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DEPARTMENT OF HOMELAND SECURITY

UNITED STATES COAST GUARD

STATEMENT OF CDR KATHLEEN MOORE

ON

BALLAST WATER MANAGEMENT

BEFORE THE

SUBCOMMITTEE ON REGULATORY AFFAIRS

COMMITTEE ON GOVERNMENT REFORM

U.S. HOUSE OF REPRESENTATIVES

SEPTEMBER 9, 2005

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Commander Moore became the Chief of the Environmental Standards Division on June 1, 2003. The Division develops policy and regulations for a variety of marine environmental protection issues both domestically and internationally. She is also the Program Manager for the Coast Guard's Aquatic Nuisance Species Program.

With a Bachelor of Science degree in Mechanical Engineering from the University of Maryland, she left the aerospace industry in 1990 to join the Coast Guard. Since then she has completed staff tours conducting plan review at the Marine Safety Center and as an Analyst in the Office of Standards Development, as well as field tours in Inspections and Investigations at Marine Safety Office/Group Los Angeles-Long Beach and as Chief, Inspections Department in San Juan, Puerto Rico. She has a Master's of Science degree in Engineering Management from the University of Maryland and a Master's of Marine Affairs from the University of Rhode Island.

Good Afternoon, Madam Chairwoman and distinguished Members of the Subcommittee. I am CDR Kathleen Moore, Chief of the Environmental Standards Division at Coast Guard Headquarters, and manager of the Coast Guard's Aquatic Nuisance Species/Ballast Water Management Program. It is my pleasure to appear before you today to provide the Coast Guard's views on ballast water management.

The Administration shares this Committee's concern with the significant 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 such invasions. Over the past several years, the United States has been a leader in international efforts to address this issue. While we have made significant progress domestically under the current legislative framework, there is no question that this framework needs to be upgraded to move us to a greater level of protection. We are committed to working with Congress to enact effective legislation that will address ballast water and substantially reduce the potential for damaging invasions through this pathway.

The Coast Guard is a leader in protecting America's maritime environment. We take great pride in providing valuable services that preserve and protect our nation's waters, making them cleaner, safer and more secure. The Coast Guard remains committed to providing a leadership role on ballast water management, both domestically and internationally, and working diligently with all stakeholders to protect U.S. waters from the introduction of aquatic invasive species.

In early 2001, through a series of domestic and international workshops, the Coast Guard began working with scientists, marine engineers, experts from the water treatment industry and our Federal agency partners to develop criteria for a ballast water discharge standard. These workshops concluded that the standard should address all organisms at all life stages, be concentration-based and set at values that are scientifically sound, be environmentally protective and be enforceable. These criteria informed our approach for international negotiations at the International Maritime Organization (IMO), as well as our ongoing rulemaking, to develop a ballast water discharge standard. The ballast water discharge standard will be used to approve ballast water management systems installed on ships as an alternative to ballast water exchange, under our current legislative authority. The standard will also be used to evaluate compliance on ships that treat their ballast water. We are currently completing a Programmatic Environmental Impact Statement that analyzes the environmental impacts of several alternative ballast water discharge standards, as well as the cost-benefit analysis for implementing this rulemaking. These required analyses are important steps in the rulemaking process.

In February 2004, the Coast Guard led the interagency United States delegation to the 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 aquatic invasive species introduced by ships' ballast water. 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 in this new treaty.

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 ballast water treatment equipment inventory to meet ballast water management requirements. Another key feature of the implementation schedule is the phasing out of the practice of ballast water exchange, which means most ballast water discharges will eventually have to meet a maximum concentration discharge standard. 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 adopted by IMO is concentration-based rather than expressed as a percent removal. This was desired by the United States because the concentration approach provides for more effective monitoring of compliance and a more uniform and protective level of risk reduction across all vessels. The standard, as adopted and when met by all vessels, will likely reduce the discharges of potentially aquatic invasive species via ballast water, compared to the current practice of mid-ocean ballast water exchange. Since the adoption of the Convention, the Coast Guard has led an interagency delegation in the development of supporting guidelines for the implementation of the Convention, the first five of which were adopted by IMO resolution in July 2005.

An issue of relevance specifically to the Great Lakes is the need for management strategies for the vessels that enter the Great Lakes with No Ballast on Board (NBOB), referred to as NOBOB vessels. In 1993, when the ballast water management regulations were promulgated for entry into the Great Lakes, the focus was on addressing the volume of ballast water being discharged by vessels with full ballast tanks. These regulations remain the most stringent in the world for restricting the discharge of unmanaged ballast water. However, many vessels enter the Great Lakes system fully loaded with cargo, having discharged their ballast water to carry as much cargo as permissible. Only unpumpable residual water and sediments remain in their ballast tanks and these residuals provide an opportunity for introductions of aquatic invasive species into the Great Lakes as these vessels conduct cargo operations, and take on and discharge ballast into the Great Lakes. This issue was the focus of the NOBOB project performed by the National Oceanic and Atmospheric Administration's Great Lakes Environmental Research Laboratory and its research partners. This project was begun in 2000 with funding from the Coast Guard, National Oceanic and Atmospheric Administration and the Environmental Protection Agency in an effort to better understand the risk of introduction of aquatic invasive species via NOBOBs and the physical/chemical characteristics of residual water and sediment. The results of the project suggested that discharges of residual waters that are fresh or brackish (low salinity) have the highest risk of potentially introducing aquatic invasive species into the Great Lakes. The Coast Guard has considered short-term and long-term strategies to address this risk and, in August 2005, announced a new policy implementing best management practices. This policy encourages vessels that may eventually enter the Great Lakes to conduct mid-ocean ballast water exchange on ballast voyages whenever possible and, when such ballast water exchange is not possible, to flush empty ballast tanks with mid-ocean water to reduce the concentration of organisms through dilution and salinity shock. The consistent application of these practices should result in the elimination of fresh and brackish residual water in ballast tanks and significantly reduce the risk of these residuals providing the opportunity for aquatic invasive species introductions. The Coast Guard will be sampling vessels entering the Great Lakes to test the salinity of these residuals and to assess the application rate of these practices. In addition, there is work currently underway to assess the effectiveness of increasing salinity on the freshwater organisms commonly found in ballast tank residual water.

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.