U.S. Department
of Transportation
Maritime
Administration

400 Seventh St., S.W.
Washington, D.C. 20590

August 10, 2005

Mr. Benjamin H. Grumbles
Assistant Administrator
Environmental Protection Agency
Office of Water (4101M)
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: *Northwest Environmental Advocates, et al. v. EPA, No. 03-05760 (N.D. Cal. Mar. 30, 2005)*

Dear Mr. Grumbles:

The purpose of this letter is to express the Department of Transportation (DOT), Maritime Administration's (MARAD) interest in and concern regarding the decision of the U.S. District Court for the Northern District of California in the above-captioned case. Although we understand that the decision has not yet gone into effect and that further proceedings will be taking place through November, we hope that this information will assist the Environmental Protection Agency (EPA) as the case moves forward.

The decision grants plaintiffs' motion for summary judgment and orders the Environmental Protection Agency (EPA) to "repeal" its thirty-two-year-old regulation excluding "any . . . discharge incidental to the normal operation of a vessel" from the Clean Water Act's (CWA) National Pollutant Discharge Elimination System (NPDES) permitting requirements (normal operation exclusion). All vessel discharges in U.S. waters, including ballast water discharges, are covered by this exclusion. Ballast water discharges are the focus of plaintiffs' objections to the exclusion because of the potential of such discharges to introduce non-indigenous aquatic nuisance species (invasive species) into U.S. waters.

Interest of the Maritime Administration

One of DOT's mandates is to ensure the safety and efficiency of the U.S. Maritime Transportation System. DOT fulfills this mandate primarily through the work of two of its operating administrations, MARAD and the Saint Lawrence Seaway Development Corporation (SLSDC). MARAD recognizes that invasive species present a significant environmental threat to our waterways and has actively participated in the federal

government's efforts to implement strategies designed to mitigate or eliminate the introduction of invasive species through ballast water discharges. However, MARAD strongly believes, as a matter of law and policy, that this goal should not be achieved through the NPDES permitting process. As explained below, imposing NPDES permitting requirements in the manner ordered by the District Court will prevent vessels from operating safely in U.S. waters and will have a significant adverse impact on the U.S. economy.

In order to fully understand MARAD's concerns, it is important first to comprehend that a vessel's ability to take on and discharge ballast water is fundamental to its operation. As a ship loads or unloads cargo, or takes on or consumes fuel, the ship must accommodate changes in its weight and trim by taking on or discharging ballast water. Ballast water is taken on through openings near or on the bottom of a vessel's hull and is pumped in or out of a vessel through piping connected to ballast pumps in the vessel's lower machinery space. Without these ballast water operations, vessels cannot be operated safely. Ballast water intake and discharge provides proper stability and trim, minimizes hull stress, aids or allows maneuvering, and reduces ship motions of roll and pitch. This is particularly true when a vessel is emptied of cargo, as James Weakley, President of the Lake Carriers Association explains in his affidavit filed in support of the Shipping Industry Ballast Water Coalition's motion to intervene in this case:

> *When empty of cargo, the lost weight must be replaced with ballast water . . . or the ship would ride so high that it would be unsafe to get underway. The propeller and rudder would not be submerged enough to provide sufficient propulsion and steerage. The stresses on the hull would be such that the vessel could break in half. There is no alternative to ballasting an empty vessel.*

Of course, water pumped into a vessel's ballast tanks must inevitably be pumped out when the vessel takes on cargo.

Marine transportation is the lifeline of international trade. The marine transportation system moves more than 90 percent by volume of goods and commodities around the world. In 2003, over two-thirds (68 percent) of the value of U.S. international merchandise trade passing through U.S. freight gateways was to and from countries other than Canada and Mexico. Since 1990, the value of this U.S. overseas trade has more than doubled, rising at an average annual rate of 6 percent per year. Maritime trade accounted for about 60 percent of this trade.

The value of U.S. maritime trade passing through our seaports rose from $434 billion in 1990 to $811 billion in 2003 at about a 5 percent annual rate. Over 1.2 billion short tons of international maritime cargo was transported through U.S. seaports in 2003, with exports accounting for 30 percent and imports accounting for 70 percent of that tonnage. Associated jobs, tax revenue, and domestic manufacturing add considerably to the total value of this trade to the U.S. economy.

MARAD programs promote the development and maintenance of an adequate, well-balanced U.S. merchant marine, sufficient to carry the nation's domestic waterborne commerce and a substantial portion of its waterborne foreign commerce, and capable of service as a naval and military auxiliary in time of war or national emergency. MARAD also seeks to ensure that the United States maintains adequate shipbuilding and repair services, efficient ports, effective intermodal water and land transportation systems, and reserve shipping capacity for use in time of national emergency. One of MARAD's objectives in accomplishing its mission is to promote maritime and intermodal transportation solutions that enhance environmental stewardship.

With respect to invasive species issues, MARAD assists the maritime industry with its efforts to comply with U.S. Coast Guard requirements to manage ballast water and sediments in such a way as to prevent the introduction of invasive species into U.S. waters via the discharge of foreign water from ships' ballast tanks. The agency is a member of the Aquatic Nuisance Species Task Force and the working group for the development of ballast water treatment standards. MARAD has participated in several other national and international efforts to address the invasive species issue, including: an interagency invasive species working group whose purpose is to develop a coordinated government program, including development of the U.S. position for International Maritime Organization deliberations; and the Great Lakes Task Force. Additionally, MARAD works with other federal agencies and the maritime industry to support a ballast water treatment technology test and demonstration program. MARAD has provided vessels for use in testing various ballast water treatment systems. In addition, the SLSDC works closely with the U.S. Coast Guard, as well as with Canadian entities, to control invasive species under current law and regulations, most importantly through its Enhanced Seaway Inspection Program.

MARAD's programmatic concerns with the District Court's decision go to the decision's impact on the safe and efficient operation of commercial vessels in U.S. waters. Those concerns arise in two contexts: the long-term workability of applying the NPDES permitting regime to ballast water discharge and the potentially crippling short-term impact that repeal of the normal operation exclusion could have pending any appeal of the decision.

Subjecting vessels that discharge ballast water to an NPDES permitting scheme is problematic for a number of reasons. First, a problem arises if the permitting scheme is based on numeric effluent standards because ballast water technologies that could meet such permit requirements are still being developed, and the Coast Guard has not issued performance standards for such treatment technologies. For example, it is likely that a permit would have to prohibit the discharge of invasive species in ballast water to comply with applicable water quality standards. However, while MARAD and other federal agencies are actively engaged in developing new invasive species prevention technologies, the only existing practical technology for ballast water treatment is mid-ocean ballast water exchange, which is generally considered ineffective in eliminating all invasive species in a ballast water tank. Accordingly, a likely NPDES permitting scheme

for ballast water discharges based on numeric effluent standards would effectively ban such discharges.

The second problem relates to the fact that most NPDES permitting programs are administered by the states. Under this approach, each state that administers such a program may set its own permitting standards that may be different from or more stringent than, federal standards. As a consequence, vessels would likely be subject to a variety of possibly conflicting permit standards as they travel from port to port. A vessel's mobility, of course, is one characteristic that distinguishes a vessel from stationary sources of water pollution covered by the CWA, and the practical problems such mobility creates in applying an NPDES permitting scheme is one reason why it is unlikely that Congress intended NPDES to apply to discharges made as part of the normal operation of a vessel.

The third problem relates to the actual implementation of an NPDES permitting regime for ballast water discharge. Implementation would be so massive an undertaking as to raise serious questions as to whether such a regime could, in fact, be implemented in a manner that would not significantly hamper commerce and overwhelm permitting agencies. In 2003, 6,157 cargo vessels of various types, accounting for 44% of the active world fleet, made at total of 56,759 port calls in the United States, representing 10% of all port calls world wide. In addition, there are operating in U.S. waters roughly 40,000 tugboats, towboats, barges, offshore supply vessels, ferries, cruise ships, and a variety of other water transportation craft that also take on and discharge ballast water for many of the same purposes that cargo vessels do. An NPDES permitting regime likely would, at minimum, require a permit for each of these vessels from each state in which it operates and in which it might discharge ballast water. It is even conceivable that a new permit would be required for every separate voyage a vessel makes through a state's waters or at least for every separate instance that a vessel engages in port operations in a state.

In addition to the problems inherent in an NPDES permitting regime for ballast water discharges, an equally significant short-term problem will be caused if the Court enters an order that EPA immediately repeal the normal operation exclusion. If that occurs and EPA repeals the exclusion, then ballast water discharges will be absolutely prohibited by the CWA because no permitting regime for such discharges currently exists. Until the appellate process is completed, which could take years, vessel operators who discharge ballast water in U.S. waters would be in violation of the CWA unless the discharge takes place in waters of a state with its own permitting regime and they have obtained such a permit. While EPA might exercise its discretion to not seek penalties against such operators, those operators would still be subject to liability in state enforcement actions and under the CWA's citizen's suit provision.

Finally, it is important to emphasize that while the main focus of the litigation has been the normal operation exclusion as it relates to ballast water discharges, the exclusion in fact applies to virtually all discharges that are incidental to the normal operations of a vessel. Accordingly, the District Court's decision, by ordering repeal of the exclusion, affects more than just ballast water discharge, which is but one of approximately 15 such

discharges. The impact of significantly limiting or banning each of these other discharges – for example, water used to cool a vessel's engines – has not yet been fully evaluated, but is likely to have safety and economic implications similar to those that will result from a significant limitation or ban on ballast water discharges. It would also multiply the implementation problems dramatically.

The cumulative impact of the problems identified above would at best significantly restrict and at worst effectively prevent ballast water and other discharges incidental to a vessel's normal operations in U.S. waters. This would leave the operators of such vessels with three choices: operate unsafely; violate the regulations; or curtail U.S. operations by not taking on cargo in U.S. ports and using, where possible, Canadian and Mexican ports in lieu of U.S. ports. The first two options are unacceptable for obvious reasons, and the third option would have significant implications for the U.S. economy and the ability to transport a wide range of goods and commodities.

Prohibiting or significantly restricting the discharge of ballast water would have enormous direct and indirect economic impacts on the nation. In addition to the direct impacts on industry and manufacturing reliant on the import and export of raw materials and goods, there would be indirect impacts on jobs, consumer prices, and the Gross Domestic Product. The economic impact resulting from the 2002 10-day closure of the Ports of Los Angeles and Long Beach resulting from a labor-management dispute illustrates the magnitude of even a short-term, localized disruption of marine cargo. That 10-day closure and the resulting 23-day backlog disrupted trade valued at $6.28 billion in the Los Angeles basin alone. That disruption is estimated to have affected 65,000 jobs and $525 million in state and local taxes nationwide. Taking this to the national level, it is apparent that even a short-term prohibition or severe restriction on ballast water discharges, could have a devastating economic impact.

Although the District Court's decision has nationwide economic implications, its potential impact on the Great Lakes - St. Lawrence Seaway (GLSLS) waterways system is instructive. The GLSLS serves 15 major international ports and some 50 regional ports in eight U.S. states and two Canadian provinces. Marine transportation on the system involves two general trade communities: traffic moved on the Seaway, much of which is overseas import/export trade, and interlake domestic trade within the Great Lakes. The Seaway trade figures have lately been in the range of 45 million metric tons per year. Seaway cargoes are borne both by Canadian-flag vessels and by other foreign-flag ocean vessels. The U.S.-flag laker fleet accounts for nearly all of the interlake trade. The interlake trade, approaching some 200 million tons a year, predominately consists of dry bulk commodities of iron ore, coal, stone and grain. A U.S. – Canadian multi-agency review of the effects of a modal shift found that "waterborne transportation has an environmental cost impact of one-fifth that of rail and one-tenth that of truck."

The GLSLS system has an enormous impact on the North American economy. The system itself generates more than $3 billion of economic activity and 150,000 jobs on the U.S. side and an additional $3 billion and almost 17,000 jobs in Canada and 44,000 directly related jobs. This major component in the bi-national intermodal transportation

system also supports the primary focus of the iron and steel industry in North America, with the region accounting for about half of total U.S. production. Other important manufacturing industries supported by the system include chemicals, paper, food products, machinery, transportation equipment, and fabricated metals. In addition, the iron ore, limestone, and coal mining industries, petroleum industry, and the major agricultural and forest product industries use GLSLS waterways for local transport and international export.

Finally, unilateral U.S. or state action could lead to the diversion of cargo to other regions or to foreign ports. For example, Montreal and Halifax are both deep water ports and have sufficient capacity to accommodate our Great Lakes port business. This diversion would in turn increase the need for trans-shipment, adding demands to the nation's already overburdened rail and road systems. Trans-shipment will also increase the overall time and cost of inter-regional shipments and diversion of intra-regional cargo could reduce the overall efficiency of import/export shipping to the United States. For example, SLSDC estimates that the amount of cargo that transits the GLSLS waterways system in a typical year would require approximately 18,000 trains with 100 cars per train (i.e., 1.8 million train cars) if hauled by rail.

Conclusion

For the reasons discussed above, the imposition of an NPDES permitting regime on ballast water discharges (and other discharges incidental to a vessel's normal operations) is an unworkable approach to invasive species prevention. Requiring NPDES permits for ballast water discharges will significantly limit or effectively ban such discharges, preventing safe vessel operations in U.S. waters, with substantial adverse consequences for the U.S. economy. Moreover, this approach, in addressing one environmental problem, only creates another. This could not have been Congress' intent, particularly given the substantial effort Congress has devoted to legislation that expressly addresses invasive species prevention.

If we can be of further assistance to you regarding this issue, or if you require additional information, please do not hesitate to contact me at 202-366-5823, or Michael C. Carter of my staff at 202-366-8887.

Thank you for your consideration.

Sincerely,

John Jamian
Acting Maritime Administrator