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June 9, 2011

Via: sanzone.stephanie@epa.gov

Attn: Ms. Stephanie Sanzone
EPA Science Advisory Board (1400R)
Ecological Processes and Effects Committee Augmented for the Ballast Water
Advisory
US Environmental Protection Agency
1200 Pennsylvania Avenue
Washington, DC 20460

RE: Comments on Draft SAB Report on "Efficacy of ballast water treatment systems: A Report by the EPA Science Advisory Board (May 2011 Draft) (76 Federal Register 30149 – 30150, May 24, 2011).

Dear Ms. Sanzone:

The Chamber of Shipping of America (CSA) appreciates the opportunity to comment on the Draft EPA SAB Report entitled "Efficacy of ballast water treatment systems" and as the Designated Federal Officer for this group, respectfully request that you forward these comments to the Board for review at the scheduled June 16, 2011 public teleconference.

CSA represents 34 U.S. based companies that own, operate or charter oceangoing tankers, container ships, and other merchant vessels engaged in both the domestic and international trades. The Chamber also represents other entities that maintain a commercial interest in the operation of such oceangoing vessels.

CSA is most appreciative of the detailed draft study produced by the independent panel of experts which comprise the Ecological Processes and Effects Committee Augmented for the Ballast Water Advisory as well as the distinguished panel of consultants utilized by the Committee. For over a decade, governments, the shipping industry and other stakeholders have faced the formidable challenge of assessing a number of potential ballast water treatment system designs both for efficacy as well as practicality for use on board a wide variety of vessel types engaged on equally varied trading routes. We understand that the Committee was

charged only with addressing half of this equation; namely evaluating the efficacy of ballast water treatment systems subject to the 4 specific charge questions. With a few exceptions we find no objections to the base conclusions reached in the study or in the recommendations noted in Chapter 6.7.3.

Our specific comments below relate to the fact that the Committee's findings relative to particular ballast water treatment systems do not necessarily translate into an ability by vessel owners to purchase certified systems for use on a variety of vessel sizes, types and trading patterns, an issue arguably outside the charge of the Committee here, although equally important to full implementation of environmentally protective ballast water treatment standards. Specific examples of the factors which play into the ability of a treatment system to pass an efficacy review by the Committee do not necessarily translate into an ability of that system to be type certified by a flag state, be available in sufficient numbers to meet market demand or be designed in such a way as to "fit" into the existing space and systems aboard vessels. Our concern is that, without additional text in the Executive Summary and Recommendations sections noting this caveat, any reader of the final report will see these positive efficacy findings on ballast water treatment systems and leap to the conclusion that they are available and ready for purchase and installation on vessels of all types and sizes engaged in a variety of trading patterns.

We do have some additional clarifying comments relative to this concern which we respectfully request be considered by the Chartered SAB in its final review of this draft study.

1. Section 5.3 addresses principal technological constraints associated with ballast water treatment systems which include operational challenges on working merchant vessels. Again, we understand the focus of the Committee's work was on efficacy of a particular system; however, little or no mention is made in the study of the practical design and operational constraints associated with given ballast water treatment systems relative to installation on a particular vessel type. Factors which must be considered by vessel owners include total ballast capacity of the vessel, overall ballast water flow rate (versus treatment system maximum flow rate), trading patterns (short voyage vs. long voyage which impacts systems that require a minimum residence time in the ballast water tanks as well as re-growth potentials), equipment size and space requirements, and power requirements to name a few of the principal considerations. While we do not believe a wholesale editing of the current text is necessary, we do believe that the Board should consider additional text in the executive summary and the recommendations section found in Chapter 6.7.3 that recognizes these very important additional considerations that must be addressed before any ballast water treatment system can be placed into service on an operating vessel.
2. Another relevant issue which does not nicely fit into any of the existing chapters concerns the type certification requirements for ballast water treatment systems. Prior to installation on any vessel, a ballast water treatment system is subject to two levels of review as required under the IMO Convention. The first is a review by a select IMO scientific group for those systems which utilize an "active substance", the so-called IMO G-9 Guideline. In laymen's terms, this review is done to be sure that the environmental impacts from the discharge of ballast water treated by a given system do not adversely impact the receiving water body. While a sometimes time consuming process, the procedure has been accepted globally and a number

of systems have received final approval under this review process. There is also, in theory, a globally accepted type certification process, the so-called IMO G-8 Guideline, which outlines the process by which a ballast water treatment system can be "type" certified by a national government. This process actually tests the efficacy of a given treatment system and provides the manufacturer and potential customer (vessel owner) with national documentation that the system has met the IMO convention ballast water treatment systems when subjected to the standardized protocol contained in the G-8 Guideline. A number of ballast water treatment systems have received type approval by a number of countries utilizing this process. However, no ballast water treatment system has received a type approval certification from the United States and to the best of our knowledge there has yet to be developed a national process/system for securing these approvals from the United States government, although it is hoped that one will be found in the long awaited US Coast Guard final rule on Ballast Water Treatment Performance Standards. Complicating this problem is the question of whether the United States will recognize type certifications issued by other nations which are parties to the Ballast Water Convention. Early comments suggested that the United States would require a US issued type approval for any system which would be used in US waters and if this ends up to be the case, further compounds the problem of purchasing and installing a "compliant" system aboard any vessel trading in US waters, even though the system had been type certified in another country. We would expect the USCG final rule referenced above to address this issue as well but until such time, a great deal of uncertainty exists as to how and when vessel owners will be able to purchase and install a "compliant" ballast water treatment system.

3. Another issue relates to commercial availability. This issue relates in some part to the certification process hurdles described above, but also relates to the ability of a treatment system manufacturer to produce a sufficient number of systems to meet the marketplace demand, keeping in mind that global implementation dates are contained in the IMO Ballast Water Convention and are expected to also be included in the USCG final rule on ballast water treatment standards. No manufacturer is likely to go into full scale production to meet the expected global demand until such time as their system is type certified by major maritime trading nations which includes the United States.
4. Finally, we note with interest, section 6.4 addressing the issue of shore reception facilities as an alternative to shipboard treatment as well as Appendix C which outlines shore reception facility issues for which the panel did not reach consensus. While we agree in theory that global application of this concept would be the most economically effective and environmentally beneficial method for treating ballast water, the commercial realities of vessel trading patterns as well as the wide variety of ownership structures of port facilities (some are publically owned while others are privately owned) make it highly improbable that a sufficient network of port based ballast water reception and treatment facilities will ever be a reality except in a very few rare cases. With this assumption, vessel owners who wish to operate a vessel which can trade globally will be compelled to install a treatment system aboard their vessel. In this respect, it is worth noting that after decades of port reception facility requirements contained in other IMO agreements (MARPOL – Annex I (oil), Annex II (Noxious Liquid Substances) and Annex V (garbage)), there still exist a number of cases where adequate reception facilities are not available in a number of countries. While we are still

reviewing the two viewpoints provided in the Appendix for the seven sub-issues and thus are not providing a position on any of them at this time, we would agree that while future research can and should be done on this issue to fill the gaps in information noted in the Appendix, the short and medium term focus of limited human and financial resources should address the issues noted in paragraphs (1) - (3) above as they represent the largest hurdles to full implementation of the IMO ballast water convention and the treatment standards contained therein.

CSA appreciates the opportunity to comment on this study and stands ready to respond to any questions that may be raised in response to our comments.