

# COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

International Convention for the Prevention of Pollution from Ships, 1973, as amended by the Protocol of 1978 (MARPOL 73/78)

# SUBJECT CATEGORY:

Marine / Oceans

# TYPE OF AGREEMENT / INSTRUMENT:

Multilateral

#### FORM:

Legally-binding treaty

#### STATUS:

The MARPOL Convention was adopted on November 2, 1973. Five years later, the Protocol of 1978 was adopted in response to a series of tanker accidents. As the original MARPOL Convention had not yet entered into force, the Protocol absorbed the original Convention. The combined Convention entered into force on October 2, 1983.

MARPOL contains six annexes which are subject to ongoing technical amendments. Dates the annexes entered into force are as follows:

- October 2, 1983: Annex I (Regulations for the Prevention of Pollution by Oil), Annex II (Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk).
- December 31, 1988: Annex V (Prevention of Pollution by Garbage from Ships)
- July 1, 1992: Annex III (Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form)
- 27 September 2003: Annex IV (Prevention of Pollution by Sewage from Ships)
- May 19, 2005: Annex VI (Prevention of Air Pollution from Ships)

#### **LEAD & PARTNER DEPARTMENTS:**

Lead: Transport Canada

**Partners:** Environment and Climate Change Canada; Department of Fisheries and Oceans

# FOR FURTHER INFORMATION:

# Web Links:

International Maritime Organization

#### Contacts:

Transport Canada Inquiry Centre

# **COMPENDIUM EDITION:**

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#### PLAIN LANGUAGE SUMMARY

The implementation of the MARPOL Convention is an important part of Canada's participation in the prevention and reduction of ship-source water and air pollution globally. Participation in the development of these global pollution reduction measures will help improve pollution standards and regulations in Canada.

Canada plays a key role in discussions on MARPOL pollution prevention measures, since these will impact national water and air quality. Canada has been involved in issues associated with prevention of pollution from oil, strengthening provisions related to sewage and garbage disposals, the implementation of stringent Sulphur requirements, and the protection of our Arctic waters.

# OBJECTIVE, KEY ELEMENTS & EXPECTED RESULTS

The MARPOL Convention was adopted on November 2, 1973 at the International Maritime Organization (IMO). The Protocol of 1978 was adopted in response to a spate of tanker accidents in 1976 to 1977. As the 1973 MARPOL Convention had not yet entered into force, the 1978 MARPOL Protocol absorbed the parent Convention. The combined instrument entered into force on October 2, 1983. In 1997, a Protocol was adopted to amend the Convention and a new Annex VI was added which entered into force on May 19, 2005. MARPOL's Annexes are updated regularly by amendments in response to technical matters and emerging pollution and climate change issues. On January 1, 2017, the Polar Code came into effect, which includes amendments to add stricter discharge requirements to MARPOL, including prohibitions on discharges of oil and noxious liquid substances in arctic waters.

The Convention includes regulations aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes. Special Areas with strict controls on operational discharges are included in most Annexes.



Annex I Regulations for the Prevention of Pollution by Oil (entered into force October 2, 1983) covers prevention of pollution by oil from operational measures as well as from accidental discharges; the 1992 amendments to Annex I made it mandatory for new oil tankers to have double hulls and brought in a phased-in schedule for existing tankers to fit double hulls, which was subsequently revised in 2001 and 2003.

Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force October 2, 1983) details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; the discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with.

Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force July 1, 1992) contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications.

For the purpose of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods (IMDG) Code or which meet the criteria in the Appendix of Annex III.

Annex IV Prevention of Pollution by Sewage from Ships (entered into force September 27, 2003) contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not comminuted or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.

Annex V Prevention of Pollution by Garbage from Ships (entered into force December 31, 1988) deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of.

In July 2011, IMO adopted extensive amendments to Annex V, which entered into force on January 1, 2013. The revised Annex V prohibits the discharge of all garbage into the sea, except as provided otherwise, under specific circumstances.

Annex VI Prevention of Air Pollution from Ships entered into force May 19, 2005 and a revised Annex VI entered into force July 1, 2010. This Annex sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances; designated emission control areas (ECA) set more stringent standards for SO<sub>x</sub>, NO<sub>x</sub> and particulate matter.

In 2011, after extensive work and debate, IMO adopted ground-breaking mandatory technical and operational energy efficiency measures, which are expected to significantly reduce the amount of CO<sub>2</sub> emissions from ships; these measures were included in Annex VI and entered into force on 1 January 2013.

Most recently, IMO adopted a data collection system to gather annual disaggregated data on fuel consumption and transport work for vessels of 5,000 gross tonnage and above. This measure will enter into force on March 1, 2018.

#### CANADA'S INVOLVEMENT

Under the Canada Shipping Act, 2001, most aspects of the MARPOL Convention have been adopted. However, aspects of the Arctic Waters Pollution Prevention Act (AWPPA) regarding sewage discharge are stricter than MARPOL, so the AWPPA applies to Canadian Arctic waters.

Canada continues its active involvement in the revisions to MARPOL, most recently regarding revisions to Annex VI; mandatory technical and operational energy efficiency measures which will significantly reduce the amount of CO<sub>2</sub> emissions from ships and the mandatory international code of safety for ships operating in polar waters (Polar Code).

# **RESULTS / PROGRESS**

#### Activities

Several revisions to MARPOL have been negotiated in recent years. The North American Emission Control Area (ECA), under MARPOL, came into effect August 1, 2012, bringing in stricter controls on emissions of sulphur oxide (SO<sub>x</sub>), and nitrogen oxide (NO<sub>x</sub>) for ships trading off the coasts of Canada, the United States and the French islands of Saint-Pierre and Miquelon.

A mandatory international code of safety for ships operating in polar waters (Polar Code) was negotiated in 2015. This amendment to MARPOL introduced stricter environmental controls on ships

operating in Polar waters and entered into force on January 1, 2017.

The adoption of the data collection system is the first part of a three-step process to develop further measures on energy efficiency for all vessels. Canada is currently active in discussions on a long-term IMO strategy on climate change.

# Reports

Transport Canada and Environment and Climate Change Canada activities are documented in the proceedings of the IMO Sessions and Committee Meetings and published on the IMO website.