ANNEX 3

INCINERATION AT SEA

Resolution adopted on 12 October 1978

THE THIRD CONSULTATIVE MEETING,

RECALLING Article I of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, which provides that Contracting Parties shall individually and collectively promote the effective control of all sources of pollution of the marine environment,

HAVING NOTED the use of incineration at sea as a means of disposal of wastes containing highly toxic substances and the consequent risks of marine and atmospheric pollution which may result from this process,

DESIRING to prevent such pollution and to minimize the risk of hazards to other vessels or interference with other legitimate uses of the sea which could arise from incineration operations at sea,

RECOGNIZING present methods of incineration at sea as being an interim method of disposal of wastes pending the development of environmentally better solutions, considering at all times the best available technology,

AFFIRMING that the intention of the adoption of mandatory provisions for the control of incineration at sea is not to increase the amounts and kinds of wastes or other matter incinerated at sea for which there are available practical alternative land-based methods of treatment, disposal or elimination,

REAFFIRMING that, in accordance with Article IV(3) of the Convention, Contracting Parties can apply additional regulations for incineration at sea on a national basis,

NOTING that Article VIII of the Convention encourages Contracting Parties, within the framework of regional conventions, to develop further agreements reflecting the conditions of the geographical area concerned,

RECALLING the decision of the Second Consultative Meeting that provisions for the control of incineration at sea should be implemented by Contracting Parties on a mandatory basis in the form of a legal instrument adopted within the framework of the Convention (LDC II/11, Annex II),

HAVING CONSIDERED the proposed amendments to the Annexes of the Convention for the control of incineration at sea contained in the Report of the Ad Hoc Group of Legal Experts on Dumping,

ADOPTS the following amendments to the Annexes to the Convention in accordance with Articles XIV(4)(a) and XV(2) thereof:

(a) addition of a paragraph 10 to Annex I;

(b) addition of a paragraph E to Annex II; and

(c) addition of an Addendum to Annex I, containing Regulations for the Control of Incineration of Wastes and Other Matter at Sea,

the texts of which are set out in Attachment to this Resolution,

ENTRUSTS the Inter-Governmental Maritime Consultative Organization with the task of ensuring, in collaboration with the Governments of France, Spain, the Union of Soviet Socialist Republics and the United Kingdom, that the texts of the above Amendments are drawn up by 1 December 1978 in all official languages of the Convention with the linguistic consistency in each text, which would then become the authentic text of the Annexes to the Convention in the English, French, Russian and Spanish languages,

RESOLVES that for the purposes of Articles XIV(4)(a) and XV(2) of the Convention, 1 December 1978 shall be treated as the date of the adoption of the amendments,

REQUESTS the Secretary-General of the Organization to inform Contracting Parties of the above-mentioned amendments,

REQUESTS the Ad Hoc Group on Incineration at Sea to prepare draft Technical Guidelines for the Control of Incineration of Wastes and Other Matter at Sea with a view to adoption by the Fourth Consultative Meeting,

INVITES Contracting Parties to implement, as an interim measure, the existing Technical Guidelines (LDC II/11, Annex II, with amendments (IAS/9, Annex IV)) and the notification procedure set out in Annex 2 to LDC III/12.

Attachment

AMENDMENTS TO ANNEXES TO THE CONVENTION
ON THE PREVENTION OF MARINE POLLUTION
BY DUMPING OF WASTES AND OTHER MATTER
CONCERNING INCINERATION AT SEA

The following paragraph shall be added to Annex I:

10. Paragraphs 1 and 5 of this Annex do not apply to the disposal of wastes or other matter referred to in these paragraphs by means of incineration at sea. Incineration of such wastes or other matter at sea requires a prior special permit. In the issue of special permits for incineration the Contracting Parties shall apply the Regulations for the Control of Incineration of Wastes and Other Matter at Sea set forth in the Addendum to this Annex (which shall constitute an integral part of this Annex) and take full account of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea adopted by the Contracting Parties in consultation.

The following paragraph shall be added to Annex II;

E. In the issue of special permits for the incineration of substances and materials listed in this Annex, the Contracting Parties shall apply the Regulations for the Control of Incineration of Wastes and Other Matter at Sea set forth in the Addendum to Annex I and take full account of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea adopted by the Contracting Parties in consultation, to the extent specified in these Regulations and Guidelines.

ADDENDUM

REGULATIONS FOR THE CONTROL OF INCINERATION OF WASTES AND OTHER MATTER AT SEA

PART I

REGULATION 1

Definitions

For the purposes of this Addendum:

(1) "Marine incineration facility" means a vessel, platform, or other man-made structure operating for the purpose of incineration at sea.

(2) "Incineration at sea" means the deliberate combustion of wastes or other matter on marine incineration facilities for the purpose of their thermal destruction. Activities incidental to the normal operation of vessels, platforms or other man-made structures are excluded from the scope of this definition.

REGULATION 2

Application

(1) Part II of these Regulations shall apply to the following wastes or other matter:

(a) those referred to in paragraph 1 of Annex I;

(b) pesticides and their by-products not covered in Annex I.

(2) Contracting Parties shall first consider the practical availability of alternative land-based methods of treatment, disposal or elimination, or of treatment to render the wastes or other matter less harmful, before issuing a permit for incineration at sea in accordance with these Regulations. Incineration at sea shall in no way be interpreted as discouraging progress towards environmentally better solutions including the development of new techniques.

(3) Incineration at sea of wastes or other matter referred to in paragraph 10 of Annex I and paragraph E of Annex II, other than those referred to in paragraph (1) of this Regulation, shall be controlled to the satisfaction of the Contracting Party issuing the special permit.

(4) Incineration at sea of wastes or other matter not referred to in paragraphs (1) and (3) of this Regulation shall be subject to a general permit.

(5) In the issue of permits referred to in paragraphs (3) and (4) of this Regulation, the Contracting Parties shall take full account of all applicable provisions of these Regulations and the Technical Guidelines on the Control of Incineration of Waste and Other Matter at Sea for the waste in question.

PART II

REGULATION 3

Approval and Surveys of the Incineration System

(1) The incineration system for every proposed marine incineration facility shall be subject to the surveys specified below. In accordance with Article VII(1) of the Convention, the Contracting Party which proposes to issue an incineration permit shall ensure that the surveys of the marine incineration facility to be used have been completed and the incineration system complies with the provisions of these Regulations. If the initial survey is carried out under the direction of a Contracting Party a special permit, which specifies the testing requirements, shall be issued by the Party. The results of each survey shall be recorded in a survey report.

(a) An initial survey shall be carried out in order to ensure that during the incineration of waste and other matter combustion and destruction efficiencies are in excess of 99.9 per cent.

(b) As a part of the initial survey the State under whose direction the survey is being carried out shall:

(i) approve the siting, type and manner of use of temperature measuring devices;

(ii) approve the gas sampling system including probe locations, analytical devices, and the manner of recording;

(iii) ensure that approved devices have been installed to automatically shut off the feed of waste to the incinerator if the temperature drops below approved minimum temperatures;

(iv) ensure that there are no means of disposing of wastes or other matter from the marine incineration facility except by means of the incinerator during normal operations;

(v) approve the devices by which feed rates of waste and fuel are controlled and recorded;

(vi) confirm the performance of the incineration system by testing under intensive stack monitoring, including the measurements of O_2, CO, CO_2, halogenated organic content, and total hydrocarbon content using wastes typical of those expected to be incinerated.

(c) The incineration system shall be surveyed at least every two years to ensure that the incinerator continues to comply with these Regulations. The scope of the biennial survey shall be based upon an evaluation of operating data and maintenance records for the previous two years.

(2) Following the satisfactory completion of a survey, a form of approval shall be issued by a Contracting Party if the incineration system is found to be in compliance with these Regulations. A copy of the survey report shall be attached to the form of approval. A form of approval issued by a Contracting Party shall be recognized by other Contracting Parties unless there are clear grounds for believing that the incineration system is not in compliance with these Regulations. A copy of each form of approval and survey report shall be submitted to the Organization.

(3) After any survey has been completed, no significant changes which could affect the performance of the incineration system shall be made without approval of the Contracting Party which has issued the form of approval.

REGULATION 4

Wastes Requiring Special Studies

(1) Where a Contracting Party has doubts as to the thermal destructibility of the wastes or other matter proposed for incineration, pilot scale tests shall be undertaken.

(2) Where a Contracting Party proposes to permit incineration of wastes or other matter over which doubts as to the efficiency of combustion exist, the incineration system shall be subject to the same intensive stack monitoring as required for the initial incineration system survey. Consideration shall be given to the sampling of particulates, taking into account the solid content of the wastes.

(3) The minimum approved flame temperature shall be that specified in Regulation 5 unless the results of tests on the marine incineration facility demonstrate that the required combustion and destruction efficiency can be achieved at a lower temperature.

(4) The results of special studies referred to in paragraphs (1), (2) and (3) of this Regulation shall be recorded and attached to the survey report. A copy shall be sent to the Organization.

REGULATION 5

Operational Requirements

(1) The operation of the incineration system shall be controlled so as to ensure that the incineration of wastes or other matter does not take place at a flame temperature less than 1250 degrees centigrade, except as provided for in Regulation 4.

(2) The combustion efficiency shall be at least 99.95 ± 0.05% based on:

$$\text{Combustion efficiency} = \frac{C_{CO_2} - C_{CO}}{C_{CO_2}} \times 100$$

where C_{CO_2} = concentration of carbon dioxide in the combustion gases
C_{CO} = concentration of carbon monoxide in the combustion gases.

(3) There shall be no black smoke nor flame extension above the plane of the stack.

(4) The marine incineration facility shall reply promptly to radio calls at all times during the incineration.

REGULATION 6

Recording Devices and Records

(1) Marine incineration facilities shall utilize recording devices or methods as approved under Regulation 3. As a minimum, the following data shall be recorded during each incineration operation and retained for inspection by the Contracting Party who has issued the permit:

(a) continuous temperature measurements by approved temperature measuring devices;

(b) date and time during incineration and record of waste being incinerated;

(c) vessel position by appropriate navigational means;

(d) feed rates of waste and fuel - for liquid wastes and fuel the flow rate shall be continuously recorded; the latter requirement does not apply to vessels operating on or before 1 January 1979;

(e) CO and CO_2 concentration in combustion gases;

(f) vessel's course and speed.

(2) Approval forms issued, copies of survey reports prepared in accordance with Regulation 3 and copies of incineration permits issued for the wastes or other matter to be incinerated on the facility by a Contracting Party shall be kept at the marine incineration facility.

REGULATION 7

Control over the Nature of Wastes Incinerated

A permit application for the incineration of wastes or other matter at sea shall include information on the characteristics of wastes or other matter sufficient to comply with the requirements of Regulation 9.

REGULATION 8

Incineration Sites

(1) Provisions to be considered in establishing criteria governing the selection of incineration sites shall include, in addition to those listed in Annex III to the Convention, the following:

(a) the atmospheric dispersal characteristics of the area - including wind speed and direction, atmospheric stability, frequency of inversions and fog, precipitation types and amounts, humidity - in order to determine the potential impact on the surrounding environment of pollutants released from the marine incineration facility, giving particular attention to the possibility of atmospheric transport of pollutants to coastal areas;

(b) oceanic dispersal characteristics of the area in order to evaluate the potential impact of plume interaction with the water surface;

(c) availability of navigational aids.

(2) The coordinates of permanently designated incineration zones shall be widely disseminated and communicated to the Organization.

REGULATION 9

Notification

Contracting Parties shall comply with notification procedures adopted by the Parties in consultation.

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