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Docket Management Facility
U.S. Department of Transportation
West Building Ground Floor
Room W12-140
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Re.: Standards for Living Organisms in Ships' Ballast Water Discharged in U.S. Waters
(Docket ID No. USCG–2001–10486)

Dear Sir or Madam:

On behalf of the American Waterways Operators (AWO), thank you for the opportunity to comment on the notice of proposed rulemaking (NPRM) establishing standards for living organisms in ships' ballast water discharged in U.S. waters.

AWO is the national trade association for the inland and coastal tugboat, towboat and barge industry. AWO's 300 member companies include the owners and operators of barges and towing vessels operating on the U.S. inland and intracoastal waterways; the Atlantic, Pacific, and Gulf coasts; and, the Great Lakes. Our industry's 4,000 towing vessels and 27,000 barges comprise the largest segment of the U.S.-flag domestic fleet, both in number of vessels and on-board crew positions. Each year, the towing industry safely and efficiently moves more than 800 million tons of cargo critical to the U.S. economy, such as coal, grain, petroleum products, chemicals, steel, aggregates and containers. Tugboats also provide essential services including shipdocking, tanker escort and bunkering in our nation's ports and harbors.

AWO members are proud to be part of an industry that is the safest and most fuel-efficient, and has the smallest carbon footprint, of any surface transportation mode. We are deeply committed to building on the natural advantages of marine transportation and leading the development of higher standards of marine safety and environmental protection. In 1994, AWO became the first transportation trade association to adopt a code of safe practice and environmental stewardship for member companies. Today, compliance with the Responsible Carrier Program (RCP) is a condition of AWO membership, and members undergo independent third-party audits every three years to demonstrate their continued compliance.

AWO is also a member of the Shipping Industry Ballast Water Coalition, an alliance of maritime trade associations that, together, represent over 90 percent of all vessels calling at U.S. ports, in both the domestic and international trades. The Coalition is committed to working with legislators, regulators and environmental groups to develop environmentally sound and economically practicable solutions to prevent the introduction and spread of invasive species in U.S. waters.

This history and these organizational characteristics inform our view of the notice of proposed rulemaking. We seek to protect the marine environment in which our vessels operate, to provide a practicable regulatory framework that allows for the continued safe and efficient movement of essential maritime commerce, and to ensure that impracticable or overly burdensome regulations do not result in the diversion of cargo to other transportation modes that pose increased risks to safety and the environment.

The Administration Should Support a Uniform National Standard for Ballast Water and Other Vessel Discharges

We note, first, the critical need for a uniform national standard for ballast water and other vessel discharges. The issuance of this NPRM is a stark reminder of the untenable state of affairs that currently exists with respect to the regulation of vessel discharges: the Coast Guard regulates ballast water under the National Invasive Species Act (NISA); the Environmental Protection Agency (EPA) regulates ballast water and other vessel discharges under the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) permit program; and, because neither NISA nor section 402 of the Clean Water Act preempts state regulation of ballast water and other vessel discharges, dozens of states have established their own regimes governing vessel discharges. This patchwork of federal and state authorities poses enormous difficulties for vessels operating in interstate commerce. (A barge tow traveling from Pittsburgh to New Orleans down the Ohio and Mississippi River systems, for example, travels through 11 states, each of which is free to establish its own unique requirements for vessel discharges in its waters.) While it is sometimes suggested that better coordination among federal and state authorities to avoid conflicting standards is the solution to this problem, coordination alone is insufficient. Even if the various federal agencies and state authorities were to agree on a common discharge standard, for example, vessel owners would still be faced with the significant burden of complying with the multiplicity of administrative requirements (reporting, recordkeeping, inspections, training, etc.) imposed by the different statutory or regulatory authorities governing vessel discharges.

The real solution is to establish a new, uniform statutory framework for the regulation of ballast water and other vessel discharges – one that provides for effective, environmentally protective standards based on sound science and is tailored to address the operational realities of mobile sources in interstate commerce. We urge the Administration to take a leadership role in working with Congress to bring about such a solution.

The Rulemaking Record Does Not Support the Proposed Regulations

AWO is deeply disappointed that, even after the many years that this NPRM has been under development, the proposal is based on inaccurate assumptions and incomplete research that do not support the regulations as proposed. These deficiencies have led to a one-size-fits-all proposal that has not and cannot be justified in its application to barges and towing vessels in the U.S. domestic trade.

First, the rulemaking record simply does not support the proposal that was published in the *Federal Register*. Egregiously, neither the Preliminary Regulatory Analysis nor the Draft Programmatic Environmental Impact Statement (DPEIS) even discusses the two-tiered standard approach proposed in the NPRM. Throughout these documents, the proposed Phase I standard is referred to as the "preferred alternative," and analysis and justification for this standard is provided. Neither the Phase II standard nor the idea of a two-phase approach to standard setting is even discussed in the regulatory analysis or DPEIS, much less analyzed for environmental benefit and economic feasibility. This glaring procedural defect suggests the troubling conclusion that the inclusion of the Phase II standard was a last-minute political decision that was not subjected to the thorough and dispassionate analysis that is 1) required by law and 2) the standard of care that the regulated public has a right to expect from government. We urge the Administration not to short-circuit the regulatory process and to ensure that all required procedural steps are undertaken as it proceeds toward the development of a final rule.

Moreover, the NPRM is also based on numerous inaccurate assumptions about the affected vessel population and its operating characteristics. For example, the regulatory analysis states that vessels under 100 feet in length, vessels operating on rivers and tugboats towing astern generally do not carry ballast water. In fact, inland towboats of all sizes routinely carry ballast water to maintain trim as fuel is burned during a voyage; coastal tugboats carry ballast for trim and stability; and many barges, both inland and coastal, are ballasted for trim and stability, to ensure proper tow configuration, or to allow for better seakeeping when empty. An AWO member survey, which generated responses from 52 member companies (or about 20 percent of AWO's carrier membership), identified more than 1,300 inland and coastal towing vessels and barges that carry ballast water in this small sample alone. The majority of these vessels have not been accounted for in the Coast Guard's estimate of 2,600 U.S. vessels that would be affected by the notice of proposed rulemaking.

The regulatory analysis also assumes that the proposed requirements would only affect vessels with the capacity to carry large volumes of ballast water (450,000 gallons and up) and flow rates of 1,100 gallons per minute or more. In fact, the proposed rule would affect vessels with much smaller capacity and much lower flow rates. A typical inland towboat has 20,000-40,000 gallons of ballast water capacity; a typical coastal tug has 20,000-70,000 gallons. A small harbor tug might have a capacity of 2,000-3,000 gallons. While barges, especially oceangoing barges, have larger ballast capacities, the ballast capacity of many barges is still a fraction of that assumed in the regulatory analysis. Flow rates for barges and towing vessels discharging ballast water are also considerably less than those of other commercial vessels, ranging from 20 to 250 gallons per minute.

Ballast Water Treatment Should Not Be Required for Towing Vessels and Barges in the U.S. Domestic Trade

Without an accurate understanding of the affected vessel population and its characteristics, the Coast Guard cannot make a defensible assessment of the scientific basis for, cost and cost-benefit of, and technical and operational feasibility of requiring ballast water treatment systems on a particular class of vessels. In fact, there is considerable evidence, or in some cases lack of evidence, to argue against the application of ballast water treatment requirements to towing vessels and barges in the U.S. domestic trade.

First, the statutory authority that the Coast Guard claims as the basis for extension of ballast water treatment requirements to all vessels equipped with ballast tanks operating in U.S. waters does not support the imposition of such requirements on vessels that do not operate beyond the U.S. Exclusive Economic Zone (EEZ). NISA provides, in pertinent part (16 USC 4711(c)(2)(D)), that the Coast Guard may "direct a vessel that is carrying ballast water into waters of the United States **after operating beyond the exclusive economic zone**" (emphasis supplied) to conduct ballast water exchange or "use environmentally sound alternative ballast water management methods . . . if the Secretary determines that such alternative methods are at least as effective as ballast water exchange in preventing and controlling infestation of aquatic nuisance species." While the Secretary is authorized to establish ballast water management and reporting requirements for "all vessels equipped with ballast water tanks that operate in waters of the United States" (16 USC 4711(c)(2)(B)), with the exception of crude oil tankers in the coastwise trade (16 USC 4711(c)(2)(L)), authority to require ballast water exchange or alternatives is limited to vessels that have operated beyond the EEZ. Given Congress's explicit distinction between vessels that operate beyond the EEZ and vessels that do not, we believe the Coast Guard's reliance on the general authority provided in 16 USC 4711(c)(1), (c)(2)(A), (e) and (f) to extend ballast water treatment requirements to vessels not required to conduct ballast water exchange is an impermissible overreach.

Second, the DPEIS provides no evidence to suggest that ballast water discharged by towing vessels or barges operating exclusively on the inland river system, or within the same coastal ecosystem, has contributed to the introduction or spread of invasive species in U.S. waters. When the Coast Guard instituted nationwide ballast water reporting requirements in 2004, the agency told AWO that one of the principal purposes of collecting this data was to map vessel movements and ballast water discharge patterns against invasive species flows. AWO was told that the Coast Guard would use this information to determine where ballast water discharges had contributed to the introduction or spread of invasive species and thus, where and on which classes of vessels ballast water treatment requirements would be justified. While the National Ballast Water Information Clearinghouse (NBIC) contains a wealth of data submitted by vessel owners over the past five years, we are aware of no effort by the Coast Guard to analyze the data to see what it suggests about the role of vessels, and particularly domestic vessels, in the introduction and spread of invasive species. We also note, as mentioned above, that NISA exempts from ballast water management requirements crude oil tankers in the U.S. coastwise trade, presumably because they pose no risk of introducing invasive species into U.S. waters. It would be patently unfair to subject domestic towing vessels and barges with much smaller volumes of ballast water capacity to a different standard.

Third, AWO is not aware of any ballast water treatment system that has been approved, installed or even tested on vessels with the operating characteristics of many tugboats, towboats and barges, such as the following:

- Vessels operating exclusively in freshwater: Well over half of U.S. towing vessels and barges never operate in saltwater, and while some ballast water treatment chemicals can work on organisms in freshwater environments, AWO is not aware of any ballast water treatment **system** that has been tested or can be used on freshwater vessels. Indeed, in AWO's conversations with treatment system manufacturers, it has been suggested that treatment systems for freshwater vessels have not yet been developed because their risk of introducing invasive species is so small.

- Vessels of very limited size. Many towing vessels are less than 125 feet long, with small engine rooms averaging between 900 and 1300 square feet. While treatment systems range in size, one of the smallest ones would take up about one-tenth of this space. In a towing vessel engineroom, there is virtually no space not already dedicated to machinery or walkways. Keeping these areas clear and leaving enough room for engineers to maintain the existing equipment is critical to the safe operation of the vessel. Moreover, since ballast water treatment systems have not been tested on tugboats or towboats, it is unclear whether or not their installation is even possible on vessels of such small size.

- Vessels with very low ballast water flow rates. The Preliminary Regulatory Analysis examined vessels with flow rates of 1,100 gallons per minute and above; however, the flow rates of some tugboats are as low as 20 gallons per minute, and average flow rates for typical towing vessels are approximately 250 gallons per minute. Since flow rates must be high enough to pump water through the treatment system, vessels with low flow rates must install additional pumps in order to ensure that the system will work effectively. Not only was the cost of additional pumping equipment not assessed in the rulemaking record, it has not been demonstrated whether treatment systems employing additional pumps are feasible for installation on barges or towing vessels.

- Vessels without installed ballast water piping. The ballast tanks of many barges and towing vessels are simply void spaces filled with water to keep the vessel stable. In many cases, these tanks do not have any piping; they are filled and emptied shoreside with hoses or portable pumps. In order to install a ballast water treatment system, piping would have to be installed, an extensive and expensive process that may require developing an approved vessel-specific design, conducting stability studies and taking the vessel out of service for weeks.

- Tank barges. There are serious safety and possibly regulatory impediments to the installation of ballast water treatment systems that rely on electricity on tank barges. Coast Guard regulations for electric equipment on vessels (46 CFR 111.105-31(l)) prohibit the placement of such equipment within 10 feet of any cargo tank vent outlet, cargo tank ullage opening, cargo pipe flange, or cargo valve unless it is intrinsically safe, explosion proof, or purged and pressurized in order to prevent cargo vapors from exploding. It is unclear whether and how ballast water treatment systems could be

installed on inland tank barges so as not to conflict with this regulation and avoid posing serious personnel safety risks.

Fourth, requiring the installation of treatment systems costing a half-million dollars or more on thousands of towing vessels and barges with very limited ballast water capacity is most likely cost-prohibitive, and surely not cost-effective. A 2009 survey by the California State Lands Commission contained cost estimates for 14 ballast water treatment systems, ranging in cost from $150,000 to $2.3 million per system, with an average cost of $895,000. These estimates do not include the cost of removing the vessel from service in order to install the system, any modifications to the vessel (as would almost certainly be required for towing vessels and barges, for the reasons discussed above), or operation and maintenance of the system once installed. These cost estimates are truly staggering when compared to the value of a barge or towing vessel on which such a system might be installed. An inland barge can cost $400,000, less than half the cost of the average treatment system examined in the California survey! An inland towing vessel can cost as little as $3 million and a coastal tugboat as little as $5 million, meaning a vessel owner could be required to install a piece of equipment worth one-third to one-fifth of the vessel's value.

These costs (which were neither assessed nor justified in their application to most towing vessels and barges, given the Coast Guard's erroneous assumptions about the affected vessel population) are particularly egregious given the very high percentage of barge and towing companies that are small businesses. The Congressionally-authorized Towing Safety Advisory Committee estimated in a 2008 analysis that some 90 percent of barge and towing companies qualify as small businesses under the Small Business Administration definition. These costs must be considered not only in absolute terms, but against the backdrop of the lack of evidence that domestic towing vessels or barges have contributed to the introduction or spread of invasive species, the smaller volumes of ballast water transported by these vessels, and the technological and operational impediments to the installation of ballast water treatment systems on towing vessels and barges.

The Coast Guard Should Exempt Other Vessel Operations That Do Not Pose a Risk of Introducing Invasive Species

In addition to not requiring ballast water treatment systems on towing vessels and barges in the U.S. domestic trade, the Coast Guard should exempt any vessel with the following operational characteristics, which pose little or no risk of introducing or spreading invasive species:

- Vessels that use only municipal or commercial water for ballast. Many towing vessels and barges fall into this category, using potable water from shoreside sources for ballast instead of river or sea water.

- Vessels that carry ballast water or have ballast tanks but do not take on or discharge ballast water in U.S. waters. These vessels do not pose a risk of transferring invasive species into or within U.S. waters and should not be required to install treatment systems.

- Vessels that operate in more than one Captain of the Port (COTP) zone but only take on and discharge ballast water in a single zone. A towing vessel might, for example, operate

throughout the inland river system but only take on ballast water to ride lower in the water when passing under the low bridges near Chicago, discharging the ballast water in the same zone when the bridge transit is completed. Such vessels should be exempted for the same reasons as vessels that operate exclusively within a single COTP zone.

We also urge the Coast Guard to correct what appears to be a technical error in the regulatory text and ensure that the proposed exemption for vessels operating exclusively in one COTP zone (33 CFR 151.2015) extends to the ballast water management requirements (33 CFR 151.2025), consistent with the description of this provision in the preamble to the NPRM.

Eliminate the Two-Tier Approach or Provide Lifetime Grandfathering for Vessels with Installed Treatment Systems

AWO urges the Coast Guard to eliminate the proposed two-tier standard and adopt a single ballast water discharge standard that is both effective in neutralizing invasive species in ballast water and practicable for installation on vessels. While we are sympathetic to the conceptual rationale for the two-tier approach – set an achievable standard in the near term and ramp up to a higher standard if and when technology allows – it is simply impractical to expect a vessel owner to install a treatment system costing as much as $1 million and then replace that system before the end of its useful life. We see two options to avoid this unacceptable situation: first, the Coast Guard could elect to conduct a practicability review now to assess whether the proposed Phase II standard is feasible and, if so, eliminate Phase I and establish an appropriate timeline for installation of Phase II systems. Alternatively, the Coast Guard could implement the Phase I standard as proposed (and subject to the modifications discussed in these comments), with the proviso that any vessel that installs a system meeting the Phase I standard will not be required to replace that system before the end of the system's, or the vessel's, useful life. If a practicability review subsequently allows for adoption of the Phase II standard, the Coast Guard could apply the Phase II requirement to new vessels (or vessels replacing systems that have reached the end of their useful life) only.

The Practicability Review Should Ensure That Systems Are Practicable for Any Class of Vessels on Which They Will Be Required

AWO urges the Coast Guard to ensure that the proposed practicability review is robust and comprehensive. Specifically, we recommend that the practicability review examine the following factors and ensure that any proposed standard is:

- Effective in neutralizing invasive species. This requires ensuring that tools and protocols exist to measure the effectiveness of the standard;
- Technologically feasible for installation on the vessels that will be required to install treatment systems meeting the standard. Treatment systems should not be required on any class of vessels unless the system has been tested and proven practicable given those vessels' engineroom size and design, ballast water capacity, tank configuration, flow rate, etc.;
- Commercially available. That is, systems meeting the standard are on the market and available in sufficient quantity to allow for purchase and installation by the population of affected vessels on the required regulatory schedule;

- Safe for use with the characteristics of the vessels to which it will be applied (i.e., proximity to flammable or combustible cargo, etc.); and,
- Cost-effective for use on the vessels that will be required to use it. A system whose cost would drive vessel owners out of business or impose severe economic hardship is not cost-effective and should not be required.

While the Coast Guard has specifically solicited comments on the factors to be included in the practicability review that takes place before implementation of the Phase II standard, the same considerations are no less relevant to the application of the Phase I standard. We urge the Coast Guard to ensure that a complete analysis of these factors is conducted in the process of finalizing the proposed regulations and before ballast water treatment system requirements are applied to any given vessel class.

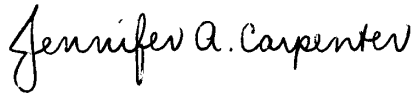
Conclusion

AWO urges the Coast Guard to:

- Play a lead role in encouraging the Administration to support a uniform federal statutory framework for the regulation of ballast water and other vessel discharges;
- Ensure that the rulemaking record is complete and accurate, following all required procedural steps and reflecting accurate assumptions about the affected vessel population, before proceeding to finalize the proposed regulations;
- Refrain from requiring treatment standards on towing vessels and barges in the U.S. domestic trade;
- Exempt from the proposed requirements vessels using municipal or commercial water for ballast, vessels that do not discharge ballast water in U.S. waters, and vessels that only take on and discharge ballast water in a single COTP zone, in addition to vessels that operate exclusively within a single COTP zone;
- Eliminate the two-tier standard or, alternatively, provide that a vessel installing a treatment system that complies with the Phase I standard will not be required to replace that system if and when a Phase II standard is implemented; and,
- Conduct a robust and comprehensive practicability review prior to requiring ballast water treatment systems on any class of vessels.

Thank you for the opportunity to comment. We would be pleased to answer any questions or provide further information as the Coast Guard sees fit.

Sincerely,



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