Comments to the EPA Science Advisory Board
by the Canadian Shipowners Association (CSA)
July 29, 2010

Good afternoon. My name is Bruce Bowie, President of the Canadian Shipowners Association (CSA).

First, I want to say that the CSA is very supportive of the work of this committee; a thorough review of the capabilities and potential of ballast water treatment systems is certainly needed, particularly in the context of Great Lakes shipping. And we very much appreciate the opportunity to provide our perspective to the Committee.

The Canadian Shipowners Association is the industry association representing Canadian-flagged vessels that operate in the Great Lakes - St. Lawrence Seaway (GLSLS), and along the East Coast of North America. Our members include seven companies operating a fleet of 68 vessels with movements of over 62 million metric tonnes in 2008 – over half of this cargo was carried between Canada and the United States.

The CSA and its member companies are committed to responsible environmental stewardship and continuous improvement in environmental performance. The CSA is a founding member and active participant in the Green Marine program, which is a voluntary environmental program to achieve continuous improvement in the environmental performance of the marine industry in the Great Lakes and St. Lawrence Seaway system.

In order to realize our environmental objectives, CSA member companies require a consistent, predictable and achievable regulatory framework that recognizes the current and future benefits of this bi-national waterway. Lakers are of critical importance to the Great Lakes economy, and their inability to operate would have enormous adverse consequences on both current and future economic opportunity, and diminish the substantial environmental benefits that a safe and environmentally efficient marine transportation service can contribute to our two nations.

With respect to an achievable regulatory framework, the problems associated with developing and testing treatment systems that exceed the IMO standard are well laid out in the white paper. However, the marine carriers that operate primarily in the Great Lakes have serious additional concerns because the unique conditions under which we operate are very different from ocean operations.

Today, ballast water treatment systems are being developed with the salt-water environment, not fresh water, in mind. Unfortunately for the 250 specialized Canadian and U.S. vessels trading in the Great Lakes, ballast water treatment

systems are largely being designed with a focus on the world's 40-50,000 ocean going vessels operating in salt or brackish waters, and no available systems can currently meet the needs of the Great Lakes fleet. In addition, highly specialized Great Lakes vessels face several unique physical and logistical challenges that create a host of obstacles for on-board treatment systems installation and use: high flow rates, no room for installation, short transit times, fresh water, very cold water, etc.

Many of the systems designed to the IMO standards just don't work in fresh water.

Many systems that require chemical reactions don't work in very cold water (Note that the navigable channels of the Lakes system are near freezing for about 20% of the season).

Many systems that require time for biocides or chemical processes such as de-oxygenation to be effective will not work on short trips in the lakes (unlike ocean voyages, many Great Lakes voyages are less than 2 days).

Many systems that require filtration or in-line treatments can not accommodate the flow rates typical of laker operations (2 to 5 times the flow rates of ocean vessels that operate in the lakes).

A treatment system must fit into the space limitations of an engine room or machinery space. Existing vessels simply cannot accommodate the physical footprint required by most existing treatment systems.

My key message here today is that IMO type-approval and flag state approval does not mean that a treatment system will meet IMO standards in the Great Lakes – very few of the systems have been tested under Great Lakes conditions. Any analysis of the efficacy of treatment systems must include an analysis of whether it is technically feasible to install them on lake vessels and whether they will in fact work in the Great Lakes operating environment.

A credible assessment of performance abilities and efficacy of treatment systems must include an assessment of their performance under the unique conditions of the Great Lakes; i.e. fresh water, cold water, short voyages, high flow rates, and very little space available for installation.

Again, thank for the opportunity to comment and thank you for your attention.