



**TESTIMONY OF VADM BRIAN SALERNO  
DEPUTY COMMANDANT FOR OPERATIONS**

**“BALLAST WATER MANAGEMENT”**

**BEFORE THE HOUSE TRANSPORTATION AND INFRASTRUCTURE  
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION  
AND THE  
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT**

**JULY 13, 2011**

Good afternoon, Chairman LoBiondo, Chairman Gibbs, and distinguished Members of the Subcommittees. My name is VADM Brian Salerno and I am the Deputy Commandant for Operations. It is my pleasure to appear before you today to provide information on the Coast Guard's actions to strengthen ballast water management regulations.

The Coast Guard shares this Committee's concerns with the environmental and economic damage that has been caused by aquatic invasive species and recognizes that ballast water discharge is one of the important pathways for invasive species. We are committed to working with the Environmental Protection Agency (EPA) to strengthen our ballast water regulations to reduce the potential for invasive species to enter our maritime environment.

The Coast Guard is a leader in protecting America's maritime environment. The Service takes great pride in preserving and protecting our nation's waters, making them cleaner, safer, and more secure. The Coast Guard has historically provided a leadership role on ballast water management both domestically and internationally, and we remain committed to working diligently with all stakeholders to protect U.S. waters from the introduction of aquatic invasive species.

Since establishing the first U.S. ballast water regulations for the Great Lakes in 1993, the Coast Guard has worked with other Federal partners to harmonize our respective ballast water regulatory programs. For the Great Lakes, this has entailed close collaboration with the U.S. Department of Transportation's Saint Lawrence Seaway Development Corporation (SLSDC) to achieve a comprehensive suite of requirements. Since 2008, the Coast Guard has worked closely with the EPA to coordinate the agencies' ballast water management programs promulgated under the Nonindigenous Aquatic Nuisance Prevention and Control Act (NANPCA), as reauthorized and amended by the National Invasive Species Act (NISA), and the Clean Water Act, respectively. Neither NANPCA/NISA nor the Clean Water Act pre-empt states from setting stricter ballast water discharge requirements, and several states have adopted ballast water regulations.

To implement NANPCA, the Coast Guard established mandatory Ballast Water Management (BWM) requirements for vessels entering the Great Lakes after operating outside the U.S. Exclusive Economic Zone (EEZ). These requirements were subsequently extended to include the Hudson River, north of the George Washington Bridge. Through extensive and close collaboration between the Coast Guard, the SLSDC, Transport Canada and Canada's Saint Lawrence Seaway Management Corporation, every ship

entering the Great Lakes is physically inspected to ensure all ballast water discharged to the Great Lakes has been managed in accordance with the combined U.S. and Canadian regulations.

In 1996, NISA mandated the continuation of the Great Lakes mandatory BWM program, charged the Coast Guard with establishing a voluntary BWM program for all other U.S. ports, and required vessels to submit BWM reports. To implement NISA, the Coast Guard required mandatory BWM reporting and recordkeeping requirements and promoted voluntary BWM practices (including ballast water exchange) for vessels entering all waters of the United States, after operating outside the EEZ. To track changes in the reported ballast water management practices of ships, the Coast Guard and the Smithsonian Environmental Research Center created the National Ballast Information Clearinghouse (NBIC) in 1997. The NBIC functions as a single location for the collection, synthesis, analysis, and interpretation of national data concerning ballast water management and ballast-mediated invasions.

In its report to Congress detailing the effectiveness of the voluntary ballast water management guidelines and based on NBIC data, the Coast Guard concluded that compliance with the mandatory reporting requirements was insufficient to allow for an accurate assessment of the voluntary BWM program. In light of these findings, the Coast Guard began strengthening the national BWM program by mandating the previously voluntary BWM program. This required all vessels that operated outside the U.S. EEZ equipped with ballast water tanks to either conduct a mid-ocean ballast water exchange, retain their ballast water onboard, or use an alternative environmentally sound BWM method approved by the Coast Guard. In 2004, the Coast Guard established penalties for failure to comply with the ballast water management reporting requirements and broadened the applicability of the reporting and recordkeeping requirements to a majority of vessels bound for ports or places of the United States.

The Coast Guard's efforts to develop a ballast water discharge standard to set appropriate criteria on the concentration of organisms allowed in ballast water discharge began in early 2001. Through a series of domestic and international workshops, the Coast Guard engaged with scientists, marine engineers, experts from the water treatment industry, and our Federal agency partners. These workshops concluded that the standard should address all organisms at all life stages; specify allowable numbers of living organisms in discharged ballast water; and set environmentally protective and enforceable limits based on sound science.

In 2004, the Coast Guard led the U.S. delegation to the International Maritime Organization (IMO) Diplomatic Conference on Ballast Water Management for Ships. The Conference adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments, which is a significant step forward in the international effort to combat the spread of aquatic invasive species introduced by ships' ballast water. Informed by the findings and recommendations of the above workshops, the U.S. delegation played a major role in developing the Convention's basic structure and ensuring that a number of key objectives were included.

One significant provision of the Convention calls for ships to meet a ballast water discharge standard according to a schedule of fixed dates, beginning with certain ships constructed in 2009. These fixed dates serve as a signal to both the shipping industry and the emerging ballast water treatment industry of the need for investment, plans, and equipment to meet ballast water management requirements. To facilitate the development of effective and practicable technologies, the Convention contains provisions for the experimental testing of prototype ballast water treatment systems on operating vessels. This provision largely follows the Coast Guard's Shipboard Technology Evaluation Program, implemented in January 2004. In addition, the Convention contains a U.S.-backed provision that allows the sampling of ballast water from ships as a port state control activity for the purposes of evaluating compliance with the Convention.

The standard proposed by IMO is based on the number of living organisms contained in discharged ballast water, rather than a required percentage removal—providing more effective monitoring of compliance and a more uniform level of risk reduction. The standard will significantly reduce the discharge of aquatic invasive species via ballast water. Since 2004, the Coast Guard has continued to lead an interagency delegation in the development and adoption of supporting guidelines for the implementation of the Convention.

Following extensive efforts to develop appropriate and practicable methods for evaluating the performance of BWM systems, and to evaluate the economic and environmental effects of establishing a ballast water discharge standard, the Coast Guard published a Notice of Proposed Rulemaking (NPRM) on August 28, 2009. This NPRM proposes a two-phase performance standard for the allowable concentration of living organisms in ships' ballast water. Phase 1 would establish a standard similar to that adopted by the IMO in 2004, taking effect in 2012. The Phase 2 standard is based on the stringent quantitative discharge limits included in some U.S. state regulations and would provide, if made final, a target to encourage the development of more effective ballast water management systems. The Coast Guard also proposed to conduct a "practicability review" before implementing Phase 2 in 2016. In the event that the Coast Guard finds that systems cannot practicably meet the Phase 2 standard, but a significant improvement over Phase 1 is achievable, the Coast Guard would then seek to implement intermediate standards to reflect such increases in technological capability. The practicability review would occur on a two year basis to provide a continuing incentive for improvements to ballast water management systems.

In association with the discharge standard NPRM, the Coast Guard held public meetings in Seattle, WA; Oakland, CA; New Orleans, LA; Chicago, IL; New York City, NY; and Washington, D.C. The comment period closed on December 4, 2009 and the Coast Guard received 2,214 comments from 662 individuals and organizations. Comments identified concerns regarding the availability of practicable technology that could be used to manage ballast water to achieve discharge limits more stringent than those in the IMO/Phase 1 standard. Other comments identified concerns regarding the availability of practicable technology for several types of vessels, such as tugs and unmanned barges. Comments also addressed the significant environmental impacts of invasive species and the importance of providing the most effective possible control of releases of invasive species.

In June 2010, the EPA Office of Water, in consultation with the Coast Guard, impaneled a Science Advisory Board to provide review and advice regarding whether existing shipboard treatment technologies can reach specified concentrations of organisms in vessels' ballast water, how these technologies might be improved in the future, and how to overcome limitations in existing data. Also last summer, the Coast Guard and EPA requested the National Academies of Science National Research Council's Water Science and Technology Board undertake a study to provide technical advice in setting limits for living organisms in ballast water.

The two-phased approach proposed by the Coast Guard establishes a uniform and practicable requirement that will significantly reduce the risks of ballast mediated introductions of invasive species to U. S. waters and will ensure the environmental protections are increased as science and technology allow.

Thank you for the opportunity to provide comments on the Coast Guard's Ballast Water Management Program. The Coast Guard looks forward to working with Congress as we continue our ongoing efforts to implement an effective ballast water management regime. I will be happy to answer any questions you may have.