

# IMO adopts ballast water convention

By Bill DiBenedetto

**T**he International Maritime Organization adopted a new international convention to prevent the spread of harmful aquatic organisms in vessel ballast water tanks last month.

The IMO is the U.N. agency responsible for the safety and security of shipping and the prevention of marine pollution from ships. It has estimated that about 10 billion tons of ballast water are transferred worldwide each year, "potentially transferring from one location to another species of wildlife that may prove ecologically harmful when released in a non-native environment."

The ballast water convention requires all vessels to implement a ballast water and sediments management plan. All new ships will have to carry a ballast water record book and will be required to perform ballast water management procedures "to a given standard" outlined in the convention. Existing vessels will be required to do the same, but after a phase-in period, the IMO said.

A commonly used management procedure, known as ballast water exchange, occurs when a vessel in effect flushes its tanks at sea before entering a port region. Depending on the size and type of vessel, the cost of a ballast water exchange can run from a low of \$75 for each exchange for a passenger vessel to a high of more than \$3,600 for an exchange involving a large tanker.

The IMO's action was applauded by the American Association of Port Authorities.

While 30 countries must ratify the new IMO treaty before it can be enforced, the AAPA said in a statement that it is optimistic it will lead to a U.S. Coast Guard certification pro-

gram for ballast water treatment technologies. For years the AAPA has publicly advocated for a strong national and international regulatory regime to reduce the potential for ecological and economic damage that can result from aquatic nuisance species.

"Because ballast water management is a key concern of U.S. port authorities, many have been actively involved in ballast water education programs and treatment demonstration projects," said AAPA President Kurt Nagle. "The port industry wholeheartedly applauds the important action that the IMO has taken on the issue. Now we eagerly await the next big step — the development of a mandatory national ballast water management program, as the AAPA has long urged."

The convention takes a two-tier approach:

- ◆ Tier 1 has requirements that will apply to all vessels, including mandatory requirements for a "ballast water and sediments management plan," a "ballast water record book" and a requirement that new ships carry out ballast water and sediment management procedures to a given standard or range of standards. Existing vessels would have to implement ballast water management procedures following a phase-in period.
- ◆ Tier 2 includes special requirements that may apply in certain areas, along with procedures and criteria for the designation of those regions in which additional controls may be applied to the discharge and/or uptake of ballast water. The text for this more controversial portion of the convention is still under development.

"With the adoption of this conven-

tion, the organization has made global provisions to control and manage ships' ballast water and thus prevent, minimize and ultimately eliminate the transfer of harmful aquatic organisms and pathogens across the seas and oceans of the world," said Efthimios E. Mitropoulos, IMO secretary-general.

The convention incorporates and replaces 1997 IMO guidelines on ballast water management, which replaced earlier guidelines adopted in 1991.

Possible solutions to minimize the risk of introducing harmful aquatic organisms with ballast water, such as the European Zebra Mussel, the European Shore Crab, tropical green algae, northern Pacific kelp, the Giant Fan Worm and the Round Goby, include:

- ◆ Ballast water exchange in deep sea as far as possible from shore.
- ◆ Non-release of ballast water.
- ◆ Taking on clean ballast water.
- ◆ Treating ballast water en route, such as with chlorine or ultraviolet radiation.
- ◆ Depositing ballast water in special reception tanks at port.

An estimated 3,000 species or animals and plants are transported in ballast water each day, according to the IMO.

Some ship types require large amounts of ballast water, primarily for trips when the ship is not loaded or is not fully loaded, including dry bulk carriers, ore carriers, tankers and liquefied gas carriers. Other vessels require smaller quantities of ballast in nearly all loading conditions: to control stability, trim and heel. Those in the latter category include container ships; ferries; general cargo ships; passenger ships; roll-on, roll-off ships; fish factory ships and military ships. ⚓