

BACKGROUND
International Maritime Organization (IMO)
The Protocol of 1997
Annex VI - Regulations for the Prevention of Air Pollution from Ships
SO_x Emissions Control Areas (SECAs)

INTRODUCTION

The most important global convention regulating and preventing marine pollution by ships is the IMO International Convention for the Prevention of Pollution from Ships. Known as the MARPOL convention, it is a combination of two treaties adopted in 1973 and 1978, with many subsequent amendments. It covers accidental and operational oil pollution as well as pollution by chemicals, goods in packaged form, sewage, garbage and air pollution.

It currently includes six technical Annexes:

- Annex I Regulations for the Prevention of Pollution by Oil**
- Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk**
- Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form**
- Annex IV Prevention of Pollution by Sewage from Ships**
- Annex V Prevention of Pollution by Garbage from Ships**
- Annex VI Prevention of Air Pollution from Ships (entry into force 19 May 2005)**

MARPOL Annex VI is an important step toward controlling and preventing emissions of harmful air pollution from ships by limiting the discharge of nitrogen oxides from larger marine diesel engines, governing the sulfur content of marine diesel fuel, prohibiting the emission of volatile organic compounds during the transfer of cargoes between tankers and terminals, setting standards for shipboard incinerators and fuel oil quality, and establishing requirements for platforms and drilling rigs at sea.

Annex VI contains provisions for the establishment of special SO_x Emission Control Areas (SECA). The sulfur content of fuel used by ships operating in these areas must not exceed 1.5% (15,000 ppm). Alternatively, a ship can use an exhaust gas cleaning system or other technological method to limit sulfur oxide (SO_x) emissions.

The Annex designates the Baltic Sea as a SO_x Emission Control Area and provides a mechanism by which the IMO may designate other SECAs. In March 2000, the North Sea was designated as such an area.

Ships entering a SECA are exempt for the first twelve months immediately following the entry into force of the SECA.

Warships, naval auxiliary and other ships owned or operated by a State and used in governmental non-commercial service are exempt (Article 3 of MARPOL).

Parties are not prohibited from imposing more stringent measures as a condition of entry into their ports or internal waters, unless a particular regulation of Annex VI expressly imposes such a limitation. However, the U.S. has taken the position that the full range of national interests related to oceans and U.S. port regions is best protected through a widely accepted international framework governing uses of the sea.

ELEMENTS OF A SECA APPLICATION

Appendix III of Annex VI of MARPOL 73/78 defines the objective of SECAs as: “to prevent, reduce, and control air pollution from SO_x emissions from ships and their attendant adverse impacts on land and sea areas.”

An application should be “supported by a demonstrated need to prevent, reduce, and control air pollution from SO_x emissions from ships.”

“The proposal shall include:

1. a clear delineation of the proposed area of application of controls on SO_x emissions from ships, along with a reference chart on which the area is marked;
2. a description of the land and sea areas at risk from the impacts of ship SO_x emissions;
3. an assessment that SO_x emissions from ships operating in the proposed area of application of the SO_x emission controls are contributing to air pollution from SO_x, including SO_x deposition, and their attendant adverse impacts on the land and sea areas under consideration. Such assessment shall include a description of the impacts of SO_x emissions on terrestrial and aquatic ecosystems, areas of natural productivity, critical habitats, water quality, human health, and areas of cultural and scientific significance, if applicable. The sources of relevant data, including methodologies used, shall be identified;
4. relevant information pertaining to the meteorological conditions in the proposed area of application of the SO_x emission controls and the land and sea areas at risk, in particular prevailing wind patterns, or to topographical, geological, oceanographic, morphological, or other conditions that may lead to an increased probability of higher localized air pollution or levels of acidification;
5. the nature of the ship traffic in the proposed SO_x emission control area, including the patterns and density of such traffic; and
6. a description of the control measures taken by the proposing contracting State or contracting States addressing land-based sources of SO_x emissions affecting the area at risk that are in place and operating concurrent with the consideration of measures to be adopted in relation to provisions of regulation 14 of Annex VI of the present Convention.”

And “The geographical limits of an SO_x emission control area will be based on the relevant criteria outlined above, including SO_x emission and deposition from ships navigating in the proposed area, traffic patterns and density, and wind conditions.”