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CONSIDERATION OF A DRAFT INTERNATIONAL CONVENTION
FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Categorization of Oils having regard to
their polluting characteristics

Submitted by the delegations of Denmark, the Federal
Republic of Germany, the Netherlands, Norway and the
United Kingdom

Attached hereto is a note submitted jointly by the delegations of Denmark, the Federal Republic of Germany, the Netherlands, Norway and the United Kingdom on categorization of oils having regard to their polluting characteristics.

The delegations of Denmark, the Federal Republic of Germany, the Netherlands, Norway and the United Kingdom consider that this subject is of major importance, and that the presentation of the subject given at the end of the Preparatory Conference on Marine Pollution requires further development (page 92 of paper PCMP/8/3 refers). This is considered important because of the necessity to have a practicable and enforceable Convention at the end of the Conference this year, based on the fundamental characteristics of possible pollutants.

"PERSISTENT" OILS

All existing agreements and even the 1969 Amendments follow the Convention of 1954, which places restrictions on the discharge of crude oils, fuel oils, heavy diesel oils and lubricating oils. Although the term "persistent" is not used or defined in the Convention, the oils mentioned, when released to the sea, form coherent masses which persist and can travel for some distance under the action of wind and current. The resultant pollution includes sea surface, coastline and sea-bed contamination. It is therefore, reasonable to describe these black oils and lubricating oils as persistent, and it is logical to consider how pollution from these substances can be prevented by following the lines of development from the original 1954 Convention, and the 1962 and 1969 Amendments, as has been done in Regulation 9 of Annex I of PCMP/8/3.

"NON-PERSISTENT" OILS

Refined petroleum products, loosely termed white oils, are much more volatile and dispersible, and even in the worst cases do not persist on the surface of the sea for more than a very limited period. Because of this, any pollution hazards should be considered essentially on their toxicity in the body of the water. It is considered, therefore, that these oils present a different hazard to the environment, more akin to certain chemicals than to persistent oils. Evidence was presented to the Preparatory Conference in paper PCMP/4/33 regarding the short-lived surface persistence and the rapid vaporisation and dispersion of white oils in tests covering discharges of gas oil and gasoline at rates and concentrations which would never be reached in operational practice. In these tests, heavy gas oil, the least volatile and most surface-polluting oil in this category, was discharged at a rate of 50 cubic metres per mile. 2½ hours after the discharge when measurement ceased, the state had been reached where there were only trace indications on the surface, and only a small quantity (between 2% and 12% of the original discharge) remained in the sea at a concentration below 0.5 parts per million in the sub-surface layers. After a similar test using gasoline discharged at a rate of 30 cubic metres per mile, there were no discernible traces either on

the surface or in the water column 1 hour after the discharge. These results indicate that the residues remaining after a short period from discharges of non-persistent oils are very small, and that they are more akin to substances covered by category C of Annex II of the draft Convention.

SEPARATE TREATMENT FOR "PERSISTENT" AND "NON-PERSISTENT" OILS

It also appears that many of the proposed methods of dealing with oil retention as set out in Regulation 9 of Annex I of PCMP/8/3 are not appropriate to this second category, since product quality considerations make it inadvisable to mix residues with subsequent cargoes.

The delegations of Denmark, the Federal Republic of Germany, the Netherlands, Norway and the United Kingdom consider from the above that the proper course to adopt is for different treatments to be accorded to persistent and non-persistent oils with regard to discharges of these substances from ships. It is, therefore, proposed that oils should be grouped into 2 categories. Category I should cover the persistent oils, for example, crude oil, residual fuel oil, heavy diesel oil, lubricating oil and any other oil which is shown to have an equivalent pollution potential and characteristic, and should in general cover all oils not included in Category II. Category II should cover all the non-persistent oils, and should comprise those oils which consist only of distillate fractions of which more than 50% by volume distils at 340°C when tested by ASTM 86/64.

These proposals entail modifications in the treatment required for such oils under Regulation 9 of Annex I of the draft Convention, to bring them, more into line with Annex II substances. A redraft of this Regulation prepared by the United Kingdom is attached for consideration by the Conference. Whilst this is agreed in principle by the other delegations in whose name this paper is submitted, the United Kingdom acknowledges that some of those delegations may wish to propose amendments of detail. A redraft of the definition of oil is also attached. The above delegations recognise that the Conference may in considering this definition, wish to re-examine the assignment of specific types of oil to Categories I or II.

REGULATION 9

Control of discharge of Oil

1. Subject to the provisions of Regulation 10 of this Annex, any discharge into the sea of oil of Category I (persistent oil) or mixtures containing such oils from ships to which this Annex applies shall be prohibited except when all the following conditions are satisfied:

(a) For an oil tanker

- (i) The tanker is proceeding en route;
- (ii) The tanker is more than [50] nautical miles from the nearest land;
- (iii) The tanker is not within any of the areas defined in Regulation 1(10) of this Annex;
- (iv) The instantaneous rate of discharge of oil content does not exceed [60] litres per nautical mile;
- (v) The total quantity of oil discharged into the sea shall not exceed
 - (A) for existing tankers, $[\frac{1}{15000}]$ of the total quantity,
 - (B) for new tankers, $[\frac{1}{15000}]$ part of the total quantity up to a maximum of [6] cubic metres, and thereafter [6] cubic metres or $[\frac{1}{30000}]$ of the total quantity, whichever is the greater, of the cargo of which the residue forms a part;
- (vi) The tanker has in operation a slop tank arrangement required by Regulation 15 of this Annex;
- (vii) The tanker has in operation an oil discharge monitoring and control system required by Regulation 15 of this Annex.

The discharge of oil or oil mixture, other than clean ballast equivalent, from machinery space bilges, excluding cargo pumproom bilges, shall be governed by sub-paragraph (b) of this paragraph;

(b) For a ship other than an oil tanker

- (i) The ship is proceeding en route;
- (ii) The oil content of the discharge is less than [100] parts of oil per 1 million parts of effluent;
- (iii) The instantaneous rate of discharge of oil content does not exceed [60] litres per nautical mile;
- (iv) The discharge is made as far as practicable from land, but in no case less than [10] nautical miles from the nearest land;

- (v) The ship, if of [] tons gross tonnage or above is not within any of the areas defined in Regulation 1(10) of this Annex.
- (vi) The ship has in operation an oil discharge monitoring and control system or oily water separating equipment required by Regulation 16 of this Annex.

2. Subject to the provisions of Regulation 10 of this Annex, any discharge into the sea of oils of Category II (non-persistent oils) or mixtures containing such oils from ships to which this Annex applies shall be prohibited except when all the following conditions are satisfied:

- (a) On completion of cargo discharge, cargo tanks and pipelines are stripped and the strippings discharged ashore to the maximum extent practicable.
- (b) Cargo pipelines and pumps are not flushed direct to the sea, but are flushed back to an appropriate tank.
- (c) The discharge to the sea of tank washings and line flushings shall commence only when there is at least [$\frac{1}{100}$] of the tank volume of water in the mixture in the tank, and the oil content is not more than [$\frac{1}{10}$] of the volume of the mixture.
- (d) Any discharge to the sea shall be at the minimum rate practicable, and when the ship is proceeding en route at a speed of at least [4] knots.
- (e) Such discharge shall be made only when the ship is more than [10] nautical miles from the nearest land and in a depth of water not less than [25] metres.

Paragraphs 2, 3, 4 and 5 should be renumbered 3, 4, 5 and 6 respectively.

PROPOSAL FOR DEFINITION OF "OIL"

Annex I, Regulation 1(i)

Oil means petroleum in any form including crude oil, residual fuel oil, sludge, oil refuse and refined products (other than petrochemicals which are subject to the provisions of Annex II of the present Convention). For the purposes of the Regulations of this Annex, oil is divided into the following two categories:

Category I (Persistent). All oils other than those of Category II. Without limiting the generality of the foregoing, oils in this category include the substances listed under Category I in Appendix I to this Annex.

Category II (Non-Persistent). Oils which consist wholly of distillate fractions and of which more than 50% by volume distils at 340°C when tested by ASTM 86/64. Without limiting the generality of the foregoing, oils in this category include the substances listed under Category II in Appendix I to this Annex.
