

MARPOL 73/78: Annex IV - Regulations for the Prevention of Pollution by Sewage from Ships (revised)

Introduction

- 4.1 The Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, as amended at London, 17 February 1978, is known as the MARPOL 73/78 Convention. It is one of the main international instruments addressing maritime pollution, and is administered by the International Maritime Organization (IMO). It contains six technical annexes, dealing with oil, bulk noxious liquid substance, harmful substances in packaged forms, sewage, garbage and air pollution respectively. Australia has been a party to this Convention since 1987 and has ratified all four of the six annexes that have come into force.¹
- 4.2 The proposed treaty action involves acceding to Annex IV of MARPOL 73/78. Annex IV defines and sets standards for sewage management systems on ships and in ports: how sewage should be treated or held aboard a ship and the circumstances under which discharge into the sea may be allowed.²

1 Veena Rampal, *Transcript of Evidence*, p. 29.

2 Veena Rampal, *Transcript of Evidence*, p. 29.

- 4.3 Commonwealth legislation which implements the provisions of Annex IV was passed in 1986, but, as Annex IV had not received the required level of international acceptance, the legislation was not proclaimed.³ The process by which the Annex enters into force will be discussed later in this Chapter.

Background

- 4.4 There are currently no enforceable international standards relating to the discharge of sewage from commercial vessels. The average cruise liner, for example, can discharge approximately 100,000 litres of sewage a day, whereas the average bulk carrier with a crew of 25 discharges approximately 300 litres per day.⁴ The Committee was advised that in 1999-2000, 3,254 international trading ships visited Australian ports.⁵

Environmental concerns

- 4.5 The 1996 State of the Environment Report notes that the input of nutrients from effluents such as sewage is one of the most serious large-scale threats to Australia's near-shore marine environments.⁶
- 4.6 Environmental problems resulting from sewage discharge from ships include the introduction of nutrients which cause algal blooms and reduced oxygen levels, in some cases leading to the permanent loss of seagrass.⁷ Sewage discharge from ships differs from other types of sewage as it is often released directly into the sea and can contain treatment chemicals (such as chlorine and formaldehyde) not found in other sewage.⁸
- 4.7 The Committee accepts the view of the Department that it is in Australia's interest to prevent pollution from sewage discharge,

3 Veena Rampal, *Transcript of Evidence*, p. 29.

4 Regulation Impact Statement (RIS), para. 1.1.

5 Veena Rampal, *Transcript of Evidence*, p. 29; NIA, para. 10.

6 RIS, para. 1.6.

7 National Interest Analysis (NIA), para. 6.

8 NIA, para. 5.

especially in sensitive marine areas such as the Great Barrier Reef which supports significant tourist activity.

- 4.8 The Committee was advised that there are serious health risks for people who come into contact with polluted water during recreational activities or people who eat contaminated fish or shellfish.⁹ Information on adverse health impacts resulting from polluted water was provided in the Regulation Impact Statement (RIS), including results of a study which suggests that seafood is involved in 20 per cent of outbreaks of disease carried in food in Australia.¹⁰

Precautionary Principle

- 4.9 The RIS states that international concern about various types of pollution has led to the development of the 'Precautionary Principle', set out in the United Nations (UN) Conference on Environment and Development, Agenda 21, Principle 15, which states that:

Governments should take action to prevent pollution whenever there are reasonable grounds for concern that such pollution may occur, and that a lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹¹

- 4.10 The Committee also accepts that Australia has obligations under the UN Convention on the Law of the Sea (1982), for:

nations to adopt generally accepted international rules and standards when implementing laws and regulations to prevent, reduce and control pollution of the marine environment from vessels.¹²

Operation of the Annex

- 4.11 The Committee was advised that the Annex will apply to new ships of 400 gross tons and more on international voyages, and new ships of less than 400 gross tons but which are certified to carry more than 15 persons (also on international voyages).

9 NIA, para. 6.

10 RIS, para. 1.7.

11 RIS, para. 1.8.

12 RIS, para. 4.3.

4.12 The Committee understands that the regulations in Annex IV prohibit the discharge of sewage from ships at sea unless the discharge is carried out through the sewage treatment plant or a comminuting and disinfecting system, provided that the ship is more than three nautical miles from the nearest land, or that is carried out from a holding tank, provided that the ship is more than three nautical miles from the nearest land:¹³

In effect, the regulations stipulate that sewage from ships may be discharged within the 12 nautical mile zone only if it has been treated. Sewage remaining in holding tanks aboard ships may be discharged at waste reception facilities located at various ports.¹⁴

4.13 The Committee was advised that the Annex places an obligation on ports to provide facilities for the reception of sewage from international trading vessels. The Committee understands that most major Australian trading ports and many small ports already have waste reception facilities in place, either through a direct connection to the city's sewerage system or through the use of private contractors using tankers for its removal.

4.14 According to Mr Paul Nelson, the RIS:

draws attention to the ports of Geelong, Westernport and Port Hedland as not having facilities when we put this document together. We have since had discussions through the Australian Ports and Marine Authorities and determined that these ports now do have facilities in place ... realising that this Annex would come into force soon, most ports have been upgrading.¹⁵

4.15 Before a ship is put into service, it will be surveyed to ensure that its sewage disposal system meets the required standard. In Australia, this survey will be undertaken by the Australian Maritime Safety Authority (AMSA), as part of its flag State control function for Australian ships, or an authorised organisation.¹⁶

4.16 In the case of existing ships that match these criteria, the provisions of Annex IV will apply five years after the date of entry into force, that is, on 27 September 2008.

13 Veena Rampal, *Transcript of Evidence*, p. 29, and NIA, para. 15.

14 Veena Rampal, *Transcript of Evidence*, p. 29.

15 Paul Nelson, *Transcript of Evidence*, p. 33.

16 NIA, para. 14.

Industry impact

Recreation and tourism

- 4.17 The Committee was advised that as this Convention only applies to ships in excess of 400 gross tons, it was generally applicable only to commercial vessels.

Smaller vessels, such as ... tourist craft operating in the Great Barrier Reef ... are not subject to this convention but they are generally subject to very similar state legislation, much of which is emerging at the moment.¹⁷

Commercial fishing

- 4.18 The National Interest Analysis (NIA) states that as the Annex only applies to vessels on international voyages, the local fishing industry will not be impacted by this proposal.¹⁸

Livestock

- 4.19 The regulations in the Annex also apply to drainage from spaces containing live animals.¹⁹ Australia has a growing livestock industry, primarily to the Middle East and South East Asia. The Committee was advised that Australia exported 826 000 head of cattle, worth \$545 million, in 2001.²⁰ The Committee was advised that little impact is foreseen on the livestock industry, as the ships that are involved in that industry are generally foreign registered vessels; the burden of ensuring appropriate certificates rests with those states.²¹
- 4.20 The Committee understands that the only other impact to this industry results from more thorough inspections at Australian ports after enactment of the appropriate legislation:

we will be able to go on board those ships and make sure they have the necessary arrangements in place. For those ships it would probably be holding tanks, which they would discharge once they get more than 12 miles offshore.²²

17 Paul Nelson, *Transcript of Evidence*, p. 31.

18 NIA, para. 27.

19 Paul Nelson, *Transcript of Evidence*, p. 33.

20 RIS, para. 1.3.

21 Paul Nelson, *Transcript of Evidence*, p. 33.

22 Paul Nelson, *Transcript of Evidence*, p. 33.

Consultation

4.21 The Committee was advised that:

Since 1973, the international shipping industry has been aware that the IMO would be implementing sewage discharge standards, and this has been taken into account in the construction of ships since that time.

4.22 The Committee understands that the shipping industry has been consulted since the 1970s, when development of Annex IV commenced. The views of the states and the Northern Territory have been sought through the deliberations of the Australian Transport Council, and the Committee was advised that all jurisdictions have provided support for Annex IV. Submissions from the Governments of Victoria and Queensland were in favour of the amendments.²³

4.23 During the public hearing on 24 March 2003, the Committee heard evidence about the establishment and operation of the Australian Transport Council and the Standing Committee on Transport (SCOT)²⁴:

which comprises the CEOs of the transport agencies. And then under that body is a number of what are called modal groups. The modal group for marine is the Australian Maritime Group. It comprises representatives of the Commonwealth, states and territories'.²⁵

4.24 The Committee understands that the Australian Livestock Export Corporation was also consulted in relation to this Annex. The Committee was told that 'they have no concerns with the proposal as compliance will largely be the responsibility of the foreign registered vessels involved in the trade'.²⁶ The Committee was also advised that, 'as only cruise ships will be impacted, consultation with the local tourism sector was not required'.²⁷

4.25 According to the NIA and RIS, a broad range of industry groups and interested parties have been consulted at several stages over three decades, and the Committee is satisfied with the range and extent of

23 Government of Queensland, *Submission 25*, and Government of Victoria, *Submission 26*.

24 NIA, para. 15.

25 Mr Robert Hogan, *Transcript of Evidence*, p. 33.

26 NIA, para. 26.

27 NIA, para. 27.

consultation and that all relevant parties have been adequately involved in the process.²⁸

Entry into force

- 4.26 According to the NIA, Annex IV has only recently gained the necessary acceptance and will enter into force internationally on 27 September 2003.²⁹ Accession for Australia is dependent on the passage of domestic legislation. At the time of writing, the Maritime Legislation Amendment (Prevention of Pollution from Ships) Bill 2003 had passed through the House and was awaiting passage through the Senate.
- 4.27 The Committee expresses its concerns that the relevant legislation was introduced and has passed through the House of Representatives prior to the Committee reviewing the proposed treaty action and tabling its report. While the Committee accepts that binding action has not been taken in a strict sense, the introduction of enabling legislation to implement treaty obligations before the Committee has completed its review and reported to Parliament could undermine the workings of the Committee over time. It is, at least, in contravention of the spirit of the Committee's terms of reference.
- 4.28 The Committee also notes that neither was notice provided to the Committee of the introduction of the Maritime Legislation Amendment (Prevention of Pollution from Ships) Bill 2003, nor was a copy of the draft legislation provided to the Committee at any time during the period between the tabling of the proposed treaty and the tabling of the Committee's report. The Committee expresses the hope that this practice not be continued.
- 4.29 The treaty will enter into force for Australia three months after indication of Australia's acceptance is received by the IMO.³⁰ It is expected that the treaty will enter into force in Australia in 2003/2004.³¹
- 4.30 Given the Annex was first prepared in 1985, the Committee inquired as to the extended time required to bring it to fruition, and was

28 NIA, paras. 21-25.

29 NIA, para. 3.

30 Ms Veena Rampal, *Transcript of Evidence*, p. 29.

31 NIA, para. 4.

advised that the previous provisions related to ships of 200 gross tons and more undertaking domestic and international voyages. A survey in 2000 by the IMO revealed that the administrative burden created by the regulation of so many ships would be too onerous for many states.³²

- 4.31 After amendments were made the Annex now has enough signatories to enter into force.³³ While acceding to the Annex in its original form was not difficult for Australia:

there was an awareness that [it] would be amended in the future and we were a little uncomfortable committing ourselves to a treaty when we were uncertain of exactly what the final wording would be.³⁴

Concluding observations and Recommendation

- 4.32 The Committee understands that the regulations of Annex IV include special protection measures for the Great Barrier Reef that prohibit any operational discharges in the Reef area.³⁵ The Committee notes that this is the only sea area in the world to have such protection.
- 4.33 The Committee accepts that by becoming a party to Annex IV, Australia will be able to enforce the full range of controls on sewage systems on foreign and Australian flagged vessels on international voyages and ensure that consistent national and international standards can be applied to foreign ships, thereby protecting the Australian marine and coastal environments.

32 Veena Rampal, p. 30.

33 Paul Nelson, *Transcript of Evidence*, pp. 30-31. At the time of writing, 91 countries had become party to Annex IV, representing 51.22 per cent of the world shipping tonnage.

34 Paul Nelson, *Transcript of Evidence*, p. 31.

35 RIS, para. 4.4.

Recommendation 3

The Committee supports Annex IV of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, as amended (MARPOL 73/78), done at London, 17 February 1978, revised text adopted at London, 13 March 2000, and recommends that binding treaty action be taken.

Recommendation 4

The Committee recommends that the role of the Committee be recognised by ensuring that, unless notice or reasons are provided, the Committee conclude its review of proposed treaty actions prior to the introduction of any enabling legislation.

