held that the tank barges cannot comply with both the state and federal regulations. The state provisions are therefore preempted. Massachusetts' attempts to establish mandatory vessel routes were likewise preempted because of a direct conflict. The Coast Guard has identified a recommended route through Buzzards Bay, but does not make the route mandatory, preferring to preserve the discretion of the vessel's master. The OSPA removes this discretion and directly conflicts with the federal rule.

The final challenged provision of the OSPA required all tank vessels traveling in state waters to present a certificate of financial assurance of at least one billion dollars. OSPA contains an exception which allows the Massachusetts Department of Environmental Protection to lower or waive the certificate requirements when a vessel meets certain design criteria. The plaintiffs in this case argued that this exception was an indirect regulation of tank vessel design, operation, equipment, and reporting. The First Circuit agreed finding that "the Commonwealth's one billion dollar financial assurance requirement imposes such an onerous financial obligation on a tank vessel owner that it in effect forces compliance with the statutory exception criteria."²¹ By attempting to indirectly regulate these fields, the state impermissibly intrudes into fields covered by the PWSA.

The First Circuit invalidated all of the challenged provisions of the OSPA on preemption grounds. Massachusetts was permanently enjoined from enforcing the challenged provisions. Massachusetts has appealed the court's decision to the U.S. Court of Appeals for the First Circuit. "We will fight the federal government to ensure our waters and our coastlines are protected from the types of accidents that necessitated the [OSPA] in the first place," said Massachusetts Attorney General Tom Reilly. "We must continue fighting for these important regulations for the health and wellbeing of our environment."²²

Michigan is attempting to regulate ballast water discharges, which are already addressed by NISA, under a different statute, the CWA. The preemption analysis is complicated by the fact that both NISA and the CWA contain provisions for joint federal/state regulation of the statutes' respective subjects, invasive species and water quality. A preemption finding under NISA is unlikely. First, a court is unlikely to find that NISA contains evidence of Congress' intent to occupy the entire field of ballast water regulation because it contains two separate savings clauses - one for state regulation of invasive species and one for regulation of discharges under the CWA.

As part of the field preemption analysis, however, a court should also consider whether the federal interest in regulating ships is so dominant that Michigan is precluded from regulation. Courts have traditionally held that creating uniformity in

²¹ *Id.* at *65-66.

²² Press Release, Office of the Massachusetts Attorney General, AG Reilly Fights Feds to Protect Buzzards Bay (Sept. 7, 2006), *available at* <http://www.ago.state.ma.us/sp.cfm?pageid=986&id=1718>.

shipping regulations is an important federal interest. If a court determines that the Michigan laws affect the uniformity of the federal regulations, they may be subject to field preemption.

When it issued the final regulations to require Ballast Water Management practices for vessels entering the Great Lakes, the Coast Guard made the following preemption finding:

“The authority to issue regulations requiring ballast water management practices for vessels entering the Great Lakes has been committed to the Coast Guard by the [NANPCA]. Standardizing the minimum requirements for vessels entering the Great Lakes after operating in waters beyond the EEZ is necessary to effectively help prevent additional introductions of nonindigenous species. Therefore, the Coast Guard intends this rule to preempt State and local regulations that are inconsistent with the requirements of this rule. These regulations were developed in consultation with the Task Force which is charged with coordinating action among, and providing technical assistance to, regional, State, and local entities regarding environmentally sound approaches toward prevention and control of aquatic nuisance species. Additionally, in accordance with the Act, the Coast Guard has consulted with the Government of Canada throughout the development of the guidelines and regulations in order to develop an effective international program.”²³

In 2004, when it issued mandatory ballast water requirements for U.S. waters, the Coast Guard did an about-face with respect to federal preemption of state regulation of ballast water. This time, the Coast Guard found that: “Congress clearly intended for a Federal-State cooperative regime and not for Federal preemption of State requirements. Thus, each state is authorized under NISA to develop its own regulations, including its own research programs, if it believes that Federal regulations or programs are not stringent enough.”²⁴ The Coast Guard provides no explanation for this change of position.

The savings clause for state regulation of invasive species was present in the NANPCA. It was not added by NISA, so there was no change in the law between 1993 and 2004. 16 U.S.C. § 4725 states that “nothing in this title shall affect the authority of any State or political subdivision thereof to adopt or enforce control measures for aquatic nuisance species, or diminish or affect the jurisdiction of any State over species of fish and wildlife.” The clauses preserving authorities under the CWA were also present in NANPCA. NISA states that Coast Guard regulations shall “not affect or supercede any requirements or prohibitions pertaining to the discharge of ballast water into waters of the United States under the [CWA].”²⁵

²³ Ballast Water Management for Vessels Entering the Great Lakes, 58 FR 18330, 18334 (April 8, 1993).

²⁴ Mandatory Ballast Water Management Program for U.S. Waters, 69 FR 44952, 44959 (July 28, 2004).

²⁵ 16 U.S.C. § 4711(b)(2)(C).

B. The Commerce Clause

Even if the Michigan laws are not preempted by federal law, state laws must still comply with the requirements of the commerce clause of the U.S. Constitution, which provides that Congress has the authority “[t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.”²⁶ The negative implication of the commerce clause, sometimes called the “dormant commerce clause,” is that the power of state and local governments to regulate interstate commerce is limited. State laws that affect interstate commerce will be invalid if they discriminate against non-residents or unduly burden interstate commerce. In determining whether a state’s law unduly burdens interstate commerce, a court would balance the burden that the law places on interstate commerce with the benefits that the law provides the state.

The Michigan laws are non-discriminatory, since the laws apply equally to all ships in the Great Lakes. The Michigan laws do promote the state’s legitimate interest of preventing the introduction of invasive species into its waters; however, the laws could prove unduly burdensome to interstate shipping. For instance, if the fees and extra paperwork cause ships to stop using Michigan waterways, the laws may unduly burden interstate commerce and the laws could be invalidated.

In order to comply with the Michigan laws, vessels will need to install new equipment, retrofit existing equipment, and train personnel. The cost of these changes could prove quite expensive and might rise to the level of a burden on commerce.

C. Preemption by International Laws

Under the Constitution, the power to regulate international commerce lies with Congress. The United States has the right to allow ships to enter and leave its ports voluntarily and to impose terms and conditions on ships passing through its ports. The United States may enter treaties or conventions with other nations regarding maritime commerce. After Congress ratifies such treaties, they become the “supreme law of the land” under the Supremacy Clause. State laws that conflict with such conventions or treaties would probably be analyzed under the same principles used in the federal preemption cases.

Although the United States is not currently party to a convention or treaty regarding ballast water discharge, it may soon be. In 2004, the International Maritime Organization (IMO), an agency of the United Nations, adopted the International Convention for the Control and Management of Ships’ Ballast Water and Sediments. The United States has not yet signed the convention, and the convention will not go into effect until 12 months after 30 countries have signed it. The IMO treaty mandates a ballast water discharge standard and would replace voluntary guidelines that recommend vessels exchange ballast water in mid-ocean.

²⁶ U.S. Const., Art. I, sec. 8, cl. 3.

Ships must have and implement ballast water management plans. Vessels must maintain ballast water record books to record when water is taken on, treated, and discharged.

The Convention states that ballast water exchange should be conducted so that there is a 95 percent volumetric exchange, and occur at least 200 miles from shore in water 200 meters deep. If the vessel uses a "pumping through" method, pumping through three times the volume of tank will be considered as meeting the standard. If a ship can't comply, it must conduct exchange as far away as possible and no less than 50 miles from shore and 200 meters deep.

Starting in 2009, ships will have to treat their ballast water so that discharges contain fewer than 10 viable organisms greater than or equal to 50 micrometers in size per cubic meter and less than 10 viable organisms per milliliter less than 50 micrometers in minimum dimension and greater than or equal to 10 micrometers. If the United States signs the IMO treaty, it would become the "supreme law of the land" and the Michigan laws may be subject to preemption. The convention also contains specified maximum concentrations for indicator microbes such as toxicogenic *Vibrio cholerae*.

The Coast Guard's ballast water exchange requirements are already more stringent than the international standards (2,000 meters depth vs. 200 meters), but there are no U.S. performance measures yet except for a requirement that at the conclusion of an exchange, tanks must have minimum salinity of 30 parts per thousand. The Coast Guard has been working on ballast water standards, although little progress has been made since the agency issued an advanced notice of proposed rulemaking in 2001.

Congress has indicated a preference for international cooperation in NISA. §4711(j) states that "The Secretary, in cooperation with the International Maritime Organization of the United Nations and the Commission on Environmental Cooperation established pursuant to the North American Free Trade Agreement, is encouraged to enter into negotiations with the governments of foreign countries to develop and implement an effective international program for preventing the unintentional introduction and spread of nonindigenous species." Section 4711(f)(3) states that "the Secretary shall revise regulations promulgated under this subsection to the extent required to make such regulations consistent with the treatment of a particular matter in any international agreement, agreed to by the United States, governing management of the transfer of nonindigenous aquatic species by vessel."

In *Locke*, the Supreme Court did not reach an analysis of the effect of international treaties on state law, because the state laws were preempted under federal law. The Court noted that the existence of international treaties indicates that Congress intended to have national uniformity. Justice Kennedy wrote, "The authority of Congress to regulate interstate navigation, without embarrassment from intervention of the separate States and resulting difficulties with foreign nations, was cited in the Federalist Papers as one of the reasons for adopting the

constitution.” Following this line of reasoning, it would seem to indicate that where Congress ratifies a treaty, states will not be allowed to regulate in ways that would affect international commerce.

IV. Enforcement of State Laws

Under the CWA, the EPA may authorize states to assume control of wastewater discharge under its NPDES program. Michigan has assumed responsibility for the permitting program pursuant to 33 USC §1342(b). Once a state assumes authority, it promulgates its own statutes and regulations, which must meet minimum federal standards. The state then becomes the primary authority for issuing NPDES permits, not the EPA. As a precondition to assuming responsibility for the NPDES program, the state program must demonstrate that it has adequate authority to enforce permit requirements. Although the state is the primary permit enforcer, the federal government retains separate authority under the CWA to pursue civil, criminal, and administrative enforcement actions.²⁷ Therefore, the Michigan ballast water laws may be enforced by Michigan or the EPA. If a ship discharges ballast water without such a permit, the person responsible for the vessel will be subject to possible civil fines and imprisonment by the state. The Michigan DEQ’s compliance staff will have the authority to board vessels discharging ballast water in ports.

V. Conclusion

Several bills have been introduced into Congress that would regulate ballast water discharge. The bills currently before Congress include: the National Aquatic Invasive Species Act of 2005, the Ballast Water Management Act of 2005 (S.363), the Prevention of the Aquatic Invasive Species Act of 2006 (PAISA), and the Great Lakes Invasive Species Control Act. The passage of these bills could affect Michigan and other states’ ability to regulate ballast water discharge. For instance, the PAISA has a specific provision preempting state laws that are inconsistent or conflict with its provisions regarding ballast water exchange or treatment requirements.

The problem of ballast water discharges has not been ignored by the federal agencies responsible for managing vessel pollution. Although progress has been slow, there has been progress. Progress is hindered, however, by litigation. Each lawsuit filed against the EPA and the Coast Guard distracts the agencies and ties up valuable resources. Without further action by Congress clearly indicating an intent to preempt state regulation of ballast water through the Clean Water Act, Michigan’s laws are likely to be upheld on the basis of preemption. If the implementation of Michigan’s program proves overly burdensome to shipping companies, the laws could be struck down under the Commerce Clause. U.S. ratification of the IMO Ballast Water Treaty would also change the analysis as implementing legislation would evidence the need for national uniformity to meet international standards.

²⁷ 33 U.C.S. § 1342(i).