



FOURTH CONSULTATIVE MEETING OF
CONTRACTING PARTIES TO THE
CONVENTION ON THE PREVENTION
OF MARINE POLLUTION BY DUMPING
OF WASTES AND OTHER MATTER
22-26 October 1979

IMCO

Agenda item 12

REPORT OF THE FOURTH CONSULTATIVE MEETING

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1 INTRODUCTION

Opening of the Meeting

1.1 The Fourth Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, convened in accordance with Article XIV(3)(a) of the Convention, was held at IMCO Headquarters, London, from 22 to 26 October 1979.

1.2 The Meeting was attended by delegations from the following Contracting Parties to the Convention:

CANADA	PANAMA
CHILE	POLAND
DENMARK	PORTUGAL
FINLAND	SOUTH AFRICA
FRANCE	SWEDEN
GERMANY, FEDERAL REPUBLIC OF	SWITZERLAND
ICELAND	USSR
MEXICO	UNITED KINGDOM
NETHERLANDS	UNITED STATES

by observers from the following States, not being Contracting Parties to the Convention:

GREECE	JAPAN
IRELAND	THAILAND
ITALY	

by observers from the following United Nations organizations:

UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)
INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

and by observers from the following inter-governmental and non-governmental organizations:

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)
ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT/NUCLEAR
ENERGY AGENCY (OECD/NEA)
OSLO COMMISSION
PARIS COMMISSION
FRIENDS OF THE EARTH INTERNATIONAL (FOEI)

1.3 At the opening of the Meeting, Mr. H.R. Bardarson (Iceland) was unanimously re-elected Chairman, Dr. F.S. Terziyev (USSR) was unanimously re-elected First Vice-Chairman, and Mr. Pablo Limón (Mexico) was unanimously elected Second Vice-Chairman.

1.4 When opening the Meeting, the Secretary-General of IMCO summarized the principal activities in the subsidiary bodies of the Consultative Meeting as well as in other international organizations of interest to the meeting, which

had taken place during the intersessional period. He also drew attention to the decisions taken by the IMCO Council concerning the work programme of the Organization as well as documentation for meetings.

Adoption of the Agenda

1.5 The Agenda for the Meeting, as adopted is shown at Annex 1. This includes, under each item, a list of documents which were considered.

2 STATUS OF THE LONDON DUMPING CONVENTION

2.1 The Meeting took note of the Report of the Secretary-General on the current status of the London Dumping Convention and the progress being made in the acceptances of the 1978 Amendments thereto (LDC IV/2/Rev.1). The Meeting noted that as requested by the Third Consultative Meeting, the Secretary-General had written to Governments which had not yet accepted the Convention, inviting them to do so as soon as possible (Circular letter No.554 of 7 November 1978). Since that time four States (Argentina, Finland, Poland and Switzerland) had ratified the Convention. The Meeting welcomed these countries as Contracting Parties and requested the Secretary-General to continue to urge all countries which have not yet done so to accept the Convention as soon as possible.

2.2 The Meeting also welcomed verbal statements made by the observers from Greece, Ireland, Italy and Japan which indicated that action was being taken by their Governments towards ratification or acceptance of the Convention at an early date. The Federal Republic of Germany delegation also stated its intention to accept the 1978 amendments to the Annexes to the Convention concerning incineration of wastes at sea as soon as possible.

3 REPORT OF THE AD HOC SCIENTIFIC GROUP ON DUMPING

3.1 The Chairman of the Ad Hoc Scientific Group on Dumping, Mr. T.A. Wastler (United States) introduced the report of the Group (LDC IV/3) which had met at IMCO Headquarters from 19-23 March 1979. The Meeting approved the report in general and took the following action in relation to the questions considered under this Agenda item.

General guidelines for classification of substances to Annexes I and II to the Convention

3.2 The Meeting took note of the draft General Guidelines for Classification of Substances to Annexes I and II to the Convention which were prepared by the Ad Hoc Scientific Group. The Meeting agreed that, at this stage, these draft Guidelines should not be applied rigidly and that other criteria may be relevant in certain circumstances. The Meeting further agreed that these

Guidelines might need to be harmonized in the light of criteria which are currently being developed from a similar viewpoint by the Scientific Advisory Committee of the Oslo Commission (SACSA). The United States delegation proposed that all Contracting Parties should be invited to comment on the draft Guidelines set out in Annex 2 to this report.

Proposals for amendments of Annexes I and II to the Convention

3.3 The Meeting considered proposals and recommendations made by the Ad Hoc Scientific Group concerning amendments to Annexes I and II to the Convention in respect of:

- .1 organic pesticides or their by-products;
- .2 crude oil and refined petroleum products;
- .3 lead and lead compounds;
- .4 oxygen consuming matter and similar substances; and
- .5 synthetic organic chemicals and their by-products.

3.4 After noting that the majority of the Ad Hoc Scientific Group had expressed concern on the possible effects of certain groups or classes of organic pesticides or their by-products on the marine environment and that the Group, in the light of this concern, recommended that this matter should be kept under continuing review, the Consultative Meeting in supporting this view, agreed that this item should be included in the agenda of the next meeting of the Ad Hoc Group for further consideration following the procedures laid down in the resolution referred to in paragraph 3.18 and set out in Annex 4 hereto. It was emphasized that comments and proposals on this matter should be submitted by Contracting Parties in good time.

3.5 With reference to the proposed wording "crude oil and refined petroleum products" recommended by the majority of the Scientific Group to replace "Crude oil, fuel oil, heavy diesel oil" in paragraph 5 of Annex I, the Meeting, after considering several additional proposals brought forward by participants, agreed that the following wording should be preferred to the existing paragraph 5 of Annex I: "crude oil, refined petroleum products and residues of crude oil and of distilled petroleum products and any mixtures containing any of these, taken on board for the purpose of dumping".

3.6 With reference to the proposed transfer of "lead and lead compounds" from Annex II to Annex I, several delegations agreed with views expressed by the Scientific Group that the hazards of lead and lead compounds have to be regarded at least as seriously as those of mercury, cadmium and their compounds.

Several delegations pointed out that discussions were going on within their national institutions and that the outcome of these considerations should be awaited before taking any further action. The United Kingdom delegation emphasized that lead did not meet the criteria to justify its inclusion in Annex I, nor did it at present constitute a serious problem in view of the relatively small quantity of lead dumped at sea. Other delegations expressed their concern on the effects of lead on the marine environment and to human health and accordingly emphasized that immediate action should be taken by the Meeting. After lengthy discussion it was agreed that the Ad Hoc Scientific Group at its next meeting should continue its review in the light of additional scientific material which several Contracting Parties undertook to submit for consideration.

3.7 With regard to the proposed addition of a new paragraph F in Annex II to the Convention referring to problems experienced with large amounts of oxygen consuming and biodegradable organic matter, the Meeting considered the text of such an addition recommended by the Scientific Group as follows: "Substances which, though of a non-toxic nature, e.g. oxygen consuming matter, may become harmful due to the quantities in which they are dumped". The Meeting agreed that this addition might assist Contracting Parties in controlling and preventing marine pollution caused by the dumping of large quantities of pulp mill wastes, sewage sludges and of certain mining tailings.

3.8 With regard to the proposed addition of synthetic organic chemicals and their by-products to Annex II of the Convention, the Meeting recognized the problems that might be caused by the disposal at sea of synthetic organic chemicals which do not occur naturally in the marine environment. The Meeting agreed with the view of the Ad Hoc Scientific Group that these problems could be solved by the strict application of the criteria laid down in Annex III to the Convention.

3.9 The Meeting agreed in principle to the proposed amendments referred to in paragraphs 3.5 and 3.7 above. Several delegations indicated their readiness to adopt these proposed amendments in accordance with Article XIV(4)(a) and XV(2) of the Convention. The delegation of the Federal Republic of Germany stated, however, that whilst that delegation had no objection to the proposed amendments, it should reserve its position for the time being on the formal adoption of the amendments from the administrative point of view.

3.10 After discussion the Meeting agreed that these proposed amendments should be circulated by the Secretary-General to Contracting Parties, with a view to consideration and formal adoption at the Fifth Consultative Meeting and to the implementation on a voluntary basis in the meantime. The text of the proposed amendment is shown at Annex 3.

Proposals for the amendment of Annex III to the Convention

3.11 The Meeting agreed that the problems connected with "materials insufficiently described in terms of their composition and properties to permit evaluation of their impact on the marine environment" should be solved by developing additional criteria in Annex III. Accordingly the Ad Hoc Scientific Group was requested to consider this matter at its next session.

3.12 The Meeting confirmed the view of the Ad Hoc Scientific Group which emphasized the need to distribute scientific information material in sufficient time for the next meeting of the Group.

Consideration of procedures regarding the proposed amendments of Annexes to the Convention

3.13 With reference to the proposals for amendment of Annexes I and II to the Convention mentioned in paragraph 3.9 above, the Meeting also took note of comments and proposals submitted jointly by Belgium, France, the Federal Republic of Germany and Portugal (LDC IV/3/3). In particular, those delegations proposed that a list comprising hazardous substances or groups of substances for inclusion in the Annexes should be prepared so that they could be examined closely, taking account of the guidelines mentioned in 3.2 above.

3.14 Several delegations supported the view expressed above that such a "waiting list" should be prepared and continuously reviewed in the light of results of scientific work focused on the substances which had been included in the list.

3.15 Other delegations preferred the direct amendment of lists of substances contained in the Annexes to the Convention rather than "waiting lists" which could only be of a recommendatory character instead of presenting binding legal provisions. These delegations, with reference to the preamble of the London Dumping Convention, felt that "action might be taken without delay to control the pollution of the sea by dumping". They expressed concern that the preparation of a "waiting list" might not coincide with the intention of those who originally drafted the London Dumping Convention. They further noted that this should be a living Convention and that the lists contained in the Annexes, as tools of preventing pollution by dumping should be reviewed and amended continuously in the light of new scientific information.

3.16 In this connexion, the Meeting also considered a proposal submitted by Canada (LDC IV/WP.1) concerning the terms of reference of the Ad Hoc Scientific Group. The Meeting welcomed the Canadian submission and agreed that, in view of the need for continuous work by this Group, such terms of reference would be beneficial.

3.17 Several delegations commented on the draft terms of reference, which included suggestions to incorporate therein certain concepts advocated in LDC IV/3/3 related to the scientific consideration of proposed amendments by the Ad Hoc Scientific Group. After discussion, the Meeting requested the Canadian delegation to consult other interested delegations and to prepare a revised draft of the terms of reference as well as the draft resolution adopting them.

3.18 Having considered the revised terms of reference prepared by the delegations of Canada and the Federal Republic of Germany (LDC IV/WP.3) the Meeting adopted the resolution set out at Annex 4 concerning Procedures for the Application of Scientific Advice in respect of the London Dumping Convention, which includes the agreed Terms of Reference of the Ad Hoc Scientific Group on Dumping.

3.19 In adopting the above resolution, the Meeting recognized the need for establishing more concrete procedures for the preparation, review and adoption of amendments to the Annexes to the Convention. In this regard the following suggestions were made:

- .1 The Ad Hoc Scientific Group will consider, from a scientific point of view, any proposal for amending the Annexes to the Convention;
- .2 the Ad Hoc Scientific Group will bring forward to a Consultative Meeting for consideration, any proposed amendment it regards as desirable from a scientific point of view;
- .3 if a Consultative Meeting agrees in principle with a proposal the Secretary-General will be requested to circulate this proposal to all Contracting Parties inviting them to implement the proposal on a voluntary basis and informing them that further consideration with a view to formal adoption will continue at a subsequent Consultative Meeting;
- .4 in general, formal adoption of proposed amendments brought forward by the Ad Hoc Scientific Group, if appropriate, will be scheduled at three-year intervals; and

- .5 in exceptional circumstances, a Consultative Meeting may consider the adoption of proposed amendments immediately after being informed of the proposal and its consequences if it regards such action as urgent.

3.20 The Meeting decided that each Contracting Party should submit comments on the above suggestions or any additional suggestion it may have thereon so that formal procedures may be adopted at the Fifth Consultative Meeting.

The review of the interim definition of "significant amounts" with regard to dumping substances listed in Section A of Annex II to the Convention

3.21 The Meeting noted the efforts made by the Scientific Group with a view to amending the interim definition of "significant amounts" which had been developed by the First Consultative Meeting. In view of the considerable time spent on this item without reaching any conclusion, the Chairman of the Ad Hoc Scientific Group expressed the view of the Group that the interim definition should continue to be used for the next few years, recognizing the general uneasiness of the Group with the interim definition.

3.22 Several delegations proposed that the interim definition in the light of its very arbitrary and inadequate character should continue to be reviewed by the Ad Hoc Scientific Group at its future meetings, taking into account comments, statements and proposals which will hopefully be submitted by Contracting Parties on that question. The Meeting decided that this item should be placed on the Provisional Agenda for the next meeting of the Ad Hoc Scientific Group with a view to its review and improvement if proposals by Contracting Parties were received at that time. Subject to the above, the Meeting agreed that the interim definition set out in LDC I/16, paragraph 39 and in LDC IV/3, paragraph 5.4 should continue to be used for the time being.

Criteria for the selection of non-industrial wastes for mandatory testing in connexion with the evaluation of "trace contaminants" and "rapidly rendered harmless"

3.23 With regard to the dumping of sewage sludge, the Meeting considered the criteria proposed by the Ad Hoc Scientific Group (LDC IV/3, Annex 3) together with comments made by the Working Group of the Oslo Scientific Committee (LDC IV/3/1). The Meeting agreed that the application of test procedures was unnecessary if chemical characterization and a knowledge of the receiving area allowed an assessment of the environmental impact. The Meeting confirmed that this should include information on the accumulation of Annex I substances in the sediments and organisms at the disposal site.

3.24 With regard to the dumping of dredged material the Scientific Group recommended that test procedures were not necessary if the authorities have good reason to believe that the disposal site environment is similar to that from which the material was dredged. The Meeting after slight modifications agreed on the criteria prepared by the Ad Hoc Scientific Group which in certain circumstances exclude the testing of these dredged materials in connexion with "trace contaminants". The Meeting requested the Secretariat to revise the "Interim Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I to the London Dumping Convention" presently set out in LDC III/12, Annex 6, incorporating the criteria agreed by the Meeting, as shown at Annex 5 hereto.

Notification of actually dumped wastes and monitoring activities

3.25 The Meeting took note of the draft format for the notification of wastes actually dumped which had been prepared by the Ad Hoc Scientific Group (LDC IV/3, Annex 4). Several delegations pointed out that the notification procedure with regard to actually dumped wastes would have to be defined in a way which would avoid duplication of work carried out under regional Conventions as well as the London Dumping Convention.

3.26 There were several other comments on the above proposed format brought to the attention of the Meeting. It was agreed that a small group of experts should meet in conjunction with the Meeting in order to prepare a revised format in the light of the comments above.

3.27 The Chairman of the Group, Mr. T.A. Wastler (United States) made a verbal report on the outcome of the meeting of the Group, inviting the Meeting to:

- .1 adopt the revised draft format for the notification of wastes actually disposed of at sea shown at LDC IV/WP.8;
- .2 endorse the view of the Group that the formats developed within regional conventions could be substituted for the above format by Contracting Parties to such regional conventions, as both types of reports provide all of the information necessary for the Secretariat to prepare reports in the light of the requirements of Article VI(1)(c) of the Convention;
- .3 take note of the view expressed by the Group that where necessary participants to the Consultative Meeting should draw to the attention of the agencies responsible for notifying the dumping of radioactive wastes the Interim Procedure adopted by the First Consultative Meeting (LDC I/16, Annex IV); and

- .4 note that it was the opinion of the majority of the Group that it was neither practical nor necessary to add information concerning "Net Weight" of radioactive wastes.

3.28 The Meeting adopted the revised format set out at Annex 6 hereto as proposed by the Ad Hoc Working Group and endorsed the views of the Ad Hoc Working Group as mentioned in paragraph 3.27.2, .3 and .4 above.

3.29 With regard to the form of report for the acquisition of data on monitoring of dumping sites proposed by the Ad Hoc Scientific Group (LDC/3, Annex 5), the Meeting adopted the format as shown at Annex 7 hereto.

3.30 The United States delegation drew the attention of the meeting to the IAEA Revised Definition and Recommendations in which B.1.4 and B.1.5 request that the notification of permits in accordance with Article VI(4) should include the results of an environmental assessment study described by the IAEA document. The Meeting agreed that this question should be considered under item 5 of the agenda.

Other matters

3.31 The Meeting noted the outcome of the considerations made by the Ad Hoc Group with reference to the questions on priority substances in wastes for treatment (LDC IV/3, section 8) in particular that:

- .1 regarding advanced waste treatment technology, the Group recommended that Contracting Parties submit information material to the Secretariat who would prepare the lists of documents for circulation to Contracting Parties; and
- .2 with reference to priority substances the Group at present could offer no guidance but that lists be prepared at future meetings in the light of material hopefully being submitted by Contracting Parties.

3.32 The Meeting noted further that the Group, regarding the protection of particularly sensitive sea areas (LDC IV/3, section 10), concluded:

- .1 it was beyond its terms to prepare an inventory of sensitive areas but that it may in future assist in the development of criteria for designating such areas; and
- .2 that GESAMP should be requested to update their report No.3, taking also into account ICES Co-operative Research Report No.76.

3.33 With reference to the construction and equipment of ships engaged in dumping (LDC IV/3, section 11), the Meeting agreed that the Secretariat should write to Contracting Parties which are known to dump large quantities of certain types of wastes, e.g. acids and alkalies, asking for information on the standards required for the safe handling during loading and carriage, as recommended by the Group.

4 REPORT OF THE AD HOC GROUP ON INCINERATION AT SEA

4.1 The Meeting considered and generally approved the report of the Ad Hoc Group on Incineration at Sea which met intersessionally from 19-22 February 1979 in accordance with a request made by the Third Consultative Meeting (LDC IV/4). In particular the Meeting agreed that future discussions on incineration at sea should take place in the Ad Hoc Scientific Group on Dumping.

4.2 The United States delegation introduced the draft procedures (LDC IV/4/1) it had prepared for the interpretation of the terms "trace contaminants" and "rapidly rendered harmless", taking account of views expressed by the Ad Hoc Group as well as comments submitted intersessionally to the United States by Canada, Denmark and the United Kingdom.

4.3 The United States delegation also introduced a paper (LDC IV/4/2) it had prepared to clarify some aspects of the application of the amendments to the Convention approved at the Third Consultative Meeting involving the Regulations on Incineration at Sea.

4.4 In relation to section 6 of the Report of the Ad Hoc Group on Incineration at Sea, the Meeting took note of the current activities of the IMCO Maritime Safety Committee and the Sub-Committee on Bulk Chemicals with regard to the safety requirements for ships carrying substances for the purpose of incinerating them at sea (LDC IV/4/3).

4.5 After a preliminary discussion on the above papers in which comments were made by several participants, the Meeting agreed to reconvene the Ad Hoc Group on Incineration at Sea during this meeting with a view to revision of the Technical Guidelines (LDC IV/4, Annex 2) and detailed consideration on LDC IV/4/1 and LDC IV/4/2.

4.6 The Chairman of the Ad Hoc Group on Incineration, Dr. M. Norton (United Kingdom) reported the conclusions of the Working Group meeting. The Group had been attended by delegations from Canada, Denmark, France, Federal Republic of Germany, the Netherlands, Sweden, the United Kingdom and the United States and by observers from Japan and the Oslo Commission.

4.7 The Group prepared a number of proposed amendments to the Draft Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea (LDC IV/4, Annex 2) as shown in LDC IV/WP.5. It was reported, that in the course of the discussion on the Technical Guidelines, it had been pointed out by some delegations that wastes could be exported for incineration from Contracting Parties to States which were not Contracting Parties to the Convention using a vessel not registered by a Contracting Party. In such circumstances incineration could take place without the Regulations on incineration at sea being applied.

4.8 The draft procedures for the implementation of paragraphs 8 and 9 of Annex I to the Convention for the purposes of incineration at sea (LDC IV/4/1) had been revised by the Group and were presented for consideration by the Consultative Meeting (LDC IV/WP.4). In this connexion the Meeting noted that some participants of the Group were of the opinion that the procedures were of a general nature and that more specific guidance could be required in the future, particularly in relation to the derivation of "permissible atmospheric concentrations". These delegations considered it important to develop air quality criteria as suggested in the procedures either individually or through a regional convention.

4.9 With regard to the document LDC IV/4/2, it was noted that the Group considered that the concern expressed in that document had been covered by the recommended amendments to the Technical Guidelines and by the revision of the draft procedures for the implementation of paragraphs 8 and 9 of Annex I to the Convention.

4.10 In discussing the recommendations of the Ad Hoc Group on Incineration at Sea, the delegation of Denmark expressed its view that the responsibility of a Contracting Party exporting a waste for incineration at sea should be clarified further in the Technical Guidelines. It was also necessary in this delegation's view to establish "maximum permissible air concentrations" with more precision than in the revised draft procedures. The Meeting agreed that these matters should be discussed by the Ad Hoc Scientific Group.

4.11 The delegation of the Federal Republic of Germany expressed its view that the Technical Guidelines and draft Procedures described above should be amalgamated and offered to prepare a draft for consideration at the next meeting of the Ad Hoc Scientific Group on Dumping.

4.12 Other delegations, while recognizing that amendments to the Technical Guidelines and draft procedures should be considered by the next meeting of the Ad Hoc Scientific Group, believed that the Consultative Meeting should adopt them on an interim basis. After discussion, the revised Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea shown at Annex 8 hereto were adopted on an interim basis. The Draft Procedures for the Implementation of Paragraphs 8 and 9 of Annex I to the Convention for the Purpose of Incineration at Sea, set out at Annex 9 hereto, should however be regarded as preliminary procedures and, as such, were adopted by the Consultative Meeting. The Meeting agreed that these Guidelines and Procedures should be considered intersessionally by the Ad Hoc Scientific Group and further reviewed by the Fifth Consultative Meeting. The United States delegation agreed to withdraw its proposal contained in LDC IV/4/2 because its concerns had been adequately addressed in the changes agreed to by the Meeting in connexion with the Technical Guidelines and the associated Procedures.

4.13 The Swedish delegation, reflecting the joint view of the Swedish and Danish delegations, (LDC IV/WP.9), proposed that the Consultative Meeting should consider the setting of a time limit during which incineration at sea would be phased out in favour of land-based facilities. The Danish delegation noted that these delegations feared that the adoption of a large set of rules on incineration at sea, thereby establishing incineration at sea as a disposal method which can be practised in full accordance with internationally accepted rules, could lead to an increase in the use of incineration at sea contrary to the intention of the Contracting Parties. The Swedish and Danish delegations therefore proposed that the Ad Hoc Scientific Group should consider the technical material necessary to enable the Consultative Meeting to take a decision on this matter. The French delegation, whilst agreeing that incineration at sea was an interim solution, considered that the development of land-based alternatives was necessary, making it difficult to discuss a time limit when incineration at sea can be terminated.

4.14 Other delegations shared the views of the French delegation and also considered the discussion of any phasing out period to be premature, particularly as the total quantity of wastes for disposal by incineration at sea was increasing the tightening in control of waste disposal on land.

4.15 The United States delegation pointed out that they could not accept proposals with regard to the time limits mentioned above. That delegation, referring to "present methods of incineration at sea as being an interim solution ...", as mentioned in the Resolution on incineration at sea, adopted

at the Third Consultative Meeting (LDC III/12, Annex 3), expressed the view that this provision was to encourage research to improve techniques for both land and sea incineration. Additionally, the United States delegation emphasized the need to implement the regulations, develop new technology and keep under review the progress of research on the destruction of toxic waste. This view was supported by the Canadian delegation which stressed the importance of considering all aspects of the environment in deciding the best disposal method for waste. The delegations of the Federal Republic of Germany and the United Kingdom supported this view.

4.16 The Meeting concluded that, although several delegations sympathized with the view that incineration at sea was an interim solution, it was not possible to set a time limit at present.

4.17 The Danish delegation noted with appreciation the intent of the Contracting Parties as expressed by a number of delegations, to consider present methods of incineration at sea as being an interim method of waste disposal and to reduce the application of this method. The Swedish delegation reserved their right to bring forward this matter for discussion at a future Consultative Meeting.

5 REVIEW OF COMMENTS AND OBSERVATIONS ON THE REVISED IAEA DEFINITION AND RECOMMENDATIONS ON DUMPING OF RADIOACTIVE SUBSTANCES

5.1 The Meeting had before it the report prepared by the Secretariat summarizing the activities in other organizations relating to dumping of radioactive wastes at sea, including:

- .1 A summary of guidelines prepared by the IAEA Advisory Group (Jamaica, 11-15 December 1978), (LDC IV/5, Annex 1);
- .2 A brief note on dispersion and mixing processes in the deep sea with special reference to the Eastern Atlantic, prepared by the ICES (LDC IV/5, Annex 2); and
- .3 A summary of the outcome of the OECD Workshop on monitoring the sea dumping of radioactive wastes (London, 16-17 July 1979) (LDC IV/5, Annex 3).

Activities in other organizations relating to radioactive waste dumping

5.2 In relation to LDC IV/5, Annex 1, the observer from IAEA reviewed further development made within that Agency in this field since the Jamaica meeting, including several meetings convened by IAEA and further actions towards improvements in the draft Guidelines referred to in LDC IV/5, Annex 1. This information is contained in a Statement reproduced in LDC IV/INF.7.

5.3 In relation to LDC IV/5, Annex 2, the observer from ICES pointed out that this note primarily related to monitoring programmes of marine pollution by dumping in general.

5.4 In relation to LDC IV/5, Annex 3, the observer from the OECD/NEA stated that this document should be seen as a specific contribution for the OECD/NEA forthcoming experts meeting on environmental research and monitoring related to sea dumping of radioactive wastes (12-14 November 1979) to which, it was hoped, IMCO as well as IAEA, would make a significant contribution. The statement made by the OECD/NEA observer is recorded in LDC IV/INF.6.

5.5 A number of delegations commended the IAEA for the "Criteria for Selection, Management and Surveillance of Dumping Sites" drawn up by the IAEA Advisory Group (Jamaica, December 1978). Other delegations noted that the Criteria were still in draft form and urged the IAEA to continue efforts for their finalization. In this connexion, some delegations stressed the importance of the assessment of potentially critical food chain transport mechanisms, the effect of such food chain transfers and key geochemical and physical oceanographic parameters necessary to make an assessment of the radiological impact of dumping operations on critical populations.

5.6 The Meeting requested the IAEA to make available, on an annual basis, a report on its intended work programme on radioactive dumping. The IAEA representative agreed that the IAEA would do so.

5.7 With regard to IAEA's invitation to GESAMP to advise on a review of IAEA's oceanographic model, the Meeting noted that GESAMP has not yet met to consider this invitation but the IMCO Secretariat will keep the Parties informed of further developments. To a question as to why oceanographic experts available to the IAEA had not been asked to undertake the review, the IAEA observer explained that IAEA now felt the need to draw on broader oceanographic expertise in order to help refine IAEA's model, and considered that GESAMP would be an appropriate body in which such expertise is available.

5.8 A number of delegations called for thorough consideration at forthcoming OECD/NEA meetings concerning the North-East Atlantic dumpsite, of all relevant international provisions for monitoring and environmental/ecological assessment. Note was taken of the OECD Workshop's recommendations (LDC IV/5, Annex 3, paragraph 4.1) that a detailed monitoring programme be carried out in connexion with the dumping of radioactive wastes and other matter. A number of delegations expressed the view that the IAEA laboratory expertise could be helpful in Atlantic dumping, particularly the pre-dumping environmental assessment and post-dumping monitoring phases.

5.9 The Swedish delegation, noting that at the Third Consultative Meeting an enquiry was made as to the possibility of a mechanism whereby IMCO could provide international observation of the loading and sea disposal of radioactive wastes, asked what results had come from the Secretariat's approaches to OECD/NEA. The Secretariat stated that IMCO and OECD/NEA had not come to an agreement, but that the matter would be pursued further recognizing the need to avoid duplication.

5.10 It was suggested that Annexes to LDC IV/5 should be referred to the Ad Hoc Scientific Group for review. Whilst there was a general agreement to refer the information on dispersion processes and on monitoring (Annexes 2 and 3 of LDC IV/5), it was considered premature to refer the guidelines on site selection (Annex 1 of LDC IV/5) since the Guidelines were not in final form.

5.11 In relation to the forthcoming OECD/NEA meeting of experts on monitoring and research programmes relating to dumping of radioactive wastes at sea, the Secretary stated that IMCO has been requested to indicate the extent to which it can contribute to the co-ordination of the programmes, particularly whether IMCO could undertake such a co-ordinating role.

5.12 Several delegations stated that this was an important and complex matter which would require careful consideration before any views could be expressed on behalf of Contracting Parties to the London Dumping Convention. In this connexion, a suggestion was made for drawing up a list of possible organizations which could undertake such a role, together with advantages and disadvantages. However, no decision was reached on this point.

5.13 After discussion, the Meeting arrived at the following conclusion:

- .1 Documents referred to in LDC IV/5, Annex 2 (ICES note on deep-ocean dispersion) and Annex 3 (summary of OECD meeting on monitoring at-sea dumping of radioactive wastes), if available, should be referred to the Ad Hoc Scientific Group, which should consider these documents from the point of ensuring consistency with the requirements set out in the Annexes to the Convention in general and with the criteria set out at Annex III to the Convention in particular;
- .2 the Secretariat was requested to consult other organizations in order to improve the documentation concerning the activities carried out by other organizations relating to radioactive waste dumping so that more up-to-date and comprehensive information may be made available to the Consultative Meeting;

- .3 with regard to possible institutional arrangements for co-ordinating monitoring and research programmes relating to dumping of radioactive wastes at sea, the IMCO Secretariat was requested to ensure that the OECD/NEA meetings are informed on the Consultative Meeting's debates by making the relevant parts of the reports available. The Secretariat was further requested to report the outcome of the OECD/NEA meeting mentioned in paragraph 5.11 above to the Fifth Consultative Meeting, which then could be in a position to express more definitive views.

Comments on the IAEA Revised Definition and Recommendations

5.14 The Mexican delegation, in presenting its document LDC IV/5/1/Rev.1, expressed dismay that Mexico had not been invited to any of the meetings on radioactive waste disposal, nor had they received the relevant documents. That delegation reaffirmed its position that any radioactive wastes should not be dumped into the sea. In commenting on the IAEA document INFCIRC/205/Add.1/Rev.1, the delegation particularly noted that radioactive wastes ought to be averaged over a gross mass not exceeding 100 tonnes rather than the proposed 1,000 tonnes.

5.15 The observer from FOE expressed concern about the present policy of radioactive waste dumping, which in the view of his organization, should be totally prohibited or more stringently controlled. The FOE observer supported the view that the IAEA should be encouraged to provide a detailed report to the Contracting Parties concerning its work programme. He also commented that the Ad Hoc Scientific Group should review intersessionally IAEA's response to the several concerns that have been raised by the Contracting Parties at the Third Consultative Meeting in relation to the requirements of the Convention and its Annexes and report its findings to the Fifth Consultative Meeting. He expressed other comments on this subject which are recorded in LDC IV/INF.2. There was no discussion of the issues raised by FOE other than those already described elsewhere in the report under this Agenda item.

5.16 The United States delegation urged monitoring of the NEA dump site in the North Atlantic, and stressed the need for a pre-dumping environmental assessment. The statement of that delegation is recorded in LDC IV/INF.5.

5.17 Several delegations stressed that they oppose, in principle, ocean dumping of any radioactive waste. The IAEA observer confirmed that the Revised Definition and Recommendation should not be construed as encouraging dumping at sea of radioactive wastes and that appropriate national authorities may adopt more stringent requirements when granting special permits according to the London Dumping Convention.

5.18 A number of delegations reiterated support for the Canadian delegation's proposal at the Third Consultative Meeting that the IAEA's work programme include an inventory of all radioactive waste inputs to the sea, so that an estimate of the capacity of the marine environment to accept radioactive waste from all sources can be developed. The United Kingdom delegation expressed doubts about the scope of this suggestion; to be effective such an inventory should include all sources of exposure including for example airborne pollution, but such a project would be in danger of duplicating the ongoing work of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). The IAEA observer strongly supported the Canadian proposal and stated that UNSCEAR would be closely involved.

5.19 In response to the comments by the United States and other delegations, the IAEA observer further stated that the Revised Definition and Recommendations represented three years of careful review of the Provisional Definition and Recommendations, carried out with the assistance of several consultants and advisory group meetings. In this review emphasis was placed on complying as far as practicable with the recommendations of the International Commission on Radiological Protection (ICRP).

5.20 The USSR delegation, recalling the obligation of Contracting Parties under Annex I, paragraph 6 and Annex II, paragraph D of the Convention, stressed that the IAEA Revised Definition and Recommendation should be strictly adhered to in carrying out any sea dumping operation of radioactive wastes. This view was supported by other delegations.

5.21 In order to promote full compliance with the IAEA Revised Definition and Recommendation, the Canadian delegation proposed the adoption of a resolution which would enhance this objective (LDC IV/WP.6). The Meeting considered this draft and with certain amendments, adopted a Resolution as set out at Annex 10 hereto.

Environmental assessments in relation to an individual application for a special permit for dumping

5.22 The United States delegation, in view of the adoption of the resolution referred to in paragraph 5.21 above, reiterated its previous position that in compliance with paragraphs B.1.4 and B.1.5 of the IAEA Recommendations, the Interim Procedures for Notification (LDC I/16, Annex IV), in particular paragraph (5) of section 3, should be amended to incorporate the elements contained in paragraphs B.1.4 and B.1.5 of the IAEA Recommendations. That delegation indicated that it had prepared a draft resolution on this for consideration by the Parties. Other delegations expressed reservations about

the United States proposal and considered that the Fifth Consultative Meeting should discuss the matter in depth before any action is taken in this regard.

5.23 The United States delegation further suggested that the OECD/NEA Secretariat should be requested to submit to IMCO relevant reports which may be available as a result of the implementation of the OECD Mechanisms (LDC III/6/1). Several delegations supported the United States proposal. After discussion, the United States delegation proposed, and the Meeting agreed, that the IMCO Secretariat should be requested to consult the OECD/NEA Secretariat to find out whether, within the framework of the OECD Mechanism, the reports on environmental assessment could be made available by OECD/NEA to the Contracting Parties, through IMCO, in conformity with paragraphs B.1.4 and B.1.5 of the IAEA Recommendations, and to report the outcome of such consultation to the Fifth Consultative Meeting.

5.24 The observer from FOE commented that FOE believes that those countries dumping radioactive wastes have not fully complied with the environmental assessment requirements of:

- .1 Articles 2 and 3 of the OECD Council's 1977 Decision establishing a multilateral consultation and surveillance mechanism;
- .2 the provisions of Annex III of the Convention; and
- .3 the recommendations contained in Section B.1 of the IAEA's Revised Definition and Recommendations.

The observer from FOE further commented that IMCO should request the NEA to enforce all of those provisions, and that IMCO should formally request copies of all such environmental assessments that the NEA undertakes or has received from participating countries. The FOE observer also recommended that the Ad Hoc Scientific Group review NEA's efforts on these matters and report its findings to the Fifth Consultative Meeting. He expressed other comments on this subject which are recorded in LDC IV/INF.2. There was no discussion of the issues raised by FOE other than those already described elsewhere in the report under this Agenda item.

6 REVIEW OF THE ANNUAL REPORTS ON DUMPING AND INCINERATION AT SEA

6.1 The Meeting noted that, following the request made by the Third Consultative Meeting, certain additional information on dumping activities carried out in 1976 and 1977 had been received by the Secretariat (LDC IV/6) and incorporated in updated summary reports which had been distributed to Governments under LDC.2/Circ.31 and LDC.2/Circ.33 early in 1979.

6.2 It was noted that further reports of permits issued in 1978 had recently been received by the Secretariat but not in sufficient time to enable the preparation of a summary report for the Fourth Consultative Meeting. The Secretariat will prepare such a summary report in due course and circulate it to Contracting Parties under LDC Circular.

6.3 The Meeting considered whether there was a need for any information to be provided in addition to that shown in the format of the Summary Reports issued by the Secretariat. After having received the report of the Ad Hoc Working Group set up under Agenda item 3 concerning the format of reports on wastes actually dumped, the Meeting considered that the above format of the Summary Reports on permits was satisfactory for the time being.

7 PROCEDURES FOR THE EFFECTIVE APPLICATION OF THE CONVENTION

7.1 With reference to Article VII(3) of the London Dumping Convention, the Meeting took note of a draft Resolution on Procedures for Effective Application of the Convention, submitted by Canada (LDC IV/7). This included draft procedures to encourage the reporting of vessels and aircraft observed dumping apparently in contravention of the Convention.

7.2 During discussion of the draft procedures several delegations expressed support for the general concept as put forward by Canada. Other delegations, while agreeing with the importance of effective application and while sympathising with the views put forward by Canada, indicated that they had doubts about the practicality of some aspects of this proposal even though it was noted that the Canadian proposal did not require that the procedures be mandatory. It was pointed out that there would be a need to include more detail in the actual procedures as to the authorities designated to receive reports and follow-up action, etc. Attention was also drawn to Resolution A.391(X) of the IMCO Assembly which sets out Procedures for the Control of Discharges under the International Convention for the Prevention of Pollution of the Sea by Oil, 1954 (as amended in 1962 and 1969). One delegation also pointed out that certain Articles contained in the Single Informal Composite Negotiating Text of the Third United Nations Conference on the Law of the Sea (ICNT/Rev.1), might need to be taken into account. While appreciating the valuable work done by Canada, therefore, the Meeting decided to defer the matter until the next session and requested Contracting Parties to submit comments to the Secretariat by 1 July 1980 to facilitate consideration of the draft Procedures.

8 RELATIONS WITH OTHER ORGANIZATIONS

8.1 In relation to Article XIV(4)(d) of the London Dumping Convention, the Meeting took note of a summary of information (LDC IV/8) prepared by the Secretariat concerning action being taken on questions relating to the dumping of wastes at sea in connexion with certain regional conventions, including:

- .1 the outcome of the fifth meeting (21-24 November 1978) of the Oslo Commission, particularly with regard to the application of its "prior consultation procedure" in cases of emergency involving the dumping of wastes containing Annex I substances; and
- .2 a study being carried out by a group of experts under the Barcelona Convention concerning the procedures and definitions necessary for the effective implementation of the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft.

8.2 Further to 8.1.1 above, the observer from the Oslo Commission presented a summary of recent activities of the Commission of interest to the Consultative Meeting (LDC IV/INF.3). In relation to 8.1.2, the observer from UNEP summarized current activities in the Mediterranean Region aimed at the effective implementation of the Barcelona Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft (LDC IV/INF.4).

8.3 The Meeting considered proposals put forward by the Oslo Commission and the Secretariat of the Barcelona Protocol that the prior consultation procedures developed under the Oslo Convention (LDC IV/8, Annex 1) and draft procedures under the Barcelona Protocol (LDC IV/8, Annex 2) be used in substitution for those which have been developed within the framework of the London Dumping Convention (LDC I/16, Annex III), in a similar manner to the Interim Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I of the London Dumping Convention (LDC III/12, Annex 6, paragraph 17).

8.4 Following the discussions in the Plenary and subsequent consultations between representatives of the Contracting Parties and the observer from the Oslo Commission, the Meeting agreed that the "Prior Consultation Procedure" outlined in LDC IV/8, Annex 1 could be used by Contracting Parties to the Oslo Convention on an interim basis as a substitute for the London Dumping Convention procedures until the next Consultative Meeting. The Meeting emphasized, however, that the Secretariat of the London Dumping Convention should be informed immediately of any emergency situation. The Secretariat

would then follow, as appropriate, the procedure already outlined in LDC I/16, Annex III, taking into account the consultations taking place within the regional convention. In this regard, bearing in mind the urgency of an emergency situation, Contracting Parties should be urged to comply with the procedure outlined in paragraph 12 of LDC I/16, Annex III and should designate a focal point for the reception of urgent messages in order to receive prompt advice from other Contracting Parties on possible alternatives to emergency dumping.

8.5 It was further agreed that during the intersessional period, Contracting Parties should study this question further on the basis of available documents (LDC I/16, Annex III; LDC III/12, Annex 6; LDC IV/8, Annex 1 and Annex 2) and that the Ad Hoc Scientific Group at its next meeting should also consider this subject and report to the Fifth Consultative Meeting.

9 REVIEW OF THE ACTION PLAN

9.1 The Meeting took note of a draft revision of the Action Plan (LDC IV/9) which had been prepared by the Secretariat on the basis of the original Plan agreed at the First Consultative Meeting (LDC I/16, Annex VII), taking account of work accomplished prior to the Fourth Consultative Meeting.

9.2 The Canadian delegation referred to recent progress which had been made by the Third United Nations Conference on the Law of the Sea and suggested that there would be a need to review Articles III(1)(c), VII(1)(b), VII(3) and XIII of the London Dumping Convention when the Conference on the Law of the Sea was concluded. The Meeting agreed that this matter should be incorporated into item 2 of Part 1 of the Action Plan and to consider under item 10 of the Agenda the possible need for an inter-governmental meeting to consider the matter during the 1980/81 biennium. It was further agreed to include this subject in the Agenda for the Fifth Consultative Meeting.

9.3 The USSR delegation, supported by other delegations, expressed the view that the review and amendment of Articles of the Convention concerning the liability of coastal States should be considered only after the final decisions of the UN Conference on the Law of the Sea will be available.

9.4 The Meeting requested the Secretariat to update the Action Plan in the light of the progress of work accomplished during the Fourth Consultative Meeting and comments put forward at this Consultative Meeting and to distribute the revised version in due course.

9.5 The Meeting further requested the Secretariat to consider the preparation of up-to-date comprehensive documents describing the status of the various amendments, guidelines and criteria relevant to the application of the Convention.

10 OTHER MATTERS

10.1 The Meeting noted that the submission concerning procedures for the settlement of disputes (LDC IV/11) had been withdrawn.

10.2 In this connexion views were expressed that the re-opening of discussions on amendments to the Convention adopted by the Third Consultative Meeting covering procedures for the settlement of disputes could discourage acceptance of the amendments and therefore should be avoided.

10.3 The Meeting, noting that Mr. H.R. Bardarson will no more be available for re-election after the expiry of his present term of office, expressed its deepest appreciation for his outstanding leadership as Chairman of the Consultative Meeting since 1976, which has enabled the Meeting to make significant progress in its work during the past four years.

11 FUTURE WORK PROGRAMME

Meetings during 1980/1981 biennium

11.1 The Meeting took note of the decision of the IMCO Council for only one meeting week to be provided in the budget of the Organization during the 1980/1981 biennium for the Consultative Meeting and its subsidiary bodies. It was noted that this would, in effect, mean that any meetings of the Ad Hoc Scientific Group on Dumping or other subsidiary bodies held in the intersessional period could not be provided with simultaneous interpretation. The French delegation expressed its regret that this situation had arisen.

11.2 The Canadian delegation proposed that, in view of the expected conclusion of the Third United Nations Conference on the Law of the Sea at the ninth session of the Conference next year, there may be a need to convene an inter-governmental meeting before the next Consultative Meeting or at least within the 1980/1981 biennium in order to review the London Dumping Convention (LDC IV/WP.7). It was stated that Canada could assist in providing interpretation facilities if budgetary funds were not available.

11.3 While appreciating the progress being made by the Conference on the Law of the Sea and the implications which the Law of the Sea Convention may have on the London Dumping Convention, some delegations felt that the matter should be given further consideration before any firm decision is taken. It was therefore agreed that this question should be reviewed again at the Fifth Consultative Meeting after consideration at the national level.

Items to be included in the Agenda for the next Consultative Meeting

11.4 Having reviewed the Action Plan and in the light of the work accomplished at the current session, the Meeting considered and agreed on substantive items to be included in the Agendas for the Fifth Consultative Meeting and the next meeting of the Ad Hoc Scientific Group on Dumping as shown at Annex 11 hereto.

Dates of next meetings

11.5 The meeting agreed that the Fifth Consultative Meeting should be held at IMCO Headquarters from 22-26 September 1980. With regard to the Ad Hoc Scientific Group on Dumping, the United States delegation offered to host the next meeting in March/April 1980 possibly at a laboratory in Florida in association with the Environmental Protection Agency. The meeting accepted this offer with appreciation.

ANNEX 1

AGENDA FOR THE FOURTH CONSULTATIVE MEETING

- 1 Adoption of the Agenda
 - LDC IV/1 - Secretariat
 - LDC IV/1/1 - Secretariat
 - LDC IV/1/2 - Secretariat
- 2 Status of the London Dumping Convention
 - LDC IV/2/Rev.1 - Secretariat
- 3 Consideration of the report of the Ad Hoc Scientific Group on Dumping (19-23 March 1979)
 - LDC IV/3 - Secretariat
 - LDC IV/3/1 - Secretariat
 - LDC IV/3/2 - Secretariat
 - LDC IV/3/3 - Belgium, France, Federal Republic of Germany, Portugal
 - LDC IV/WP.1 - Canada
 - LDC IV/WP.2 - Secretariat
 - LDC IV/WP.3 - Canada and Federal Republic of Germany
 - LDC IV/WP.8 - Ad Hoc Working Group on Report Format
- 4 Consideration of the report of the Ad Hoc Group on Incineration at Sea (19-23 February 1979)
 - LDC IV/4 - Secretariat
 - LDC IV/4/1 - United States
 - LDC IV/4/2 - United States
 - LDC IV/4/3 - Secretariat
 - LDC IV/WP.4 - Ad Hoc Group on Incineration at Sea
 - LDC IV/WP.5 - Ad Hoc Group on Incineration at Sea
 - LDC IV/WP.9 - Denmark and Sweden
- 5 Review of comments and observations on the revised IAEA Definition and Recommendations on dumping of radioactive substances
 - LDC IV/5 - Secretariat
 - LDC IV/5/1/Rev.1 - Mexico
 - LDC IV/INF.2 - Friends of the Earth (FOE)
 - LDC IV/INF.5 - United States
 - LDC IV/INF.5/Corr.1 - United States
 - LDC IV/INF.6 - OECD/NEA
 - LDC IV/INF.7 - IAEA

- 6 Review of the annual reports for dumping and incineration at sea
 LDC IV/6 - Secretariat
- 7 Procedure for the effective application of the Convention in
 accordance with Article VII(3) of the Convention
 LDC IV/7 - Canada
- 8 Relations with other organizations
 LDC IV/8 - Secretariat
 LDC IV/INF.3 - Oslo Commission
 LDC IV/INF.4 - UNEP
- 9 Review of the Action Plan (LDC I/16)
 LDC IV/9 - Secretariat
- 10 Future work programme and date of next session
 LDC IV/10 - Secretariat
 LDC IV/WP.7 - Canada
- 11 Any other business
 LDC IV/11 - Secretariat
- 12 Consideration and adoption of the report
 LDC IV/WP.10 - Secretariat
 LDC IV/WP.10/Add.1 - Secretariat
 LDC IV/12 - Report

ANNEX 2GENERAL GUIDELINES FOR CLASSIFICATION OF SUBSTANCES TO
ANNEXES I AND II TO THE LONDON DUMPING CONVENTIONIntroduction

1 The Fourth Consultative Meeting considered a system of classification of substances which could provide guidelines to evaluate whether or not certain substances should be included in or excluded from an Annex to the London Dumping Convention. The Meeting, recognizing however, that other criteria may be relevant in certain circumstances and that a degree of judgement is involved in applying these criteria, e.g. toxicity, bioaccumulation and persistence, for assigning materials to the Annexes, agreed that these Guidelines will be kept under continuing review with a view to having them further revised as and when appropriate, in the light of technological developments and increased scientific knowledge.

Guidelines for Classification2 Annex I substances

2.1 The substances and materials listed in Annex I should be those which have intrinsic properties such that their dumping into the sea could cause adverse effects in the marine environment such as to create hazard to human health, harm to living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea. These substances and materials are those that are considered by agreement of Contracting Parties to be:

- .1 simultaneously toxic, persistent and bioaccumulative and therefore have a wide range of action; and
- .2 while essentially non-toxic, are persistent and float or remain suspended in the sea where they may interfere with legitimate uses of the sea either because of the quantities dumped at a single time or because of their accumulation over a long period of time.

3 Annex II substances

3.1 The substances listed in Annex II should be those which exhibit one or more of the properties of toxicity, persistence or bioaccumulation, but which may be safely disposed of in the marine environment if special care is used in the disposal.

ANNEX 3

PROPOSED TEXTS OF AMENDMENTS AGREED IN PRINCIPLE
BY THE FOURTH CONSULTATIVE MEETING

PROPOSED AMENDMENT TO ANNEX I TO THE CONVENTION

Replace paragraph 5 by the following:

"5 Crude oil and its wastes, refined petroleum products, petroleum distillate residues, and any mixtures containing any of these, taken on board for the purpose of dumping."

PROPOSED AMENDMENT TO ANNEX II TO THE CONVENTION

Add new paragraph F as follows:

"F Substances which, though of a non-toxic nature, may become harmful due to the quantities in which they are dumped, or which are liable to seriously reduce amenities."

ANNEX 4

RESOLUTION LDC RES.7(IV) ON PROCEDURES FOR
THE APPLICATION OF SCIENTIFIC ADVICE
IN RESPECT OF THE LONDON
DUMPING CONVENTION

THE FOURTH CONSULTATIVE MEETING,

REAFFIRMING that international action to control the pollution of the sea by dumping can and must be taken without delay,

NOTING Article XIV(4)(b) of the London Dumping Convention concerning the role of scientific bodies,

RECOGNIZING the need for continuing scientific and technical review of issues considered by the Consultative Meetings,

CONSIDERING therefore that there is likely to be continuing requirement for deliberations of the Ad Hoc Scientific Group on Dumping,

ADOPTS the terms of reference for this Group as set out in the Annex to this Resolution, and

RESOLVES to consider as a matter of high priority the preparation of formal procedures for the amendment of Annexes to the Convention in order to facilitate the achievement of its objectives.

ANNEX

TERMS OF REFERENCE FOR THE AD HOC
SCIENTIFIC GROUP ON DUMPING

The terms of reference of the Ad Hoc Scientific Group on Dumping are as follows:

- 1 To respond to requests from the Consultative Meeting for scientific advice on matters related to the Convention.
- 2 To review scientific information, as submitted by Contracting Parties or the Secretariat, particularly that arising from new scientific and technological developments (with respect to newly synthesized compounds, newly discovered hazards of existing substances and new techniques for waste treatment and disposal).
- 3 To prepare and maintain a list of hazardous substances or groups of substances to which particular attention should be paid, and, when sufficient scientific evidence has accumulated to warrant amendments to the Annexes of the Convention, to prepare recommendations for such amendments and submit them to the Consultative Meeting for action.

ANNEX 5

INTERIM GUIDELINES FOR THE IMPLEMENTATION OF
PARAGRAPHS 8 AND 9 OF ANNEX I TO
THE LONDON DUMPING CONVENTION

A. Conditions under which Permits for Dumping of Wastes and Other Matter containing Annex I Substances may be issued

1. Under Article IV(a) of the Convention the dumping of waste or other matter containing substances listed in Annex I is prohibited, except that such prohibition does not apply to:
 - (a) Annex I substances which are rapidly rendered harmless by physical, chemical or biological processes in the sea (paragraph 8 of Annex I); or
 - (b) wastes or other materials, such as sewage sludges and dredged spoils, which contain matters listed in paragraphs 1 - 5 of Annex I as trace contaminants (paragraph 9 of Annex I).
2. A Contracting Party may issue a special or general permit for the dumping of waste containing an Annex I substance provided that the substance is determined to be rapidly rendered harmless or to be present as a trace contaminant and that the requirements of Annex II and Annex III have been met.
3. It is recognized that for many of these wastes practical alternative methods of treatment, disposal or elimination or of treatment to render the matter less harmful for dumping at sea might be available on land and these alternative methods should be pursued as required by the Convention.

B. Evaluation of "Trace Contaminants" and "Rapidly Rendered Harmless"

4. In the context of paragraph 1(a), Annex I substances may be regarded as meeting the requirements of Annex I, paragraph 8, if tests of the waste or other matter proposed for dumping, including tests on the persistence of the material, show that the substances can be dumped so as not to cause acute or chronic toxic effects or bioaccumulation in sensitive marine organisms typical of the marine ecosystem at the disposal site. A persistent substance should not be regarded as harmless except when present as a trace contaminant.

5. In the context of paragraph 1(b), Annex I substances listed in paragraphs 1, 2, 3 and 5 of Annex I shall not be regarded as "trace contaminants" under the following three conditions:

- (a) if they are present in otherwise acceptable wastes or other materials to which they have been added for the purpose of being dumped;
- (b) if they occur in such amounts that the dumping of the wastes or other materials could cause undesirable effects, especially the possibility of chronic or acute toxic effects on marine organisms or human health whether or not arising from their bioaccumulation in marine organisms and especially in food species; and
- (c) if they are present in such amounts that it is practical to reduce their concentrations further by technical means.

6. The procedures and tests described in the following sections are considered to apply equally to the interpretation of "harmlessness" (paragraph 8 of Annex I) and "trace contaminants" (paragraph 9 of Annex I).

C. Test procedures to be employed

7. Test procedures should be designed and run so as to provide evidence of the potential for acute or chronic toxic effects, the persistence of the material (where appropriate), inhibition of life processes, and bioaccumulation under the proposed disposal conditions.

8. For dredged spoils and sewage sludge the test procedures may not be needed if chemical characterization of the material and knowledge of the receiving area allows an assessment of the environmental impact.

9. The test procedures used should be:

- (i) those described in Appendix I and, when appropriate,
- (ii) those procedures acceptable to neighbouring States (in appropriate cases through a regional convention) which may be affected by the proposed disposal, including tests and effects on animals from the affected zone.

The Organization should be notified of the test procedures to be adopted by a Contracting Party.

D. Procedures for Consultation

10. When acceptable test procedures referred to in Section C are used and the results of tests show that the material is not persistent and would appear not to cause acute or chronic toxic effects or bioaccumulation in sensitive marine organisms typical of the marine ecosystem at the disposal site and especially in food species, and on human health, consultation with other Contracting Parties is not required. If such a permit is issued for other than sewage sludge or dredged material, notifiable particulars of the permit and the information required in Appendix II should be submitted immediately to the Organization for circulation to other Parties as information.

11. If the Contracting Party has doubts about the results of the tests referred to in paragraph 7 above, the Contracting Party should consult with the Organization, other Parties and international organizations as appropriate, as provided for under Article XIV, before issuance of the permit.

12. The Contracting Party intending to pursue the above consultation should submit to the Organization sufficient information to assist in determining whether the substances may be rapidly rendered harmless or are present in trace contaminants, including the information required in Appendix II.

13. The Organization, upon being informed by a Party that consultation is necessary, may:

- (a) convene a Special Meeting of Contracting Parties in accordance with Article XIV(3)(a) of the Convention to consider the problems; or
- (b) establish a Panel of Contracting Parties which could be convened or consulted by the Secretariat at short notice.

14. The Organization should, after consultation with other organizations, experts and Parties, make recommendations as to whether or not the waste in question may be dumped and, if so, on appropriate procedures which should be adopted by the Party prior to disposal.

15. The Contracting Party should inform the Secretariat of the actions taken following the recommendations of the Organization and, if a permit is issued, should notify the permit details to the Organization as well as any other information listed in Appendix II and not already notified under paragraph 12. The Organization shall circulate this information to other Parties.

16. Annual reports on dumping prepared by the Secretariat for circulation to the Contracting Parties should include a summary of permits for dumping of Annex I substances which have been issued in accordance with the consultation procedures of these Guidelines.

17. If a Contracting Party to the London Dumping Convention which is also a Party to a regional convention and has followed a consultative procedure under a regional convention, such procedure may be substituted for the procedures set out in paragraphs 11 - 16 above. The Secretariat of the regional convention should inform the Organization of the result of the consultation which has taken place.

APPENDIX I

TEST PROCEDURES FOR THE INTERPRETATION OF "TRACE CONTAMINANTS" AND "HARMLESSNESS" IN REGARD TO ANNEX I, PARAGRAPHS 8 AND 9

I. GENERAL PROVISIONS

1. Each Contracting Party may develop and use individually or through a regional convention procedures as laid down in Section C of the Guidelines for the implementation of paragraphs 8 and 9 of Annex I to the London Dumping Convention.
2. Such test procedures may include, as appropriate, chemical characterization of the material, bioassays of the material, application of emission standards or environmental quality criteria in use by the Contracting Party, scientific literature or the results of field surveys of the proposed disposal site or a similar marine environment. For the initial evaluation of an industrial waste containing Annex I substances, the tests of paragraph 4 of this Appendix shall be used. Some of the tests may be augmented by new scientific developments, e.g. predictions from structure/activity relationships and environmental models.
3. Each Contracting Party should notify the Organization of the test procedures adopted and, upon request, should provide to the Organization or other Contracting Parties copies of those specific test procedures.

II. SPECIFIC CONSIDERATIONS

A. Test Procedures

4. Test procedures should include the following:
 - (a) acute toxicity tests on plankton, crustaceans or molluscs, and fish;
 - (b) chronic toxicity tests capable of evaluating long-term sublethal effects, such as bioassays covering an entire life cycle;
 - (c) tests to determine the potential for bioaccumulation of substances listed in Annex I and, if appropriate, the potential of elimination. The test organisms should be those most likely to bioaccumulate Annex I substances; and
 - (d) tests for determining the persistence of Annex I substances. Potential for degradability of Annex I substances should be determined using bacteria and water typical of the proposed dumping site. The tests should reflect the conditions at the dumping site.

B. Dilution and Dispersion of the Dumped Material

5. In applying the results of tests to predict the environmental impact of the proposed disposal, the method of disposal and the dilution of the waste

that would result after dumping should be considered. The rate of dilution and dispersion actually occurring after dumping will depend on many factors, but will often include an initial period of rapid mixing and reduction of concentration of the dumped material followed by a period in which concentrations of the dumped material decrease at a much lower rate. In such cases the allowance for initial mixing should be based on the rate and time of the initial period of rapid mixing.

C. Chemical Characterization of the Dumped Material

6. Chemical characterization of wastes is required by Annex III. Chemical analysis of the liquid and solid phases of the wastes may be used to evaluate the potential for biological effects and persistence of Annex I substances in the dumped materials, where sufficient experience has been gained for the type of waste involved through test procedures or field surveys described in the relevant sections of this Appendix.

D. Application of the Results of Field Surveys

7. Data collected from field surveys of disposal sites may provide a direct measurement of the impact of Annex I substances on the marine environment.

8. Field survey data may be used as part of acceptable test procedures (see paragraph 2) when the following conditions are met:

- (a) The disposal site from which the data were collected is the same as that to be used for the proposed dumping, or is similar in environmental characteristics to the proposed disposal site;
- (b) The disposal site from which the data were collected has had wastes containing Annex I substances dumped there recently enough to cause impacts of the type listed in paragraph 1 of these Guidelines; and
- (c) The data collected are adequate to make a determination in regard to the impacts listed in paragraph 1 of these Guidelines.

E Criteria for the exemption of chemical and biological testing of dredged spoils

9 Dredged material in the absence of appreciable pollution sources is excluded from the chemical and biological testing requirements set out above when it meets one of the following criteria:

- (a) Dredged material is composed predominantly of sand, gravel and rock and the material is found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels.
- (b) Dredged material is for beach nourishment or restoration and is composed predominantly of sand, gravel, or shell with particle sizes compatible with material on the receiving beaches.
- (c) The material proposed for dumping is substantially the same in physical and chemical properties as the sedimentary materials at the proposed disposal site.
- (d) The site from which the dredged material proposed for dumping is to be taken is situated away from known existing and historical sources of pollution so as to provide reasonable assurance that such material has not been contaminated by such pollution.
- (e) The operation is similar to a previously tested operation and constitutes at most a 50 per cent increase in the amount of dredged material over an operation tested not more than 5 years previously.

APPENDIX II

BASIC INFORMATION TO BE PROVIDED FOR THE IMPLEMENTATION OF PARAGRAPHS 8 AND 9 OF ANNEX I OF THE LONDON DUMPING CONVENTION

INTRODUCTION

1. The purpose of the following procedures is to give guidance on the appraisal of such wastes for which dumping has to be considered and the presentation of the evidence in support of the proposal to dump. The test procedures advocated can only produce scientific evidence on which to base a decision. They are to some extent still experimental and experience is necessary as regards their practical application and the interpretation of the results. They cannot give conclusive proof that a substance is biologically harmless, especially in the longer term. Scientifically such proof is impossible, the tests can only provide evidence for judging whether the environmental risk is acceptable or not.

REQUIRED INFORMATION

2. The following paragraphs draw attention to the more important aspects of the appraisal and set out the headings under which information is required:

Alternative disposal options

2.1 Itemize all of the alternative methods which have been considered and rejected, e.g. treatment, storage, destruction or disposal on land. Give the reasons for the rejection in each case.

Origin of waste

2.2 Give a description of the process from which the waste is derived to indicate the possible nature of the waste. It is not necessary to set out the process in detail.

Amount of waste

2.3 Give:

- (a) the total amount of waste expected to arise annually;
- (b) the frequency of dumping; and
- (c) the amount to be dumped on each occasion.

Form in which the waste is presented for dumping

2.4 State the form of the waste, quantify the maximum amount of solids present and give information on particle sizes.

Chemical composition

2.5 Give the chemical identification of compounds present in the liquid and solid phases and the quantification of these compounds. Specify the analytical methods used, including information on detection limits, precision and accuracy, as appropriate.

Physico/chemical characteristics

2.6 Give pH and other physico/chemical characteristics of the waste, e.g. specific gravity, volatility, solubility, and of its specific compounds.

Results of test procedures

2.7 Results of tests performed in accordance with Appendix I should be reported.

Other relevant information and data

2.8 Give any other relevant information, e.g. possibility of tainting; other sources of pollutants in the disposal area and all other information required by Annex III of the Convention.

Characteristics of proposed disposal area

2.9 Give the geographical limits of the proposed dumping area using co-ordinates. Give the depth and dynamics of the area, the characteristics of the sediments, etc. and any other information relevant to the selection of the area proposed for dumping, e.g. absence of spawning grounds, nursery areas, fishery activities, migratory routes, etc.

Overall assessment of the information

2.10 In this section bring together all the information gathered and set out the reasons why it is considered that a permit should be given.

Details of proposed dumping operation and proposed subsequent action

2.11 Give the conditions which will be imposed on the dumping operation, e.g. duration of licence, frequency of dumping, method of discharge, speed of vessel, whether or not containerized, supervision, etc. Finally give information on proposed post operational monitoring which will be carried out.

ANNEX 6REPORT OF THE DISPOSAL OF WASTES OR OTHER MATTER
CARRIED OUT AT SEA IN THE CALENDAR YEAR^{1/}

1. Name(s) of Country(ies)
2. Year Permit(s) issued (and reference number if appropriate)^{2/}
3. Dumping/incineration site(s)
4. Nature and quantity (tonnes) of waste dumped/incinerated
Industrial Wastes
Sewage Sludge
Dredgings
Radioactive waste^{3/}
5. Dumping/incineration method

-
- ^{1/} If a Contracting Party to the London Dumping is also a party to a regional convention and has submitted an annual report on all dumping or incineration operations carried out under a regional convention, that report may be substituted for this report format. The Secretariat of the regional convention shall notify the Organization of the annual reports submitted under the regional convention.
 - ^{2/} Reference should be made to a permit reference number that might have been used in the INTERIM PROCEDURE FOR NOTIFICATION UNDER ARTICLE VI(4) OF THE CONVENTION
 - ^{3/} For radioactive wastes the Beta/gamma-, Tritium- and Alpha-Radioactivity should be given in Curie (Ci) separately together with the origin of waste and conditioning.

ANNEX 7

FORM OF REPORT FOR THE ACQUISITION OF DATA ON MONITORING OF DUMPING SITES

1. Monitored Area
 - coordinates of the dumping area (geographical coordinates)
 - area map with station locations
2. Data on discharged wastes
3. Technical data on the method of dumping (depth, initial dilution, etc.)
4. Hydrographical data about the area (general direction of current flow etc.
data from Annex III of the Convention)
5. Monitoring data
 - Station locations
 - Monitored compartment:
 - water
 - sediments
 - living matter
 - Frequency and duration
 - Parameters measured in each
compartment (with reference
to the analysis methods used)
 - General biological parameters
(primary productivity, etc.)
6. Laboratories and organizations responsible for analysing, sampling,
data storage etc.
7. Information on intercalibration and quality control of results:
if so, within what framework (ICES, IAEA etc.)
8. General conclusions resulting from monitoring
9. Contact addresses for further information
10. Any details of publications (title, number, year)

ANNEX 8

**INTERIM TECHNICAL GUIDELINES ON THE CONTROL OF INCINERATION
OF WASTES AND OTHER MATTER AT SEA**

1 INTRODUCTION

1.1 In 1978 the Third Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter adopted Resolution LDC Resolution 5(III) by which it approved the following amendments to the Annexes to the Convention concerning the prevention and control of pollution by incineration of wastes and other matter at sea:

- .1 the addition of a paragraph 10 to Annex I;
- .2 the addition of a paragraph E to Annex II; and
- .3 the addition of an Addendum to Annex I, containing Regulations for the Control of Incineration of Wastes and Other Matter at Sea.

1.2 Under these amendments, the Contracting Parties shall, in the issue of permits for incineration, apply the Regulations for the Control of Incineration of Wastes and Other Matter at Sea 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 requirements for the issue of permits for different types of wastes are summarized in the following table:

Substances	Permit	Regulations	Technical Guidelines
1. Organohalogen compounds; Pesticides and by-products	Special	All provisions of the Regulations in Parts I and II to be applied	All provisions of the Technical Guidelines to be taken into full account
2. Crude oil, fuel oil, etc. taken on board for purpose of disposal; Annex II substances (without pesticides)	Special	Control to the satisfaction of Contracting Parties, taking into account: all applicable provisions of Regulations in Parts I and II	 all applicable provisions of the Technical Guidelines
3. Substances not mentioned under 1 and 2 above	General	as under 2 above	

1.3 The present Guidelines have been developed on the basis of existing scientific knowledge of the incineration process and on a knowledge of current technology. Although the state of knowledge on the incineration of liquid organochlorine wastes in existing vessels has enabled specific guidelines to be drawn up covering the incineration of these wastes, there remain types of wastes where knowledge is insufficient at present. Scientific work and technical development is, however, proceeding and consequently these Guidelines should be kept under review as the results of further research and investigations become available.

1.4 These Technical Guidelines apply to wastes or other matter loaded or kept on board marine incineration facilities which are defined in Regulation 1(1) and include vessels, platforms or other man-made structures which might at some future date carry out factory operations and generate wastes which could be incinerated at sea. Incineration at sea is defined in Regulation 1(2) and exclude activities incidental to the normal operation of ships (e.g. combustion of ship-generated garbage) or platforms (e.g. flaring of gas from oil production or exploration).

1.5 The incineration of a waste at sea must be controlled to safeguard a number of uses of the marine environment as laid down in Annex III to the Convention. Additionally the Resolution of the First Consultative Meeting of Contracting Parties to the London Dumping Convention (1976) recognized that the risks of atmospheric pollution should be taken into account.

1.6 Where the word "Convention as amended in 1978" is used, this is to be understood as reference to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, with amendments to the Annexes to the Convention adopted in 1978 as listed under 1.1 above. Where the word "Regulation" is used, this is to be understood as reference to the corresponding regulation of the Addendum to Annex I to the Convention as mentioned in 1.1.3 above.

2 INCINERATION OPERATIONS

2.1 Waste type and feed rates of waste to the incinerator

2.1.1 Continuous flow-measuring devices for recording liquid waste flow rate should be installed on existing marine incinerator facilities by 1 June 1980. Interim methods of control should be based on a continuous display of the waste and fuel pump status supplemented by manual checks of the type and amount of waste burned every hour, weather and sea state permitting, to be recorded in the log.

2.1.2 Where solid wastes are burned, the waste type and rate of input should be recorded in the log.

2.1.3 The feeding of wastes in containers to the incinerator will necessitate special design and operational requirements in order to comply with Regulation 5. These should include but not be limited to:

- .1 the waste should be fed to the incinerator at such a rate that the oxygen demand is well within the capability of the combustion air fan; and
- .2 the waste should be fed to the incinerator via an air lock chamber.

2.2 Air feed to the incinerator

2.2.1 The amount of air entering the incinerator should be sufficient to ensure that a minimum of 3 per cent oxygen is present in the combustion gases near the incinerator stack exit. This requirement should be monitored by an automatic oxygen analyser to routinely record oxygen concentrations.

2.2.2 Although existing incinerator vessels employ a fixed air input rate, marine incineration facilities may in the future use a variable air feed in which case this rate should be recorded.

2.3 Temperature controls

2.3.1 Temperature controls and records should be based on the measurement of wall temperature. Unless otherwise determined by the Contracting Party there should be three or more temperature measurement devices for each incinerator.

2.3.2 In order to comply with Regulation 5 the Contracting Party should define the operating wall temperature and the temperature below which the flow of waste to the incinerator should be automatically shut off by approved equipment.

2.3.3 The minimum wall temperature should be 1200°C unless the results of tests on the marine incineration facility demonstrate that the required combustion and destruction efficiencies specified in Regulations 3 and 5 can be achieved at a lower temperature.

2.4 Destruction efficiency

2.4.1 For the purpose of applying Regulation 3 the destruction efficiency should be determined not only for the total organic components of the wastes but additionally for particular substances such as those listed in 4.1.2.

2.5 Residence time

2.5.1 The mean residence time of the incinerator should be of the order of one second or longer at a flame temperature of 1250°C (e.g. as measured by an optical pyrometer) during normal operating conditions.

2.6 Automatic shut-off systems

2.6.1 Devices to shut off the waste feed to the incinerator in accordance with Regulation 3 should include the following:

- .1 flame sensors with each burner to stop waste flow to that burner in the event of a flame-out; and
- .2 automatic equipment to stop waste flow in the event of wall temperatures falling below 1200°C or the temperature determined in 2.3.3.

2.7 Positioning of measuring devices

2.7.1 In applying Regulation 3(1)(b)(i) and (ii) to approve the siting of temperature measuring devices and gas sampling probes the Contracting Party should take into account that in certain cases flames can be non-homogeneous (e.g. through vortex formation in the incinerator or during incineration of solid or containerized wastes).

3 GENERAL CONTROL OF THE MARINE INCINERATION FACILITY AND ITS OPERATION

3.1 Loading and stowage of wastes

3.1.1 Due to the risk of spillages wastes should not be transferred from barges or other vessels to marine incineration facilities outside harbour limits except where special arrangements have been made for the prevention of spillages to the satisfaction of the Contracting Party.

3.1.2 Wastes in damaged containers should not be taken on board marine incineration facilities.

3.1.3 Containers loaded on board should be adequately labelled.

3.1.4 Containerized wastes should be stowed in accordance with the regulations of the IMCO International Maritime Dangerous Goods Code (IMDG Code).

3.2 Disposal of residues

3.2.1 Tank washings and pump-room bilges contaminated with wastes should be incinerated at sea in accordance with the Regulations for the Control of Incineration of Wastes and Other Matter at Sea and with these Technical Guidelines, or discharged to port facilities.

3.2.2 Residues remaining in the incinerator should not be dumped at sea except in accordance with the provisions of the Convention.

3.3 Prevention of hazards to other vessels

3.3.1 In licensing the incineration of wastes and other matter on board approved marine incineration facilities, the Contracting Party should have regard to the need to avoid hazards to other vessels by appropriate location of the incineration sites or incineration zones concerned and by ensuring that the relevant maritime authorities are notified of the date of sailing and/or intended schedule, as well as the intended movements of the marine incineration facility (whether underway, at anchor, etc.).

3.3.2 Regular radio warnings should be broadcast during the period of incineration.

3.3.3 Contracting Parties in a given geographical area should endeavour to designate common incineration sites in the area.

3.4 Construction of marine incineration facilities

3.4.1 For the carriage of liquid wastes an incineration ship shall carry a valid "Certificate of Fitness" as required under the IMCO Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

3.4.2 The competent national authorities of the country concerned should designate suitable conditions for the construction and equipment of marine incineration facilities not mentioned under 3.4.1 above, based on the principles of the IMCO Bulk Chemical Code. Such conditions should be notified to the Organization.

3.5 Data recording

3.5.1 In addition to the records required by Regulation 6 of the Addendum to Annex I, marine incineration facilities should also record:

- .1 the oxygen concentration in the combustion gases as monitored in accordance with 2.2.1 of these Guidelines;
- .2 the air feed rate in accordance with 2.2.2;
- .3 the tank(s) from which waste is taken; and
- .4 the meteorological conditions, e.g. wind speed and direction.

3.5.2 Parameters which may require recording in the future, subject to satisfactory technical development, include routine measurement of destruction efficiency and total particulate matter in the combustion gases.

4 NATURE OF WASTES OR OTHER MATTER AND NOTIFICATION PROCEDURES

4.1 Characteristics of wastes

4.1.1 Information on the characteristics of wastes or other matter to be provided in connexion with a permit application in accordance with Regulation 7 should include in addition to that in the Appendix hereto, if possible, information on the chemical and physical transformation of the waste after incineration, in particular, subsequent formation of new compounds, composition of ashes or unburned residues.

4.1.2 For the purpose of Regulation 4, examples of wastes or other matter over which doubts exist as to the thermal destruction and efficiency of combustion are listed as follows:

- .1 Polychlorinated biphenyls (PCB's)
- .2 Polychlorinated triphenyls (PCT's)
- .3 Tetrachloro-dibenzo-p-dioxin (TCDD)
- .4 Benzene hexachloride (BHC)
- .5 Dichlorodiphenyl trichloroethane (DDT)

4.2 Compliance with paragraphs 8 and 9 of Annex I of the Convention

4.2.1 The Contracting Party must ensure through the application of procedures adopted by Contracting Parties in consultation that the incineration of a waste containing Annex I substances should not result in the introduction of Annex I substances into the marine environment unless these are rapidly rendered harmless or are present as trace contaminants. Based on current scientific knowledge on the environmental effects of incinerating liquid organochlorine compounds, this requirement is considered to be met if the Regulations and Technical Guidelines are observed.

4.2.2 Where it is proposed to incinerate wastes at sea containing other Annex I substances or organochlorine compounds referred to in 4.1.2, it will be necessary to determine that the residues entering the marine environment after incineration are rapidly rendered harmless or present as trace contaminants through procedures adopted by the Contracting Parties in consultation.

4.3 Notification of permits issued for incineration at sea

4.3.1 Each Contracting Party should immediately notify the Organization of a Special Permit issued for incineration of wastes or other matter at sea in accordance with Regulation 2(3). A record of the General Permits issued for incineration in the previous calendar year in accordance with Regulation 2(4) should be sent directly or through a Secretariat established under a regional agreement to the Organization by 31 March in each year.

4.3.2 The notifications should contain for each permit the kind of information set out in Appendix hereto.

4.3.3 The Organization should treat notifications of incineration permits in the same way as permits issued for dumping.

APPENDIX

NOTIFICATION FORM FOR INCINERATION PERMITS

The notification shall contain the following information for each permit:

- 1 issuing authorities;
- 2 date issued;
- 3 period for which the permit is valid;
- 4 country of origin of wastes and port of loading;
- 5 total quantity of wastes (in metric units) covered by the permit;
- 6 form in which the waste is presented (bulk or containers; in the latter case, also size and labelling);
- 7 composition of the waste, such as:
 - .1 principal organic components;
 - .2 organohalogens;
 - .3 main inorganic components;
 - .4 solids in suspension; and
 - .5 other relevant constituents.
- 8 properties of the waste, such as:
 - .1 physical form;
 - .2 specific gravity;
 - .3 viscosity;
 - .4 calorific value;
 - .5 radioactivity; and
 - .6 toxicity and persistence, if necessary.
- 9 industrial process giving rise to the waste;
- 10 name of the marine incineration facility and state of registration;
- 11 area of incineration (geographical location; distance from the nearest coast);

- 12 expected frequencies of incineration;
- 13 special conditions relating to the operation of the marine incineration facility which are more stringent than those specified in the Regulations or other than those in the Technical Guidelines;
- 14 additional information, such as relevant factors listed in Annex III to the Convention.

ANNEX 9

PRELIMINARY PROCEDURES FOR THE IMPLEMENTATION OF PARAGRAPHS 8 AND
9 OF ANNEX I TO THE LONDON DUMPING CONVENTION FOR
THE PURPOSE OF INCINERATION AT SEA

1. Conditions under which permits for incineration of waste and other matter containing substances listed in Annex I to the London Dumping Convention may be issued

1.1 In accordance with the London Dumping Convention and with the Amendments thereto adopted by the Third Consultative Meeting in 1978, a Contracting Party to the Convention may issue a Special or General Permit for at-sea incineration of wastes containing Annex I substances - other than mercury or cadmium or their compounds as described in 1.3 below - provided that the emission products of the substances entering the atmosphere and sea are rapidly rendered harmless by physical, chemical or biological processes (paragraph 8 of Annex I) or are present as trace contaminants (paragraph 9 of Annex I), and that the requirements of Annexes II and III to the Convention have been met.

1.2 These conditions are considered to be met for Annex I substances other than those described in 1.3 and 1.4 below if the provisions set out in the Amendments to the Convention regarding incineration at sea as adopted in 1978 and the requirements of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea (LDC IV/12, Annex 8) are observed.

1.3 For substances listed in paragraphs 2 and 3 of Annex I to the Convention (mercury and cadmium and their compounds), the procedures set out in section 2 below in addition to the procedures developed for the dumping of wastes and other matter at sea specified in the Interim Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I of the London Dumping Convention (LDC IV/12, Annex 5) should apply. In the latter context, concentrations of mercury or cadmium which would not be considered as trace contaminants for the purpose of direct dumping should also not be considered as trace contaminants for the purpose of incineration at sea.

1.4 Substances listed in paragraph 7 of Annex I to the Convention and organohalogen substances mentioned in 4.1.2 of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea, as well as any other Annex I substances for which a Contracting Party may have doubts concerning compliance with paragraphs 8 and 9 of Annex I to the Convention should be evaluated in accordance with the procedures set out below. In this context, consideration should be given to the possible presence of these substances in very low concentrations in the wastes and to the possibility of their synthesis during incineration.

1.5 The procedures described below are considered to apply equally to the interpretation of "harmlessness" (paragraph 8 of Annex I) and "trace contaminants" (paragraph 9 of Annex I) of emission products resulting from the incineration of wastes and other matter at sea. The emission products may not be regarded as "trace contaminants" and/or being "rapidly rendered harmless" if they occur in such amounts that the incineration of the wastes or other materials could cause undesirable effects, especially the possibility of chronic or acute toxic effects on marine organisms or human health or wildlife whether or not arising from their bioaccumulation in marine organisms and especially in food species. A persistent substance should not be regarded as "harmless" except when present as a "trace contaminant".

1.6 The maximum permissible stack concentration of substances referred to in paragraphs 1.3 and 1.4 above should be based on the procedures outlined below and the best available technology. If the permissible stack concentration is higher than that resulting from the mandatory combustion efficiency specified in the addendum to Annex I to the London Dumping Convention, the combustion efficiency required by the Regulations shall apply.

2 Procedures for the Evaluation of the terms "Trace Contaminants" and "Rapidly Rendered Harmless"

2.1 The maximum permissible stack concentration should be established using a mathematical plume model (taking into account the prevailing atmospheric conditions at the incineration site and the maximum permissible atmospheric concentrations) and by using a dispersion model (taking into account the interaction of the plume with the marine environment and the maximum permissible environmental concentrations for marine life).

2.2 The maximum permissible environmental concentration for the protection of marine life should be established using the procedures developed for dumping and described in the Interim Guidelines for the Implementation of paragraphs 8 and 9 of Annex I of the London Dumping Convention (LDC IV/12, Annex 5).

2.3 The maximum permissible atmospheric concentrations for the protection of human health and wildlife should be established, taking into account, among other things, exposure time, site location, and impact on populated areas. A Contracting Party in concurrence with its neighbouring States may develop and use individually or through a regional convention, procedures to establish air quality criteria to be used in determining acceptable atmospheric concentrations.

3 Consultation

3.1 If a Contracting Party has doubts about the results of any evaluation mentioned above, the Contracting Party should consult with the Organization and other parties as provided for in LDC IV/12, Annex 5, paragraphs 12-17.

ANNEX 10

RESOLUTION LDC RES.8(IV) ON THE

REVISED IAEA DEFINITION AND RECOMMENDATIONS OF 1978 CONCERNING
RADIOACTIVE WASTES AND OTHER RADIOACTIVE MATTER REFERRED
TO IN ANNEXES I AND II TO THE LONDON DUMPING CONVENTION

THE FOURTH CONSULTATIVE MEETING,

RECALLING the obligations of Contracting Parties regarding the implementation
of the London Dumping Convention as set out in the Annexes to that Convention.

APPRECIATING the Revised IAEA Definition and Recommendations of 1978
Concerning Radioactive Wastes and Other Radioactive Matter referred to in
Annexes I and II to the London Dumping Convention (INFCIRC/205/Add.1/Rev.1)
circulated by the Secretary-General of IMCO to Contracting Parties to the
Convention in circular LDC.2/Circ.29 of 29 January 1979,

NOTES the Definition of High-Level Radioactive Wastes or Other High-Level
Radioactive Matter Unsuitable for Dumping at Sea,

RESOLVES that Contracting Parties to the Convention will apply the
Definition and implement to the best of their ability the Recommendations
provided by the IAEA, and

ENCOURAGES the IAEA to continue its review of the Definition and
Recommendations taking into account statements and comments provided by
Contracting Parties.

ANNEX 11

SUBSTANTIVE ITEMS TO BE INCLUDED IN THE AGENDA FOR THE
FIFTH CONSULTATIVE MEETING AND FOR THE INTERSESSIONAL
MEETING OF THE AD HOC SCIENTIFIC GROUP ON DUMPING

Fifth Consultative Meeting

1. Procedures for the consideration and adoption of amendments to the London Dumping Convention.
2. Report of the Ad Hoc Scientific Group on Dumping:
 - .1 Dumping of Wastes at Sea
 - .2 Incineration of Wastes at Sea
3. Consideration and adoption of amendments of Annexes to the London Dumping Convention.
4. Matters related to the dumping of radioactive wastes at sea.
5. Procedures for the effective application of the Convention.
6. Consideration of the review of Articles of the Convention in the light of the outcome of the Third United Nations Conference on the Law of the Sea.
7. Relations with other organizations.

Ad Hoc Scientific Group on Dumping

1. Review of Annex I.
 - (a) Consideration of lead for inclusion based on new information.
 - (b) Improvement of Guidelines for Classification of Substances into Annex I.
 - (c) Develop a list of hazardous substances for consideration for inclusion in Annex I, e.g. specific pesticides or groups of pesticides.
2. Review of Annex II.
 - (a) Development of better definition for "significant amounts" based on new proposals.
 - (b) Improvement of Guidelines for Classification of Substances into Annex II.

- (c) Development of a list of hazardous substances for consideration for inclusion in Annex II.
 - 3. Review of Annex III.
 - (a) Consideration of proposals for amendments to Annex III subject to the submission of documented proposals.
 - (b) Consideration of the Co-operative Research Report No. 76 submitted by the International Council for the Exploration of the Sea (ICES).
 - 4. Review of reports and studies on the disposal of radioactive wastes at sea for consistency with the requirements of the Annexes to the Convention.
 - 5. Development of criteria for the selection of emergency disposal sites.
 - 6. Review of monitoring activities carried out by national and international institutions for the purposes of the London Dumping Convention.
 - 7. Review of Interim Notification Procedures - evaluation of data submitted by Contracting Parties.
 - 8. Exchange of information on new land-based treatment techniques, if available.
 - 9. Incineration at sea.
 - (a) Review and consolidation of technical guidelines and procedures for application of paragraphs 8 and 9 of Annex I.
 - (b) Consideration of establishment of air quality criteria for Annex I substances for incineration at sea.
 - (c) Consideration of new information on research on incineration at sea.
-