



## Ship Pollution Regulations

Regulations to prevent pollution from ships in Australian waters are implemented by both Commonwealth and State Governments. They are based on the International Convention for the Prevention of Pollution from Ships, known as MARPOL. This Convention is in force in 144 countries and is the main international convention covering prevention of ship-sourced pollution in the marine environment.

The Convention is administered by the International Maritime Organization (IMO), a specialised agency of the United Nations that has adopted some 50 Conventions and Protocols relating to ship safety and marine environment protection. Australia has been a member of the IMO since its establishment in 1959.

The MARPOL Convention deals with pollution that might result from accidents such as collisions or groundings, as well as all types of waste generated during the normal operation of ships, known as "operational waste". Ships are permitted to discharge small quantities of this operational waste, subject to very strict controls. A discharge is any release from a ship, whatever the cause.

The Convention has separate technical annexes dealing preventing pollution by:

- oil;
- chemicals;
- harmful substances in packaged forms;
- sewage;
- garbage; and
- air emissions.

The Convention includes special protection measures for Australia's Great Barrier Reef.

### Standards for Ships

The regulations dealing with prevention of pollution by oil include provisions for the progressive introduction of double hulled oil tankers to replace those with single hulls, protective location of ballast tanks on oil tankers to minimise pollution in the event of grounding, and a requirement for all ships to have special pollution-prevention equipment on board.

This equipment includes oily water separating that can monitor the level of oil in waste water while being discharged from a ship and trigger an alarm or shut down when the oil content exceeds permitted levels. The permitted level is generally 15 parts per million oil in water, a concentration at which oil is not normally visible.

Ships are also required have emergency response plans, to undergo regular surveys to ensure all equipment is functional, and to maintain a record book with details of all discharges and oil pumping operations.

The regulations dealing with the prevention of pollution by garbage prohibit the disposal of all plastic materials at sea, while permitting the discharge of other types of waste providing the vessel is a specified distance from the nearest land (12 nautical miles/22 kms). Ships are also required to have detailed garbage management plans and record books.

For discharge of sewage, ships are required to be quipped with a standard discharge connection and a holding tank, an approved sewage treatment plant or an approved sewage comminuting and disinfecting system.

Air pollution regulations include technical standards for diesel engines and shipboard incinerators, fuel oil quality standards and requirements for fuel oil suppliers.

## **Role of Government**

In addition to placing obligations on ships, MARPOL places an obligation on Governments to ensure ports provide adequate facilities for the disposal of the various waste products generated on board ship. These facilities can be fixed, such as those normally found at oil terminals to receive tank washing from oil tankers, or mobile, such as road tankers operated by private waste removal contractors.

AMSA conducts an extensive program of inspecting ships visiting Australian ports to ensure compliance with the relevant IMO Conventions, a program known as port State control. During 2006, AMSA marine surveyors inspected 3080 ships and detained 138 to ensure serious deficiencies, including those related to pollution prevention equipment, were rectified.

AMSA is responsible for the application and enforcement of MARPOL in areas of Commonwealth jurisdiction, that is to the limit of the 200 nautical mile exclusive economic zone. State/NT Governments are responsible for coastal waters up to three nautical miles (5.5 kms) offshore and the Great Barrier Reef Marine Park Authority (GBRMPA) is responsible for enforcement activity in respect of illegal discharges from smaller vessels in the Great Barrier Reef Marine Park.

## **Fines & Penalties**

Penalties under MARPOL legislation administered by AMSA are up to \$A1.1 million for the shipowner and \$A220,000 for the master of a ship discharging

in contravention of the MARPOL regulations. The legislation provides wide powers for AMSA marine surveyors to board ships and obtain evidence such as oil samples, and enables ships to be detained while investigations are carried out.

Enforcement of laws relating to pollution from ships can be difficult, particularly where an oil slick is sighted offshore and several vessels are either in the vicinity or passed through the area in the hours preceding the slick being sighted. Obtaining sufficient evidence to prove an offence in court will largely depend on whether samples from a slick can be obtained and matched in a laboratory with samples taken from a particular vessel.

Where more than one ship was in the area, as is frequently the case, success in court will also depend on whether samples from all such ships can be taken to ensure only one vessel was carrying the particular type of oil that caused the slick. This can be further complicated if one or more of the vessels passing through the area is heading to a foreign port.

Nevertheless, while the focus of AMSA, GBRMPA and the various State/NT agencies involved in enforcing MARPOL will always be on preventing pollution incidents, enforcement action is becoming increasingly effective. From 1991 to 2006, there were 160 successful prosecutions in Australian courts. Further successful prosecutions were also conducted in foreign courts following pollution incidents in Australian waters.

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### **For more information see:**

International Maritime Organization - [www.imo.org](http://www.imo.org)

Australian Maritime Safety Authority - [www.amsa.gov.au](http://www.amsa.gov.au) (Marine Environment Protection)