



Antarctic and Southern Ocean Coalition

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ASOC Press Briefing IMO to Consider Ban on Heavy Fuel Oil in Antarctic Waters

I. Background

In 2005 the Antarctic Treaty Consultative Parties (ATCPs) requested that the International Maritime Organization (IMO) take steps to restrict the use of heavy fuel oil in Antarctic waters because of the high risk of fuel release in the Antarctic Treaty Area due to conditions such as icebergs, sea-ice and uncharted waters and the high potential of environmental impacts associated with a spill of heavy fuel oil.

In 2006 the IMO commenced action on the request, when Norway submitted a proposal to the Marine Environment Protection Committee (MEPC) to establish a prohibition on the carriage of heavy grade oil as cargo and as fuel oil when ships are operating in Antarctic waters. Following several years of discussions, the ban is now on track to be adopted by the MEPC in July.

The waters of Antarctica have been designated as a Special Area under the MARPOL 73/78 Convention¹ and all discharges of oils from ships both over 400 gross tonnage (gt) and under 440 gt are banned.

Heavy fuel oil is considered more environmentally hazardous than other marine fuel oils because it is slow to break down in the marine environment, particularly in cold polar waters. Spills such as those from the *Nakhodka*, *Erika* and *Prestige* demonstrate that there are serious short and long-term environmental consequences.² It is likely that a spill of heavy fuel oil in Antarctic waters will persist for many years and could have a major impact on any wildlife populations in the vicinity, particularly on penguins and other seabirds. In addition, when burned, heavy fuel oils produce higher emissions of sulphur oxides and greenhouse gases. Hence the desirability of banning both the use of fuel oil and the carriage on board vessels in Antarctic waters.

Currently, it is the larger cruise vessels, some research vessels and possibly some of the larger fishing vessels that use heavy grade fuel oil within Antarctic waters, although the cruise industry is now claiming that the proposed ban of heavy grade oils means that some of the smaller vessels will also be affected. After approval, it is expected that the ban will take effect in 2011.

¹ The International Convention for the Prevention of Pollution from Ships 1973 and Protocol of 1978. MARPOL 73/78 is the foremost marine pollution prevention convention. Annex I, which contains provisions addressing prevention of pollution by oil and also defines heavy grade oils, is ratified by 147 contracting states representing over 99% of the world's shipping tonnage, including all the Antarctic Treaty Consultative Parties.

² In recent years a number of serious incidents in Antarctic waters have resulted in fuel oil spills, fortunately none have involved heavy fuel oil or been serious, although it is unknown how much fuel oil remains in the *M/S Explorer*, a commercial tourism vessel, which sank in November 2007, and spilt an unknown amount of fuel. Two cruise ships, the *M/V Lybov Orlova* and the *M/V Nordkapp*, grounded at Deception Island in the South Shetland Islands in November 2006 and January 2007 respectively. The grounding of the *Nordkapp* resulted in hull damage and the spillage of an unknown amount of fuel. More recently, the Panamanian flagged *MV Ushuaia*, built in 1970, grounded near Cape Anna in the NW Antarctic Peninsula on December 4, 2008 and a small amount of fuel oil leaked.

Furthermore, recent revisions to MARPOL Annex VI on air emissions from international shipping will inevitably result in further global restrictions on the use of heavy fuel oils which contain high levels of sulphur; these restrictions will be reviewed in 2018 and take effect from 2020. Thus many shipping companies currently using HFO have already begun considering alternatives. However, heavy fuel oils cost less than the lighter grades of intermediate fuel oil or distillate fuels that would comply with the proposed new Annex I regulations and Annex VI sulphur limits.

Warships, navel auxiliary or ships owned and operated by a State on non-commercial service along with search and rescue vessels will be exempt from the ban.³ In addition, it is not intended that lubricating oils would be covered by the ban, nor would cleaning or flushing of tanks and pipelines which had previously contained heavy fuel oils be required. Furthermore, any fuel transported in containers for resupply of bases on Antarctica will not be covered.

II. Impacts of the Ban

A. Impact on the Tourism Industry

It has been suggested in the media that cruise lines are abandoning the Antarctic directly as a result of the proposed ban, and certainly the proposed ban has recently drawn fire from some members of the Antarctic cruise industry, who have asserted that it “will effectively prohibit the sailing of most passenger vessels in the Antarctic.”⁴ Another news story claimed that “[c]ruise lines are preparing to abandon the Antarctic, as a result of stringent proposed rules that would compel them to use greener fuels.”⁵ However, the recent downturn in visitors to the Antarctic is a response to the current global economic climate and recent increases in the price of fuel have not prevented cruise lines from adding a surcharge to the costs of each passenger.⁶

The proposed ban does not expand the definition of heavy fuel oil from the original request of the Antarctic Treaty Parties. The original request from the Antarctic Treaty Parties referred to the MARPOL definition of heavy grade oils, that is “all fuels of higher number than Intermediate Fuel Oil 180 (IFO-180).”⁷ However, the definition of heavy fuel oil does include some IFO-180 fuels, which have a density at 15°C higher than 900 kg/m³.⁸ All Antarctic Treaty Parties have ratified the MARPOL Convention and are party to the definition of heavy grade oils and all Antarctic Treaty Parties adopted Decision 8 in 2005. The current language of the ban reflects the intent of the request, which was to ban fuels defined as Heavy Grade Oil under MARPOL regulations.⁹

B. Other Economic Impacts

³ See Annex I for the complete draft text of the ban.

⁴ Crystal Cruises. “Antarctica’s Luxurious ‘Last Call’ with Crystal Cruises.” PR Newswire. <<http://news.prnewswire.com/DisplayReleaseContent.aspx?ACCT=104&STORY=/www/story/05-21-2009/0005031020&EDATE=>>

⁵ Shearing, Caroline. “Green Fuel Costs Threaten Antarctic Cruises.” Telegraph (UK). <<http://www.telegraph.co.uk/travel/cruises/5328683/Green-fuel-costs-threaten-Antarctic-cruises.html>>

⁶ Hannafin, Matt. “Welcome to \$100 Oil: Cruise Industry Ups Prices to Defray Fuel Costs. Frommer’s. <<http://www.frommers.com/articles/4831.html>>

⁷ XXVIII Antarctic Treaty Consultative Meeting. “Decision 8 (2005) Use of Heavy Fuel Oil (HFO) in Antarctica.” Final Report of the 28th Consultative Meeting.

⁸ The regulation lists several technical specifications that will qualify a fuel as a Heavy Grade Oil. Some IFO-180 meets the specifications as a crude oil that has a density at 15°C higher than 900 kg/m³, but some IFO-180 have a lower density and these will still be allowed to be used once the ban is in place.

⁹ It should also be considered that IFO is a residual fuel oil that has been cut with a lighter oil such as marine gas oil or diesel, and in the event of a spill of IFO the lighter oils will evaporate or rapidly disperse leaving the heavier oils and a spill that has essentially the same properties as a heavy fuel oil spill.

The cruise industry has asserted that the ban will have not only a negative impact on their business, but on port cities where tourists embark or stop on their journeys as well. Many port cities in Argentina, Chile and the Falkland Islands have numerous businesses supported by tourism, and obtain other port fees from visiting cruise ships. Though tourism has clearly benefited some cities and towns, it is unclear whether Antarctic tourism is more than a minor component of the industry. For example, it has been suggested that many cruise ships only stay for a short while in port, most tourists do not stay more than one night before embarking and often go directly from the airport to the ship, few take local excursions unless waiting to board a vessel, and most produce used on vessels is imported from further afield. In 2001-2002, two-thirds of port revenues in Ushuaia came from sources other than Antarctic cruises.¹⁰

Furthermore, not all ships will be affected by the ban, and many will still operate using the fuels that they use currently or will change to alternative fuels, lighter grades of intermediate fuel oil or distillate fuels, that are already available. There is a downturn in visitors to the Antarctic, which is due to the global economic climate and is not a response to the future ban on the use and carriage of heavy fuel oils.

A further reason for the ban is the predicted damage and cost of a spill of heavy fuel oil in the Antarctic. The *Exxon Valdez* oil spill resulted in an estimated \$19 million dollar loss to the tourism industry and \$286.8 million in losses to local fishermen,¹¹ in addition to the costs of clean up. Although the oil spill from the tanker *Exxon Valdez* is not directly comparable to a spill from a ship operating in Antarctic waters, there is clearly a high price to pay for oil spills, which would no doubt be exacerbated by the remoteness, inaccessibility and dangerous weather that characterize the region and which would significantly hinder clean-up operations.

C. Resupply of Antarctic Research Bases

Concerns have been raised about resupplying bases in Antarctica, however, it is believed that most of the oil used at bases for on-shore operations would not qualify as HFO – generally the Antarctic is too cold for heavy fuel oils to be used. In addition, the regulation covers only fuel transported in ship tanks, so if necessary oil transported in drums or other containers will still be possible.

III. ASOC Position

- ASOC calls on IMO parties to approve the proposed amendment to MARPOL Annex I which will introduce a new chapter and eliminate the use and carriage of heavy fuel oils on ships operating in Antarctic waters at the Marine Environment Protection Committee (13 – 17 July) and adopt the revision to MARPOL Annex I at the IMO Assembly meeting later in the year.

ASOC believes that the concerns raised by some segments of the cruise industry do not justify halting or delaying the implementation of the ban. The decision to ban the use and carriage of heavy fuel oil was taken by the Antarctic Treaty Parties and by IMO's Marine Environment Protection Committee some years ago, and the task of the sub-committee on Bulk Liquids and Gases which met in March, was to formulate the necessary text to be approved and adopted as an amendment to the MARPOL Convention.

¹⁰ Snyder, John and Stonehouse, Bernard. 2007. *Prospects for Polar Tourism*. Oxfordshire: CABI, 132.

¹¹ Lessons Not Learned. 20 Years after the Exxon Valdez Disaster Little Has Changed in How We Respond to Oil Spills in the Arctic. WWF, 2009.

Global restrictions on sulphur emissions from ships will mean that the use of heavy fuel oils will be effectively curtailed in 2018, so the Antarctic ban will merely bring forward the date by a few years for vessels operating in the IMO's Antarctic special area.

Discussion of technical concerns and elements of the ban has been underway since 2006 based on the consensus request of the ATCPs. It is surprising that objections are now being raised at this late stage. No ATCPs have raised objections to the ban.

The criticisms that the IMO ban does not accurately reflect the request from the ATCM because it covers the "use and carriage" are unfounded. The ATCM request specifically asks IMO to take the potential for fuel release and oil spills into account when developing restrictions for the use of HFO, and the inclusion of carriage is thus reasonable.

ASOC submits that this ban will impact only a small segment of the Antarctic cruise industry, yet will provide immeasurable and invaluable protection for this pristine and fragile region.

Annex I. Text of proposed heavy fuel oil ban.

Draft Amendments to MARPOL Annex 1

Addition of new chapter 9

Chapter 9 – Special requirements for the use or carriage of oils in the Antarctic area

Regulation 43

Special requirements for the use or carriage of oils in the Antarctic area

1. With the exception of vessels engaged in securing the safety of ships or in a search and rescue operation, the carriage in bulk as cargo or carriage and use as fuel of the following:

- .1 crude oils having a density at 15°C higher than 900 kg/m³;
 - .2 oils, other than crude oils, having a density at 15°C higher than 900 kg/m³ or a kinematic viscosity at 50°C higher than 180 mm²/s; or
 - .3 bitumen, tar and their emulsions,
- shall be prohibited in the Antarctic area.

2 When prior operations have included the carriage or use of oils listed in paragraphs 1.1 to 1.3 of this regulation, the cleaning or flushing of tanks or pipelines shall not be required.