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## Poles Apart? An Introduction to the Regulation of Polar Shipping



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**Ships trading or transiting through polar waters are subject to specific regulations to address the protection of pristine natural environments as well as safety of crew and ships in remote and hazardous conditions. However, the legal framework for the Arctic and Antarctica differ by reasons of geography and state sovereignty.**

### The Antarctic Treaty System

The 1959 Antarctic Treaty was established in order to ensure the Antarctic was used for peaceful scientific purposes. It designated Antarctica as a Special Conservation Area and put a hold on competing states' claims to sovereignty.

The Antarctic does not have a functioning state government, which gives rise to issues of implementation of some international maritime conventions that rely on action or enforcement by a coastal state government with established emergency response procedures. The Environmental Protocol to the Treaty recognises that the Antarctic cannot respond in the usual way to an environmental emergency, and requires Parties to the Treaty to provide for prompt and effective response action to environmental emergencies and establish contingency plans for response to incidents that have the potential to adversely affect the Antarctic environment.

Article 16 of the Environmental Protocol calls on Parties to set rules and procedures relating to liability for damage arising from activities taking place in the Antarctic Treaty area covered by the Protocol.

Pursuant to Article 16, Annex VI to the Protocol was adopted at the 2005 Antarctic Treaty Consultative Meeting (ATCM). This Annex sets requirements for environmental protection measures and response actions for operators of advance-notice activities as defined by Art VII (5) of the Antarctic Treaty. The Annex also deals with liabilities arising from environmental emergencies. In short, if an operator does not take prompt and effective response action in the event of an environmental emergency, they will be liable to pay for the costs of that response action up to the limitation amount as set by the Annex. It is important to note that an 'operator' is not defined as an operator of a ship for the purpose of the Annex, but rather the natural or juridical person that organises activities to be carried out in the Antarctic.

Annex VI has not yet entered into force, and will not until it has been approved by all of the 28 Consultative Parties that attended the 2005 ATCM.

## The Polar Code

Since entering into force on 1 January 2017, certain ships operating in polar waters are subject to mandatory requirements of the Polar Code in addition to other requirements already established for all ships under MARPOL and SOLAS.

These additional requirements reflect the unique risks posed to ships, crew and the environment when operating in extreme weather and remote locations and cover matters such as ship design, training, voyage planning, life-saving equipment and response, search and rescue, and pollution prevention.



## Key Provisions

· **Ship Design and Construction:** These requirements include enhanced ice strengthening, specialised navigation equipment, and other safety features to ensure that the ship can withstand the extreme conditions of the polar environment.

Chapter 1 requires that ships intending to operate in Arctic waters and the Antarctic area have a valid Polar Ship Certificate on board. Ships must undergo an assessment prior to receiving this Certificate. The Certificate would classify the vessel as one of the following categories:

**Category A** - ships designed for operation in polar waters in at least medium first-year ice, which may include old ice inclusions

**Category B** - a ship not included in category A, designed for operation in polar waters in at least thin first-year ice, which may include old ice inclusions

**Category C** - a ship designed to operate in open water or in ice conditions less severe than those included in categories A and B.

Chapter 2 requires a Polar Water Operational Manual (PWOM) to be carried on board which includes information on ship-specific capabilities and limitations arising from the assessment required to obtain the Polar Ship Certificate.

- **Crew Training and Certification:** Mandates that all crew members onboard ships operating in polar waters are adequately trained and certified to operate in these challenging environments. The training covers various topics, including ice navigation, emergency response, and polar survival techniques.

Chapter 12 requires that masters, chief mates and officers in charge of navigational watch on board ships operating in polar waters will have completed appropriate training. Minimum requirements for training of masters and deck officers operating in polar waters have been mandatory under the STCW Convention and Code since 1 July 2018.

- **Environmental Protection:** Includes strict regulations to minimise the environmental impact of shipping activities in polar waters. These regulations include limits on the discharge of pollutants and requirements for the safe handling and storage of hazardous materials.

- **Search and Rescue:** Requires that all ships operating in polar waters have appropriate search and rescue capabilities. This includes the provision of dedicated rescue equipment, such as survival suits and life rafts, as well as training for crew members on how to respond to emergencies.

- **Voyage Planning:** Requires that all ships operating in polar waters have a detailed voyage plan that considers the unique challenges of operating in these regions. This includes factors such as ice conditions, weather forecasts, and the availability of emergency response resources.

## Recent Amendments

In November 2022 the Maritime Safety Committee of the IMO approved amendments to Interim Guidelines on life-saving appliances and arrangements for ships operating in polar waters **MSC.1/Circ.1614 -Rev.1**. The amendments create an appendix that sets out a method of calculation for maximum time of rescue. This allows ships to calculate the necessary quantity of food rations and fresh water as well as inform the type of equipment that should be carried on board.

Additionally, the MSC approved, with a view to adopt at the next session, amendments to the Polar Code and associated amendments to SOLAS relating to safety of navigation and voyage planning. These amendments apply to certain non-SOLAS ships, namely:

- fishing vessels of 24m length overall and above,
- pleasure yachts of 300GT and upwards (not engaged in trade) and
- cargo ships of 300 GT or more 9but below 500GT).

For over a decade the Antarctic area (being south of latitude 60°S) has had a prohibition in place for both the carriage as cargo and use as fuel of heavy grade oils pursuant to **MARPOL Annex 1 Reg 43**. This includes crude oils with a density at 15°C higher than 900 kg/m<sup>3</sup>; oils, other than crude oils, having a density at 15°C higher than 900 kg/m<sup>3</sup> or a kinematic viscosity at 50°C higher than 180 mm<sup>2</sup>/s; or bitumen, tar and their emulsions.

On 1 November 2022, amendments to MARPOL Annex I entered into force, introducing the same prohibition on heavy grade oils in Arctic waters (defined here) from 1 July 2024 at Annex 1 Reg 43A. Some exemptions have been provided for ships engaged in securing the safety of ships or in search and rescue operations as well as ships dedicated to oil spill preparedness and response. Additionally, States with a coastline that borders on Arctic waters may temporarily waive the prohibition for ships flying their flag while operating in waters subject to the sovereignty or jurisdiction of that State. Waivers cannot be issued or apply after 1 July 2029.

On 26 November 2021 the IMO's Marine Environment Protection Committee (MEPC) adopted a resolution **MEPC.342 (77)** urging member States and ship operators to voluntarily use distillate or other cleaner alternative fuels or methods of propulsion to contribute to reduction of Black Carbon emissions from ships operating in or near the Arctic.