Ballast water

Issued December 2010

EPA 937/10: This information sheet is part of a series on environmental management practices for vessel and facility management on marine and inland waters. The information is extracted from the code of practice published in 2008.

Introduction

Most introduced aquatic species have 'hitchhiked' into Australian waters and have been transferred between state waters in vessel ballast water or attached to the hulls or internal water systems of vessels. Such species are considered pests if they threaten human health or environmental and economic values. Introduced aquatic pests are a major threat to the balance of aquatic ecosystems, commercial fishing and aquaculture industries. Pest species can be carried and spread by domestic travelling vessels and not just international travelling vessels.

Who this applies to

In the interim, the following practices are **recommended** for vessels to which the proposed Ballast Water Management Arrangements will apply and are not subject to current Australian, Quarantine and Inspection Services (AQIS) requirements.

Operators should (recommended practices)

- 1 determine the risk status of ballast water by accessing the Australian Quarantine and Inspection Services Ballast Water Decision Support System (BWDSS)
- 2 keep accurate and comprehensive records of the status of ballast water on a voyage-by-voyage basis
- 3 achieve at least a 95% volumetric exchange of the vessel's ballast water using any of the following methods:
 - sequential method, a process by which a ballast tank intended for the carriage of ballast water is first emptied
 and then refilled with replacement ballast water to achieve at least a 95% volumetric exchange

OR

 flow-through method, a process by which replacement ballast water is pumped into a ballast tank intended for the carriage of ballast water, allowing water to flow through overflow or other outlet arrangements

OR

- dilution method, a process by which replacement ballast water is filled through the top of the ballast tank,
 intended for the carriage of ballast water, with simultaneous discharge from the bottom at the same flow rate and maintaining a constant level in the tank throughout the ballast exchange operation.
- 4 whenever possible, conduct ballast water exchange at least 200 nautical miles from the nearest land and in water at least 200 m in depth



- where a vessel is unable to meet the above requirement, undertake ballast water exchange as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 m in depth
- 6 ensure all practical steps are taken during ballast water uptake to avoid sediment accumulation. This can include avoiding areas with current phytoplankton blooms, shallow water where propellers may stir up sediment and where dredging is or has recently been carried out
- 7 remove sediment from ballast tanks in controlled conditions in port, at a vessel mooring/repair facility or slipway. Such sediment should be disposed of in a suitable land-based sediment reception facility
- 8 if sediments are to be disposed of at sea, vessels should ensure that, whenever possible, sediments (and water used to flush sediments) should be disposed of at least 200 nautical miles from the nearest land and be in water at least 200 m in depth.

Exemptions

Vessels will be exempt from exchange requirements if the master reasonably decides that such exchange would threaten the safety or stability of the vessel, its crew, or its passengers because of adverse weather, vessel design or stress, equipment failure, or any other extraordinary condition. The discharge of water that has not been managed due to these circumstances may be permitted, provided its occurrence can be substantiated.

Important dates

From 2009, certain ships will be required to meet a discharge standard, most likely through ballast water treatment, and it will become a requirement for all ships by 2016. An approval process for ballast water management systems will apply, which will include the assessment of active substances which are used as part of the treatment to ensure they do not further harm the marine environment.

Ballast water management systems

There are two systems currently in effect in Australia for the management of ballast water. They are the AQIS Australian Ballast Water Management Requirements that regulate ballast water taken up overseas, and the Victorian Government's domestic ballast water arrangements that are managed by the EPA Victoria.

To respond to growing concern over the potential devastating impacts of introduced marine pests, a national system for the prevention and management of marine pest incursions has been developed. Implementation of the Ballast Water Management Arrangements under the national system commenced in July 2007, with mandatory arrangements now effective in both federal and state jurisdictions.

The new Ballast Water Management Arrangements will apply to all Australian registered ships operating in Australian waters, and all foreign-registered ships visiting and operating in Australian waters. The arrangements will also apply to ships that only operate in Australian waters, or Australian waters and the high seas. The arrangements will not apply to the following:

- · ships not designed or constructed to carry ballast water
- ships with permanent ballast water in sealed tanks that are not subject to discharge
- any military or other ship used for governmental non-commercial services.

As far as reasonable and practical, pleasure vessels used solely for recreation or competition, or vessels used primarily for search and rescue, less than 50 metres in length overall, and with a maximum ballast water capacity of 8 m³, should comply with the ballast water and sediment management requirements.

References

AQIS Ballast Water Reporting Form,

www.daff.gov.au/aqis/avm/vessels/ballast/requirements/guide to aqis ballast water reporting forms

The Ballast Water Decision Support System (BWDSS) can be accessed via http://www.daff.gov.au/__data/assets/pdf_file/0003/112962/dssap2.pdf

EPA, Code of practice for vessel and facility management (marine and inland waters), www.epa.sa.gov.au/xstd_files/Water/Code%20of%20practice/vessels.pdf.

Harbors and Navigation Regulations 2009, *Part 14, Division 2–Ballast Water*, www.legislation.sa.gov.au/LZ/C/R/HARBORS%20AND%20NAVIGATION%20REGULATIONS%202009.aspx

Department of Agriculture, Fisheries and Forestry, *The National System for the Prevention and Management of Marine Pest Incursions*, www.marinepests.gov.au/national_system.

Victorian EPA, Ballast Water Obligations, www.epa.vic.gov.au/water/ballastwater/obligations.asp.

Useful websites

EPA Vessel and facility management pages, www.epa.sa.gov.au/vfm.

Disclaimer

This publication is a guide only and does not necessarily provide adequate information in relation to every situation. This publication seeks to explain your possible obligations in a helpful and accessible way. In doing so, however, some detail may not be captured. It is important, therefore, that you seek information from the EPA itself regarding your possible obligations and, where appropriate, that you seek your own legal advice.

Further information

Legislation

Legislation may be viewed at: < www.legislation.sa.gov.au >

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet Telephone: 13 23 24
Adelaide Service SA Centre Facsimile: (08) 8204 1909

108 North Terrace Website: <<u>shop.service.sa.gov.au</u>>

Adelaide SA 5000

For general information please contact:

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GPO Box 2607 Facsimile: (08) 8124 4670
Adelaide SA 5001 Freecall (country): 1800 623 445

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