ARTICLES

The New Commonwealth Ballast Water Legislation - Righting the Error of Ships' Ways!

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Introduction

"Every ship that carries ballast water should be provided with a ballast water management plan to assist in the minimisation of transfer of harmful aqatic organisms and pathogens[3]

The statistics are alarming. Approximately 150 million tonnes of ships' ballast water is discharged into Australia's 64 international ports each year by 10,000 vessels from 300 overseas ports. In addition, some 34 million tonnes of ballast water is moved by domestic shipping each year from one Australian port to another[4].

Ballast water can contain organisms which have the potential to have adverse effects on human health, the marine environment as well as the economy[5]. Ballast water also presents significant legal issues for the shipping industry, such as how to regulate ballasting, how to prove causation (eg that a ship caused the incident), who should be liable in the event of biological contamination, what the scope of liability should be and how to deal with or 'clean up' any contamination after.

Of particular concern to government is the potential for damage to marine ecosystems along the Australian coastline and particularly within the Great Barrier Reef Marine Park, which has both environmental and economic importance for Australia[6]. A number of industries are at risk, including the seafood industry.

Whilst there is legislation covering oil pollution[7] there is little provision for the potentially more damaging contamination which can be caused by 'foreign' organisms discharged with ballast water. In 1998 alone, the United States government spent $10 billion attempting to respond to marine pollution arising from the introduction of new species into the marine environment.

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[3] A model Ship Ballast Water Management Plan was developed for the IMO by the International Chamber of Shipping (ICS) and Intertanko and is available from the ICS - <ICS@marisec.org>

[4] Information obtained from the Australian Quarantine Inspection Service.

[5] For a good discussion see Jones, M. "Marine Organisms Transported in Ballast Water". *Bureau of Rural Resources, Bulletin* No 11 (1991).

[6] Ottensen, P, S Sparkes and C Trinder "Shipping Threats and Protection of the Great Barrier Reef Marine Park - The Role of the Particularly Sensitive Area Concept" (1994) 9 *The International Journal of Marine and Coastal Law* 4.

[7] See for example the *Transport Operations (Marine Pollution) Act 1995 (Qld).*

Recent examples of these problems have included the spread of brown kelp from Japan along the eastern coast of Tasmania which has effected a number of shellfish farms[8]. The North Pacific Seastar has been present in Tasmania's Derwent Estuary since the 1980s and has put at further risk Tasmania's shellfish industry[9]. The giant sea worm has become a major threat to the Western Australian scallop industry[10] and "red tides" which can kill fish and also potentially lead to human poisoning by contaminating food can be caused by toxic planktonic algae found in ballast water. A new species of toxic red algae was reported in Sydney Harbour and the Parramatta River as recently as 1996 and this has caused considerable concern for both industry and government[11].

The Compliance Regime

In Australia, the regulation of ballast water is primarily the responsibility of the Australian Quarantine and Inspection Service ('AQIS')[12]. In 1990 AQIS introduced guidelines in order to attempt to manage the ballast water problem. These include:

1. Measures at the ballasting port in order to ensure that ballast water is taken on free of organisms and that ballasting in shallow water is avoided.
2. Measures en-route (for example in-hold water treatment of ballast water).
3. Measures on arrival at port including things like non-discharge of ballast in port as well as on-shore ballast treatment.

This regime has recently been strengthened through a number of measures adopted by the Federal Government. These include the 1995 Ballast Water Management Strategy and the establishment of the Australian Ballast Water Management Advisory Council, as well as the announcement by the Prime Minister in March 1997 that $1 million would be allocated from the National Heritage Trust to fund the Strategic Ballast Water Research and Development Program.

It was intended that further funding for research would be raised through the imposition of a levy on ships entering Australian ports. In that respect (and in 1998), two pieces of legislation were passed. Those are the *Ballast Water Research and Development Funding Levy Act* 1998 (Cth) and the *Ballast Water Research and Development Funding Levy Collection Act* 1998 (Cth) which came into force on and from 1 July 1998.

Essentially those Acts impose a levy on all ships entering Australian ports. The levy is $210 for bulk carriers and $140 for all other ships with a length of 50 meters or over. Ships under 50 meters are not required to pay the levy. Ships trading solely between Australian Ports are required to pay this levy on the first day of every quarter and other ships entering Australian ports are required to pay the levy on the day they enter the port. Once the levy is paid, a ship is allowed access for a three month period. After three months, a ship may need to pay the levy again for the following quarter. The ship's owner, her master and any agent or consignee who is responsible for such payments are all jointly and severally liable for the payment of the levy.

[8] Bonny, M. "Ballast water: the scourge of the oceans" (1994) 25(3) *Search* 72.

[9] McLoughlin, R and R Thresher "The North Pacific Seastar: Australia's most damaging marine pest?" (1994) 25(3) *Search* 69.

[10] Bonny, M. "Preventing the invasion of marine immigrants" (1995) 26(3) *Search* 81.

[11] "Red tide of toxic algae threatens harbour's fish", *Sydney Morning Herald*, 14 December 1996:5.

[12] For general information on AQIS, visit its web site at <http.www.aqis.gov.au>

The levy is to be collected for a period of two years and at that time the federal government will review the legislation. The *Quarantine Act* 1908 (Cth) has also been amended to provide that vessels need to provide AQIS with certain "ballast water" information at least 12 hours prior to their arrival[13] in an Australian port. A failure to report accurately may result in penalties being imposed[14] up to $10,000 or five years imprisonment or both for false reporting. Furthermore access to a safe on-board ballast water and/or ballast sediment sampling point is now mandatory[15]. There are also provisions which prohibit the disposal of sediment through the cleaning of a ship's tank and hold in Australian waters but it is clear that the legislation in this area is still developing with clearer obligations and stronger penalties being required. Furthermore the problem of policing ballast water regulation remains a significant one.

Hopefully, more substantive legislation will be put in place dealing with the issues, because the issues simply cannot be ignored. Certainly, at this point, the raising of these funds for research by the government and the imposition of regulatory measures under the *Quarantine Act* highlights the seriousness with which the government and the scientific community views the potential problems associated with ballasting in Australian waters.

Ballast Water and Tortious Liability

There can be no doubt that ship owners and those in charge of the day to day operation of ships need to consider their potential liability for damage caused to the environment and to industry by foreign organisms discharged with ballast water. Of particular international concern at the moment is the voracious jellyfish which is currently causing havoc in the Black Sea. It is thought that the jellyfish came from the bilge water of a North American ship in 1982. Another concern is the Zebra Mussel, which entered the Great Lakes of North America in approximately 1988. By 1993 the Mussel had invaded 50% of all the waterways in the United States, killing off native species and clogging the inlet pipes of ships and power plants. The cost of controlling the mussel in the United States is estimated at $US 1 billion per year[16].

Of course it is very difficult to prove a polluters negligence at sea[17] as causation is difficult to demonstrate as well is foreseeability of damage[18]. Ship owners might also argue that the dumping of ballast water could not amount to negligence, as the practice is still common in the shipping industry. However, that does not mean that the situation cannot change, particularly in light of the developments in the area of oil pollution controls; attention is being given to the issue of ballast water by the government, and it has been demonstrated scientifically that it can cause significant environmental damage as well as economic loss to other groups, such as the seafood industry. The state of thinking is strongly changing, but there is still so little law in the area. The writers'

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[13] This is done by sending a completed AQIS Quarantine Declaration for Vessels (QDV) form which has attached to it the AQIS Ballast Water Reporting Form.

[14] The *Quarantine (General) Regulations* - Reg 18 requires the provision of information by ship's masters.

[15] For a good summary of AQIS guidelines on ballst water see <http://www.aqis.gov.au>

[16] See <http:www.aph.gov.au>

[17] see for example *Esso Petroleum Co. Ltd. v Southport Corporation* [1956] A.C. 218

[18] see *Overseas Tankship (U.K.) Ltd v Miller Steamship Co. Pty. Ltd.* [1967] A.C. 617

research revealed that there is no Australian case law on biological pollution of this type, and it would also seem the various issues have not been considered by courts in other jurisdictions. Given the consequences of biological pollution of this type it is really only a question of time before the various issues mentioned are tested in the courts.

Ship owners do need to take care. At the end of the day, the question of whether a ship owner is liable may largely depend on what the shipper could have done to avoid problems but didn't do. A failure, for instance, to comply with the AQIS guidelines could prove costly. Ship owners will need to arm themselves with all the latest information on 'ballasting' and look at and evaluate their systems. Staff should be appropriately instructed as to ballasting procedures and precautions, so that there is no confusion. It is well recognised at law that employers can be vicariously liable for the acts and/or omissions of their servants and agents.

Ballast Water and Statutory Regulation

Other than the provisions of the *Quarantine Act* there would appear to be only one other Commonwealth provision that could potentially apply. There is no applicable legislation in Queensland (where the writers are based), but there could be some in the other states.

Section 10 of the *Environment Protection (Sea Dumping) Act* 1981 (Cth) provides that:

> *Where, otherwise than in accordance with a permit, any wastes or other matter (other than radioactive material) -*
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> *(a) are, or is, dumped into Australian Waters from any vessel or aircraft; or*
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> *(b) are, or is, dumped into any part of the sea from any Australian vessel, Australian aircraft or Australian platform,*
>
> *the owner and the person in charge of the vessel, aircraft or platform and the owner of the wastes or other matter are each guilty of an offence against this section.*

The Act does not define "waste" or "other matter", but both would seem wide enough to include ballast water in circumstances where, for example, the master of the ship takes on water in a trouble area or is aware that the ballast water may contain organisms which could be harmful to marine ecosystems and/or marine life. In this circumstance, it is foreseeable that damage could arise, thereby leading to a prosecution under the Act.

There is extensive regulation covering the pollution of the sea through the discharge of oil. For instance, the *Protection of the Sea (Prevention of Pollution from Ships) Act* 1983 (Cth) provides for penalties of up to $200 000 for the discharge of oil or oily substances by ships in Australian waters. The rationale behind this legislation is to enforce the 1973 *International Convention for the Prevention of Pollution from Ships* to which Australia is a signatory.

In light of the government's desire to protect marine ecosystems and marine based industry it would seem illogical not to extend legislative prohibition to ships ballasting in Australian waters. There are already established ways in which ships can ballast with little effect on the marine environment through utilising the facilities and procedures established by AQIS. Given that the damage which may be caused through the introduction of foreign species into Australian waters and the severe long term effects that this can have, it would also seem likely that the courts will slowly move to extend tortious duties in this area to cover negligent ballasting by ships masters.

A Problem for the Future ?

Whilst it may appear that liability for ballasting represents a problem for the future it is clear that the practice is one which is sure to attract further attention from the legislature and eventually, from the courts. Shippers need to be aware that their potential liability in an action brought against them for negligently ballasting in Australia waters could be immense given the scope of the potential damage to marine ecosystems and the seafood industry. It is clear that ballasting can and does cause damage to the marine environment and that government and the industry need to work together to overcome this. This challenge is not only a legal one, but one of critical importance to Australia's marine environment generally.