

Addressing Critical Environmental Issues Facing the Maritime Industry

Mario N. Tamburri

Maritime Environmental Resource Center, Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science, Solomons, Maryland, USA

The Maritime Environmental Resource Center (MERC) was created by the University of Maryland Center for Environmental Science and Maryland Port Administration, with additional support from the US Maritime Administration, National Oceanic and Atmospheric Administration, and American Bureau of Shipping, to provide test facilities, expertise, information, and decision tools to address key environmental issues facing the international maritime industry. The primary focus is to evaluate the mechanical and biological efficacy, costs, and logistical aspects of ballast water treatment systems and to assess the economic impacts of ballast water regulations and management approaches. Invasions of coastal habitats by non-native aquatic species are increasingly common worldwide, are known to cause extensive ecological and economic damage, and have the potential to create human health concerns.

MERC has four main objectives:

- Provide technology developers/vendors with facilities and expertise for pilot-scale and shipboard evaluations of treatment systems;
- Provide regulatory agencies and classification societies with standardized, rigorous, and independent data on treatment system performance;
- Provide ship builders and shipping lines with information and decision tools to select the most appropriate ballast water treatment options; and
- Remove as much uncertainty as possible from emerging markets for treatment systems in order to accelerate the adoption of innovative technologies.

While the initial and primary focus of MERC is on ballast water treatment systems, the Center has the expertise, facilities, academic independence, and scientific integrity that will allow for testing and assessment of additional technologies and innovations related to Green Shipping, including hull fouling invasive species, port and vessel air emissions and alternative fuels, and gray and oily water treatments.

Contact Information: Mario Tamburri, Chesapeake Biological Laboratory UMCES, One Williams Street, Solomons, Maryland 20688 USA, Phone: 410-326-7440, Fax: 410-326-7428, Email: tamburri@umces.edu, web: www.maritime-enviro.org