



Australian Government
Australian Maritime Safety Authority

CHIEF EXECUTIVE OFFICER

Ms Christine McDonald
Secretary
Senate Environment and Communications References Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Ms McDonald

Thank you for the opportunity to contribute to the Environment and Communications References Committee Inquiry into the threat of marine plastic pollution in Australia and Australian waters. I attach, for the consideration of the Committee, a submission by the Australian Maritime Safety Authority (AMSA).

While marine plastic pollution is predominantly derived from land-based consumption and disposal, pollution from garbage by shipping is an important focus for AMSA in its marine environment protection activities.

While it is estimated that the contribution of marine debris from shipping is less than 20 per cent (with 80 per cent or more attributed to land based sources), pollution from garbage by shipping remains a significant concern and is an important focus for AMSA in its marine environment protection activities.

The submission is focussed particularly on the Inquiry's terms of reference set out at (b) - sources of marine pollution and (d) - measures and resourcing for mitigation.

Yours sincerely

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Submission to the Senate Inquiry into the threat of marine plastic pollution in Australia and Australian waters

Environment and Communications References Committee

The Australian Maritime Safety Authority (AMSA) is a statutory authority established under the *Australian Maritime Safety Authority Act 1990* with the primary role to minimise the risk of shipping incidents and pollution in Australian waters, through ship safety and environment protection regulation and services, and maximise people saved from maritime and aviation incidents through search and rescue coordination.

Introduction

Marine debris, particularly plastics, is a global problem. While the United Nations Joint Group of Experts on the Scientific Aspects of Marine Pollution has stated that the contribution to shipping may not be as large as previously thought (previously stated as up to 20 per cent), pollution from garbage by shipping remains of significant concern and is an important focus for AMSA in its marine environment protection activities.

Shipping is one of the few contributors of plastics and other marine debris that is actively controlled under an international convention. The International Convention for the Prevention of Pollution from Ships (MARPOL) regulates various sources of marine pollution from shipping, including oil, sewage, air emissions and garbage.

MARPOL Convention

Waste is generated during the normal operations of ships. Plastic wastes that may be generated on-board include various types of garbage - for example packaging, bottles, plastic parts of e-waste, synthetic ropes, fishing nets and lines, and strapping or wrapping associated with the ships stores and cargo.

The discharge of plastic into the sea has been prohibited under MARPOL since 31 December 1988. As of 1 January 2013, MARPOL Annex V prohibits the discharge of all types of garbage into the sea, with very limited exceptions (not related to plastics).

Guidelines for the Implementation of MARPOL Annex V assist shipowners/operators and governments to effectively implement the Annex V regulations. These guidelines focus on waste minimisation and address how to reduce the amount of waste taken on board a ship, through to the effective on-board management of waste to ensure that waste is stored or treated on-board without discharge into the sea.

Through record maintenance and port State control inspections, ships are held accountable for the management of their waste and any discharges in contravention of the Convention and Australian legislation (refer to Compliance and Enforcement below), which may be met with ship detentions and/or penalties.

Adequacy of Waste Reception Facilities

The MARPOL Convention obliges each party to the Convention to ensure that all ports and terminals have adequate facilities to receive ships' wastes. Adequate ships' waste reception facilities assist and encourage ships' crews to dispose of plastic wastes appropriately.

The International Maritime Organization (IMO) has stated that 'adequacy' of waste reception facilities includes that the fee charged does not provide a disincentive to use the facilities (and by implication an incentive to illegally dispose of waste overboard). This presents a particular challenge in providing reception facilities for ships' waste in Australia, due to high standards for waste handling, transport, treatment and disposal, and relatively high labour costs. Garbage from ships arriving from overseas is subject to quarantine and, therefore, strict handling and disposal requirements which come at a cost. Whilst ships' crews are generally diligent in sorting and separating recyclable materials (including plastics), there is limited opportunity for recycling to occur under current biosecurity arrangements. AMSA understands that a quarantine inspection of a consignment of waste is required before allowing recycling (rather than deep burial or sterilisation), which can be difficult, particularly in remote port locations AMSA is working with the Department of Agriculture in this regard.

To encourage ship operators to unload non-recyclable and recyclable plastics in Australian ports it is AMSA's view that ship operations should be considered in any broader review of arrangements for collection, treatment and disposal/recycling of plastics.

In Australia, ships' waste reception is generally delivered through commercial arrangements. Ships' agents contact local waste service providers to collect waste from the ship when it is alongside the wharf. Less commonly, a port may provide a waste collection service under the port fees. Given the stewardship role of port authorities in the environmental management of port areas, AMSA works collaboratively with Ports Australia to raise awareness of ships' waste issues. Port operators and port authorities have an important role in waste reception - for example through allowing wharf access for service providers, communicating waste reception arrangements to port users and reviewing the demand for waste reception, to determine if existing arrangements are working.

State and Northern Territory Governments also have an important role, including where the role of port authorities is limited (eg, private terminals subject to State government licences to operate). Several jurisdictions have provisions in legislation giving ministers, agency heads or delegates the power to require the provision of waste reception facilities for ships. During the approvals process for new port or wharf developments, a range of State/Northern Territory and Commonwealth agencies have an opportunity to ensure that the design and operation of the development caters for the appropriate management of ships' waste. It is AMSA's view that authorities have the scope to consider making more frequent and effective use of the legislation and influence over developments and terminals operations, to ensure waste facilities are available and adequate.

Compliance and Enforcement

AMSA has undertaken numerous investigations into the discharge of garbage in Australian waters, which have been successfully prosecuted by the Commonwealth Director of Public Prosecutions under the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* (the POTS Act).

Section 26F(3)(b)(ib) of the Act imposes a strict liability penalty by a fine not exceeding 500 penalty units (ie, \$90,000 for Master and \$450,000 for Owners). Section 28 allows for matters to be dealt with summarily for offences against 26F, with resultant fines not to exceed 200 penalty units (ie, \$36,000 for Master and \$180,000 for Owners). The penalties applied by the courts are typically \$500 or \$600 for the Master of the vessel and \$5,000 to \$20,000 for shipowners. AMSA is now considering alternative compliance and enforcement options, such as issuing directions and improvement notices, in order to deter offenders from discharging garbage in Australian waters.

Non-Legislative Mechanisms

While the MARPOL Convention and associated domestic legislation is the primary regulatory mechanism, AMSA undertakes a number of other non-legislative initiatives to help minimise pollution from shipping.

Community Education and Engagement

AMSA produces a range of publications and educational material to support regulations and raise awareness on how to manage waste on-board a vessel, to prevent it from being discharged into the sea. Published marine notices assist in the interpretation and implementation of applicable regulations, primarily targeted at larger vessels. These and other educational materials, such as online games, are also made available to educational institutions to assist in educating students on the importance of marine debris issues and source reduction.

AMSA supports other educational programmes and initiatives, including the Australian Marine Environment Protection Association (AUSMEPA). AUSMEPA was formed in 1999 by a partnership of concerned government and maritime industry representatives. One of AUSMEPA's key objectives is instilling an increased marine environment consciousness. This is achieved through education of industry and the community on IMO regulations, Australian legislation and MARPOL requirements. AMSA supports the activities of AUSMEPA as a Board member and by providing educational and other materials and corporate membership.

AMSA also supports Tangaroa Blue, which is a non-government organisation that coordinates the Australian Marine Debris Initiative to assist in source reduction and identification of trends, including those associated with shipping. In an effort to ensure that garbage does not turn into marine debris, AMSA works in partnership with Tangaroa Blue to ensure that information on marine debris, the management of garbage on-board ships and reporting requirements for illegal discharges from ships is communicated to the people dealing directly with marine debris, such as Tangaroa Blue volunteers and the wider maritime community. Information collected by Tangaroa Blue in the Australian Marine Debris Initiative database can also assist in the longer term identification of trends and the overall efficacy of the MARPOL Annex V regulations. This information can assist Australia in discussions in the international context and assist in ensuring the effective implementation of MARPOL Annex V both in Australian waters and in the region.

AMSA's relationship with Tangaroa Blue began in 2006 and both parties are now looking to formalise this relationship with a memorandum of understanding to reflect our positive working relationship with regard to the prevention of pollution by garbage from ships and associated marine debris.

Asia-Pacific Regional Support

Marine plastic pollution is, to a significant extent, a regional problem in terms of both sources (largely land-based) and controls. In regard to shipping, Port State Control is of particular importance to Australia, due to the significant role shipping plays in Australia's trade and the sensitivity of the Australian coastline to environmental damage.

AMSA engages with maritime safety agencies throughout the Asia-Pacific region to encourage consistent application of international shipping conventions, resulting in safe, efficient and environmentally sustainable shipping. AMSA acts as the Secretariat to the Asia-Pacific Heads of Maritime Safety Agencies (APHoMSA) forum. One of the pillars of this forum is 'Protecting the Marine Environment', providing an opportunity for discussion on issues of importance to the region including marine debris.

AMSA actively supports comprehensive technical cooperation programs in the Asia-Pacific region offered by international organisations, such as the IMO and the Tokyo Memorandum of Understanding (MOU) on Port State Control. AMSA regularly provides specialists to contribute to expert missions to build technical capacity within the Asia-Pacific region. Regional cooperation under the Tokyo MOU also allows member States to share information on inspection results and ensure follow-up of deficiencies found during inspections.

Regional cooperation on port state control is pivotal to stamping out substandard shipping, in particular, ensuring compliance with a suite of international conventions including MARPOL.

In 2014 AMSA commenced an annual international staff exchange program. The program aims to strengthen relationships between maritime safety agencies in the Asia-Pacific region by assisting in the transfer of knowledge and skills to participants. The program proved successful, with participants from China, Korea, Kiribati and Solomon Islands attending formal training courses in port State control and marine pollution prevention and response.

Pacific Regional Reception Facilities Plan for Ships' Waste

In early 2015, a Regional Reception Facilities Plan for ships' waste was produced by the Secretariat for the Pacific Regional Environment Programme (SPREP) for the small island developing states in the Pacific region, in accordance with MARPOL and IMO guidelines. Many Pacific islands have minimal industrial waste infrastructure, small land area and landforms that make it difficult to handle waste generated on the island/s, let alone additional waste from international shipping. While certain 'hub' ports in the Pacific have been identified as regional ships waste reception centres, Australian ports including Townsville, Brisbane and Sydney, are also identified as important in providing adequate reception facilities on a regional scale.

AMSA assisted SPREP undertake gap analyses of ports in the region that could act as waste hubs, and co-sponsored submission of the draft plan to the IMO. The plan, which takes effect in May 2016, will continue to evolve and expand over time. It is considered in Australia's interests to help the Pacific small island developing states meet this MARPOL requirement, as it assists their moves towards accession to the MARPOL Convention which, in turn, encourages greater compliance with MARPOL throughout the region.

Australia is also a participant in the Pacific Ocean Pollution Prevention Programme which was updated in 2014 and recognises marine plastics and marine debris more generally as a significant source of pollution. Proposed actions (subject to funding) include: investigating sources of abandoned or lost fishing gear (ALFG); regional Workshop on ALFG including training on disentanglement of migratory species such as whales and dolphins; improved ghost net management; opportunistic sampling of ocean plastic debris; develop SPREP region marine debris network; investigating adequacy of port reception facilities; and a necropsy workshop for Pacific Islands to investigate degree of ingestion of marine debris in turtles, dolphins and whales.

Conclusion

In conclusion, while AMSA considers the contribution to marine plastic pollution from shipping to be, on the whole, subject to appropriate and effective measures, improvements could be made in the following areas:

- Any review of national arrangements for collection, treatment and disposal/recycling of plastics should also consider ship operations.
- Exercising Commonwealth/State/Northern Territory regulatory powers to their full extent in providing adequate ship waste facilities for new and existing ports.
- Consideration of funding pollution initiatives in the region, given the global/regional significance of the problem.