



SECOND CONSULTATIVE MEETING OF
CONTRACTING PARTIES TO THE
CONVENTION ON THE PREVENTION
OF MARINE POLLUTION BY DUMPING
OF WASTES AND OTHER MATTER
26-30 September 1977
Agenda item 12

IMCO

REPORT OF THE SECOND CONSULTATIVE MEETING

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I. INTRODUCTION

1. The Second 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 26 to 30 September 1977.

2. The Meeting was attended by delegations from the following States Contracting Parties to the Convention:

| | |
|---------|----------------------|
| CANADA | PANAMA |
| CHILE | SPAIN |
| DENMARK | SWEDEN |
| FRANCE | UNITED ARAB EMIRATES |
| ICELAND | USSR |
| MEXICO | UNITED KINGDOM |
| NORWAY | UNITED STATES |

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

| | |
|------------------------------|--------------|
| AUSTRALIA | LIBERIA |
| BELGIUM | NETHERLANDS |
| CYPRUS | PORTUGAL |
| FINLAND | SINGAPORE |
| GERMANY, FEDERAL REPUBLIC OF | SOUTH AFRICA |
| GREECE | SWITZERLAND |
| IRELAND | THAILAND |
| JAPAN | |

by observers from the following United Nations Organizations:

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

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

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)
COMMISSION OF THE EUROPEAN COMMUNITIES (EEC)
OSLO COMMISSION
INTERIM PARIS COMMISSION
GROUP OF EXPERTS ON THE SCIENTIFIC ASPECTS OF MARINE POLLUTION (GESAMP)
INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)
ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES (OPEC)
INTERNATIONAL CHAMBER OF SHIPPING (ICS)

3. At the opening of the Meeting, Mr. H.R. Bardarson (Iceland) was unanimously re-elected Chairman and Dr. V. Kotliar (USSR) First Vice-Chairman; Mr. W. Astié-Burgos (Mexico) was unanimously elected Second Vice-Chairman.

4. The first Meeting of the Ad Hoc Scientific Group established by the First Consultative Meeting was held on 27 and 28 September 1977. In addition, it was decided to convene, on 28 September, an Ad Hoc Working Group on Incineration at Sea (Agenda item 4), to consider the report of intersessional consultations on this subject. The Consultative Meeting adjourned on those days to enable the Scientific Group and the Working Group on Incineration at Sea to hold meetings with full interpretation facilities.

II. ADOPTION OF THE AGENDA

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

6. The Meeting took note of a list prepared by the Secretariat (LDC II/2) of inter-governmental and non-governmental organizations to which the Secretary-General had issued an invitation to the Second Consultative Meeting subject to approval by the Meeting. The Meeting approved the participation of those organizations which had expressed a wish to do so, in accordance with Rule 3(d) and (e) of the Rules of Procedure. For future meetings, it was agreed that invitations should be sent to all the organizations listed in LDC II/2.

7. The Norwegian delegation felt that the Contracting Parties and inter-governmental organizations participating would normally possess the necessary technical expertise related to the objectives of the Convention. For practical reasons the participation of non-governmental organizations should therefore be restricted to meetings where their participation is considered strictly necessary. In such cases they should be specially invited. For plenary meetings, special attention should be paid to Rule 4(3) of the Rules of Procedure.

III. STATE OF RATIFICATION OF THE CONVENTION

8. The Meeting noted the present status of the Convention as set out in the Report of the Secretary-General (LDC II/3). In particular, it was noted that, since the First Consultative Meeting, acceptances had been received from six Governments (Cape Verde, Chile, France, Libyan Arab Jamshiriya, Monaco and Morocco). The Meeting welcomed these acceptances which raised the total number of Contracting Parties from 29 to 35.

9. As requested by the First Consultative Meeting, the Secretary-General had addressed an enquiry to Governments (Circular Letter No. 356) inviting them to accept the Convention as soon as possible and to indicate any specific problems they had met or assistance they required in implementing its provisions. The Meeting noted (LDC II/3/Add.1) replies to this enquiry from Australia, Austria, Greece, South Africa and the United Kingdom (Hong Kong) which indicated the intention of those countries to accept the Convention on completion of the necessary procedure and establishment of the official machinery required. Verbal statements were also made by the observers from the Federal Republic of Germany, Finland, Greece, Japan, the Netherlands, Portugal and South Africa, which indicated that the procedure for acceptance was now well advanced and their Governments expected to be able to ratify the Convention in the near future. The Meeting welcomed this information and expressed the hope that other States would soon be able to report similar progress.

IV. INCINERATION AT SEA

10. The Meeting took note of the Report of a Consultation on Incineration at Sea (LDC II/4) which had been convened by the Secretary-General during the intersessional period in implementation of the Resolution adopted by the First Consultative Meeting (LDC I/16, Annex VI). In particular, the Meeting noted the Draft Technical Guidelines on the Control of Incineration at Sea, prepared by the experts, together with the following comments and related information:

- (a) Outcome of the thirty-sixth session of the Maritime Safety Committee with regard to the safety aspects of dumping at sea (LDC II/4/Add.1);
- (b) Comments on the Draft Technical Guidelines submitted by the Governments of Canada and the Federal Republic of Germany (LDC II/4/Add.2);
- (c) Comments on the measurement of efficiency of the incinerator submitted by experts from Canada, Federal Republic of Germany, United Kingdom and United States (LDC II/4/Add.3); and
- (d) Outcome of the twentieth session of the Sub-Committee on Safety of Navigation with regard to safety matters in relation to incineration and dumping operations at sea (LDC II/4/Add.4).

11. In addition to the above the United States delegation circulated a report on the At-Sea Incineration of Organochlorine Wastes on board the M/T Vulcanus, which describes analytical techniques and results on investigations carried out in connexion with the burning of wastes in March 1977. The French delegation also described a joint Franco-American Programme on the control of incineration procedures at sea. Details of this study will be circulated to Contracting Parties by the Secretariat after the Meeting. The delegation of the Netherlands reported the outcome of a meeting of experts on incineration at sea which was held in The Hague in May 1977, in particular to discuss scientific investigations on incineration at sea planned by the Federal Republic of Germany, France and the Netherlands.
12. In order to consider the technical aspects of the Guidelines on the basis of the comments submitted by delegations and Governments, together with suggested amendments put forward by the Sub-Committee on Safety of Navigation (Annex to LDC II/4/Add.4), the Meeting set up an Ad Hoc Working Group under the chairmanship of Dr. M.G. Norton (United Kingdom). The Group made proposals for amendments to the draft Guidelines as contained in its report (LDC II/WP.3/Rev.1). The Meeting accepted these proposals and approved the contents of these Interim Guidelines as recommended by the Consultation on Incineration at Sea and amended by the Working Group.
13. With regard to the format of the Technical Guidelines, several delegations emphasized the need for formal binding provisions such as an amendment to the London Dumping Convention, a separate protocol to the Convention or an entirely separate instrument, and proposed that this matter be examined in depth at the Third Consultative Meeting. A number of delegations supported the view expressed by the Consultation on Incineration at Sea (paragraph 41, LDC II/4) that some further development of the provisions would be required in the light of experience, particularly during the initial period of implementation. It was therefore agreed, as an interim measure, to recommend the implementation of the Guidelines in their present form on the understanding that they should form the basis of a legal instrument adopted within the framework of the London Dumping Convention. In the light of the above discussion, the Secretariat prepared a draft Resolution on incineration at sea (LDC II/WP.2).
14. The French delegation proposed that the Contracting Parties should be invited to take action within the framework of the Third United Nations Conference on the Law of the Sea, in order to ensure that incineration at sea

is listed as one of the sources of pollution covered by the provisions currently being drawn up. Several delegations pointed out that the definition of dumping appearing in Article 1(5)(a) of the Informal Composite Negotiating Text already included incineration at sea.

15. The Norwegian and Swedish delegations proposed the inclusion in the draft Resolution of a paragraph reflecting the view of several Contracting Parties that incineration at sea should be regarded as an interim measure until such time as alternative methods are more fully developed. Several delegations felt that the intent of such statement had been covered by paragraph 2(f) of the draft Guidelines and were not in favour of the insertion of the proposed paragraph in the draft Resolution.

16. After discussion, the Meeting adopted a Resolution on Incineration at Sea as shown at Annex II. It was understood that the adoption of this Resolution did not prejudice the form of any legal instrument to be ultimately adopted.

17. The observer from the Oslo Commission informed the Meeting that requirements on the control and approval of incineration operations at sea had been prepared by a Working Group on Incineration within the frame of the Oslo Convention. The final format of adoption of the Code of Practice on Incineration at Sea, which is very similar to the Technical Guidelines on Incineration, will be considered at the next meeting of the Oslo Commission in December this year. Several delegations expressed their views that the technical requirements under both the London and Oslo Dumping Conventions should be harmonized.

18. The Meeting endorsed the views expressed by the Ad Hoc Working Group that it would be desirable to harmonize, as far as possible, the work of the respective groups on incineration under the London and Oslo Dumping Conventions. Subject to concurrence by the Oslo Commission, the Meeting agreed that appropriate contacts with the Oslo Commission might be set up to achieve this objective. The Meeting accordingly requested the Secretariat to consult with the Oslo Commission Secretariat with a view to organizing, if possible, joint meetings of technical experts under the two Conventions.

19. With regard to future work, the Meeting endorsed the suggestion by the Working Group that a meeting of the intersessional Working Group on Incineration should be convened when the outcome of current research programmes becomes available, possibly in June 1978, following the meeting of

the intersessional Working Group proposed by the Ad Hoc Scientific Group on Dumping, but in any event before the Third Consultative Meeting (see paragraph 74 below). The Secretariat was requested to bear this proposal in mind in its consultations with the Oslo Commission.

20. In response to a request made by the Marine Environment Protection Committee at its seventh session, the Meeting considered a draft IMCO Assembly Resolution prepared by that Committee recommending the prohibition of the bulk carriage of polychlorinated biphenyls (PCBs) (LDC II/4/1).

21. Some delegations stressed the point that there exist doubts as to the efficiency of ocean combustion of certain PCBs, which are in many cases hazardous to the marine environment. It was pointed out, however, that the present draft of the Technical Guidelines on Incineration does not cover the routine incineration of these substances (LDC II/4, section 4.5.5), but that special requirements are needed. Several delegations would prefer to incinerate PCBs on land or to use other land-based disposal methods. In that connexion, the United States delegation drew the attention of the Meeting to the fact that the Draft Resolution could, as currently worded, be construed as prohibiting the bulk coastal transport of PCBs by a vessel from one port to another for the purpose of incineration on land.

22. The Meeting endorsed the amendments to the Draft Resolution proposed by the Working Group (LDC II/WP.3/Rev.1), paragraph 17) and requested the Secretariat to convey these proposals to the IMCO Assembly, together with the above comments.

V. NOTIFICATIONS UNDER ARTICLE VI(4) OF THE CONVENTION

23. The Meeting had before it two papers prepared by the Secretariat (LDC II/5, LDC II/5/Add.1) covering:

- (a) a review of the Interim Notification Procedure (LDC I/16, Annex IV);
- (b) a summary survey of present and planned monitoring activities;
- (c) a report on special and general permits issued during 1976.

24. With respect to the Interim Procedure, the Meeting welcomed the action taken by the Oslo Commission at its third meeting (Dublin, 26-29 October 1976) to modify its notification procedures to ensure their harmonization with the London Dumping Convention procedure.

25. The Meeting recalled that the following two questions should be further considered in relation to the Interim Procedure:

- (a) the interpretation of the words "containing significant amounts of" in Annex II, Section A of the Convention on the basis of recommendations made by the Ad Hoc Scientific Group;
- (b) the extension of the Interim Procedure to cover the report on the nature and actual quantities of waste dumped and the report on monitoring the condition of the sea.

26. With regard to the question mentioned in (a) above, the Meeting noted that the Ad Hoc Scientific Group concluded that the interpretation, as agreed at the First Consultative Meeting (LDC I/16, paragraph 39), could continue to be used for the time being until the Ad Hoc Scientific Group has reviewed the interpretation in more detail and agreed on a revised text.

27. In considering the question in (b) above, the Meeting had before it the pro forma of the Annual Report on dumpings carried out during a particular year, which had been adopted by the Oslo Commission (LDC II/5, Annex I). In the ensuing discussion it was recognized that this was a source of detailed data on inputs by dumping into the restricted area of the Oslo Convention. One of its purposes was to provide data for the Commission's Monitoring Group to formulate monitoring programmes appropriate to the area covered by the Convention. One delegation expressed the opinion that this form of report would not be entirely appropriate to the London Dumping Convention.

28. Some suggestions were made on the amendments to the Interim Procedure, but after discussion it was felt that there was no pressing need, at this Meeting, to amend this procedure until further experiences have been gained and the procedure is thoroughly reviewed by the Ad Hoc Scientific Group. Accordingly the Meeting agreed that the Interim Procedure should remain valid for the time being.

29. In the meantime, the Meeting agreed that the intersessional working group should:

- (a) discuss the Interim Procedure with a view to improvement; and
- (b) consider how the procedure should be extended to cover the aspects mentioned in paragraph 25(b) above, taking into account the Oslo Commission's scientific report.

30. The Meeting took note of the summary of programmes and activities concerning monitoring of the conditions of the sea prepared by the Secretariat (LDC II/5, Annex II). The summary covered on-going and planned monitoring programmes and activities carried out by various international organizations at global and regional levels.

31. The Canadian delegation pointed out that monitoring programmes are also carried out in many countries at national level and indicated that Canada would submit annual reports to the Secretariat highlighting results of scientific research, monitoring programmes and related studies. The Meeting welcomed the offer by Canada and invited other Contracting Parties to submit similar information.

32. In considering the report on special and general permits issued during 1976, prepared by the Secretariat (LDC II/5, Annex III and LDC II/5/Add.1), the Meeting noted that only five Contracting Parties had submitted reports on special and general permits issued during 1976; it was also recalled that at the First Consultative Meeting, Signatory States had been requested to submit reports in order to prepare a comprehensive picture of dumping activities. The Secretary was instructed to remind Contracting Parties of their obligations under Article VI(4) of the Convention.

33. With regard to the form in which the annual report on permits was presented (LDC II/5, Annex III), some delegations expressed the wish that more detailed information could be made available. The Secretariat stated that it kept in its archives the full reports submitted by the Contracting Parties which could be made accessible to those Parties at any time.

VI. DUMPING OF RADIOACTIVE SUBSTANCES

(a) Consideration of the progress report by IAEA on the pending revision of the Definition and Recommendations

34. The Meeting received a progress report prepared by the IAEA Secretariat (LDC II/6(a)) summarizing the work carried out by the IAEA on the revision of the Provisional Definition and Recommendations. The work included the review of the oceanographic basis and the radiological basis, using the Shepherd model. In presenting the progress report the observer from the IAEA indicated that a revised Definition and Recommendations may be expected to be completed in time for consideration by the Third Consultative Meeting.

35. The Meeting noted with satisfaction the progress of work made by the IAEA and looked forward to receiving the revised Definition and Recommendations at its next meeting.

36. The United States delegation expressed the hope that all of the comments on the Provisional Definition and Recommendations reflected in the report of the First Consultative Meeting would be taken into account by the IAEA before completing the revised Definition and Recommendations.

37. Some delegations expressed concern over the conclusions reached by the IAEA Consultants' Meetings, as recorded in paragraph 8 of the progress report, that there were no "high-level" radioactive wastes that would be intrinsically unsuitable for dumping at sea. Such a conclusion would conflict with the provisions of Article IV(a) and paragraph 6 of Annex I of the Convention.

38. In response, the observer from the IAEA assured the Meeting that the conclusion of the consultants should in no way be taken as representing the view of the IAEA in regard to the interpretation and application of the Convention. He stated that, in further work of the IAEA in this field, views expressed by the Consultative Meeting and the Contracting Parties to the London Dumping Convention would be fully taken into account, and close collaboration would be maintained with IMCO and other competent international organizations such as OECD/NEA. He stated further that, in the opinion of the IAEA, paragraph 8 of the progress report should not be regarded as suggesting any departure from the responsibilities vested in the IAEA for the purposes of Annexes I and II of the Convention.

(b) Notification and prior consultation procedures with regard to dumping of radioactive waste

39. The Meeting received a report prepared by the Secretariat (LDC II/6) on a study of the question of notification and prior consultation procedure with regard to dumping of radioactive substances. The report summarized the requirements of the London Dumping Convention in regard to the notification for the dumping of radioactive waste, the recent action taken by the IAEA Board of Governors on the extension of its role in the area of sea dumping of radioactive wastes and the action taken by the OECD/NEA concerning the development of a multilateral mechanism for sea dumping of radioactive wastes.

40. The Meeting was further informed (LDC II/6/Add.1) that the OECD Council had adopted, on 22 July 1977, a Decision Establishing a Multilateral Consultation and Surveillance Mechanism for Sea Dumping of Radioactive Waste. A copy of that Decision (C(77)115) was made available to the Meeting.

41. It was noted that certain OECD Member States had abstained on the adoption of the Decision or indicated that the acceptance of the Decision was contingent upon the requirements of their constitutional procedure or of other internal administrative provisions.

42. The Meeting welcomed the initiative taken by the IAEA for the control of dumping of radioactive wastes, which would be a valuable contribution to further the objectives of the London Dumping Convention. The Meeting also welcomed the OECD Decision which, as stated in its preamble, had been adopted with a purpose consistent with the objectives of the London Dumping Convention and the IAEA Definition and Recommendations considering that several Member countries object in principle to sea dumping operations, and with no intention of encouraging the sea dumping of radioactive wastes.

43. In regard to the obligations of the Contracting Parties under the London Dumping Convention on the notification and prior consultation for the dumping of radioactive wastes, the Secretariat reported that, under the existing provisions of the London Dumping Convention, all wastes listed in Annex II of the Convention would be treated in the same manner and, consequently, there was no mandatory requirement for the establishment of a prior consultation and notification mechanism, except in the case of emergency as referred to in Article V(2).

44. After discussion, the Meeting agreed that the implementation of the OECD Decision by OECD Member States which are Contracting Parties to the London Dumping Convention would not relieve them of their obligations under the Convention in relation to the dumping of radioactive wastes; in particular the prior consultation procedure could not be regarded as a substitute for the submission of notifications under Article VI(4) of the Convention. In this connexion, the observer from the IAEA expressed the view that, if and when such procedure would be developed for possible adoption within the framework of the Convention, it should be applied to all materials covered by the Convention.

45. The observer from the Federal Republic of Germany expressed the view that, if the Contracting Parties wish to consider whether a mechanism for the control of dumping of radioactive waste should be established, the work already achieved by the OECD/NEA should be taken into account with the aim of setting up a suitable similar mechanism.

VII. PROMOTION OF TECHNICAL ASSISTANCE

46. The Meeting considered two papers prepared by the Secretariat (LDC II/7, LDC II/7/Add.1) summarizing the action taken to follow up the decisions taken by the First Consultative Meeting in the field of technical assistance.

47. The Meeting noted the progress made by the Secretariat in compiling a roster of appropriate experts on the basis of nominations and information provided by Contracting Parties, and agreed that States which are not Contracting Parties should also be encouraged to nominate experts for inclusion in the roster. Several observers intimated their intention of taking such action.

48. One delegation suggested that, after the compilation of the roster of experts, the Meeting should consider how this expertise could be made available to countries requiring assistance. Another delegation requested the Secretariat to give an indication of how many requests had been received to date for technical assistance in implementation of the Convention.

49. The Secretary explained that the Organization had been compiling rosters of experts in different fields of IMCO activities, and the roster in the field of dumping was an extension of this undertaking. The roster would be used by the IMCO Secretariat as reference material, which could be utilized to the best advantage when implementing technical assistance projects relating to dumping.

50. The Secretary further explained that most requests to IMCO for technical assistance were submitted in general terms and that this might include matters pertaining to dumping, although no particular record had been kept of requests which referred to dumping specifically. A request had been received from a country in the Pacific which involved the disposal of a bi-product of the exploitation of bauxite, and there may be other requests on which advice on dumping had been sought. The Secretary offered to prepare a report on the technical assistance activities of IMCO pertaining to marine pollution for the Third Consultative Meeting, similar to a report which had been prepared for the Marine Environment Protection Committee.

51. The Secretary stated that, in dealing with requests for technical assistance made to IMCO, assistance can usually be given, depending on the availability of funding, from UNDP, UNEP or national bilateral aid agencies such as SIDA, NORAD and CIDA. In some cases assistance is financed by the

recipient country on a funds-in-trust basis. Advice could also be given by the Marine Pollution Adviser located at IMCO Headquarters, London, or by the Regional Marine Pollution Adviser for Latin America, based in Santiago, Chile.

52. The Meeting took note of present arrangements and was in agreement that no special mechanism for providing assistance was required at the present time in the field of dumping.

53. The Meeting noted the action taken by the Secretariat concerning the preparation of a manual or guidelines for use by developing countries on "the disposal and treatment of waste and other measures to prevent and mitigate pollution caused by dumping", as called for by Article IX(c) of the Convention. The Meeting noted that this topic had been referred to GESAMP and was being considered by a GESAMP Working Group currently working on the scientific aspects of removal of harmful substances from waste water. The Meeting recommended that experts and specialists in dumping should also be included in this work.

54. With regard to the preparation of a bibliography of reports, publications and other documents relating to pollution by dumping, the Meeting noted that the Secretariat had requested GESAMP for assistance in the compilation of the material. In this connexion, the Canadian delegation offered to contribute material to assist in the preparation of such a bibliography, and expressed the hope that other Contracting Parties would also participate.

55. The Meeting was informed by France (LDC II/7/1) of a training course in marine pollution held at Marseilles in June 1977, in which marine pollution problems raised by dumping and incineration were considered. A further course to be held in June 1978 will include an option relating to dumping/incineration. The Meeting noted this information and welcomed the activities in France in this field.

VIII. PROCEDURES FOR THE SETTLEMENT OF DISPUTES

56. The Secretary reviewed the discussion which had taken place at the First Consultative Meeting set out in the note by the Secretariat (LDC II/8). The consensus then had been that it would not be advisable to have a substantive discussion on the settlement of disputes pending the outcome of the Law of the Sea Conference (LDC I/16, paragraph 26). It had been concluded, however, that the matter should be reviewed at the Second Consultative Meeting.

57. A number of delegations expressed the view that procedures for the settlement of disputes should be developed as soon as possible, as required by Articles X and XI of the Convention. Such procedures would be consistent with both the substance and the intention of Article 282 of the Informal Composite Negotiating Text (ICNT) (United Nations Document A/CONF.62/WP.10, 15 July 1977) of the Third United Nations Law of the Sea Conference. Two delegations, however, were of the opinion that action on this matter should await the outcome of this Conference so that the dispute procedures of the London Dumping Convention would conform to the principles adopted by the Law of the Sea Convention.

58. The delegation of the USSR proposed that, in the meantime, the Contracting Parties to the London Dumping Convention should agree to observe the provisions of Article 33 of the UN Charter on the peaceful settlement of disputes.

59. Canada and the United States subsequently submitted jointly a paper (LDC II/WP.4), drawing attention to the fact that, although the Third United Nations Conference on the Law of the Sea had not yet come to a conclusion, Article 282 of the ICNT contemplated reliance on existing or alternative dispute settlement procedures outside the Law of the Sea treaty. These delegations advocated the development of a dispute settlement procedure tailored to the specific needs of Contracting Parties to the London Dumping Convention. To this end, Annex I of the paper was a draft resolution on settlement of disputes and Annex II a proposed amendment to the London Dumping Convention to provide procedures for the settlement of disputes. The delegations of Canada and the United States further indicated that they would welcome comments on those procedures, or the submission of alternative procedures, for consideration by the Third Consultative Meeting.

60. Several delegations supported in principle the draft resolution in LDC II/WP.4, Annex I, while other delegations expressed reservations on its contents. In the light of this, the Canadian delegation subsequently introduced a revised draft resolution the purpose of which was to meet the reservations expressed on the need to formulate proposals in advance of the outcome of the Law of the Sea Conference on this matter. After considering this revised proposal the Meeting adopted the Resolution shown at Annex III.

61. The French delegation informally circulated to the Meeting a document setting out the main lines of emphasis that might govern the drawing up of procedures for the settlement of disputes. This document would be issued for the Third Consultative Meeting.

IX. REPORT OF THE AD HOC SCIENTIFIC GROUP ON DUMPING

62. The Meeting considered and approved the Report of the Ad Hoc Scientific Group on Dumping (LDCSG/9) which was introduced by the Chairman of the Group, Dr. M. Waldichuk (Canada). The full text of the Report is reproduced at Annex IV.
63. The Meeting considered draft guidelines for the implementation of paragraphs 8 and 9 of Annex I of the London Dumping Convention (LDCSG/9, Annex) recommended by the Scientific Group, and endorsed these draft guidelines in principle for further consideration as a priority item by the inter-sessional working group referred to in paragraph 72.
64. In considering the Report of the Scientific Group, several delegations made comments and statements relating to various matters including the above-mentioned guidelines. These are summarized in the following paragraphs.
65. The Japanese observer described Japanese experience in dumping materials containing Annex I substances. It was his view that no special permit is required if such a substance is rendered completely harmless by chemical, physical or biological means. He stressed that, as noted in paragraph 8 of Annex I of the Convention, paragraphs 1-7 of this Annex do not apply to substances which are rapidly rendered harmless by such processes in the sea. He was of the opinion, moreover, that permits could be issued without tests for repeated dumping of the same waste.
66. The Japanese observer further stated that the environmental quality standards applied in Japan are based on the upper limit of the background concentration. He raised the question as to whether there is a need to specify a de minimis level below which no control measures are required. The observer from the Federal Republic of Germany pointed out that there have been some controversial discussions on this question in the context of another convention. In his view acceptable emission standards should also be considered.
67. Japan offered to provide information on its experience in controlling the dumping of materials containing Annex I and II substances, and was willing to co-operate in any future study on the toxicity of Annex I substances.
68. The Portuguese observer drew attention to the difficulty in translating the word "relevant" in paragraph 9(a) of the Guidelines and suggested that an explanatory footnote should be inserted as follows:

"The term 'relevant' refers not only to trace contaminants, but also to any substance or compound listed in Annex I or II of the Convention."

69. The Australian observer expressed concern that, with reference to paragraph 17 of the Report of the Scientific Group, the need for "firm scientific evidence" to be submitted in support of proposals to amend the lists in Annexes I and II could entail a long delay in putting forward such proposals. He therefore suggested that those words should be replaced by "supporting information".

70. The Canadian delegation drew attention to the fact that Section C (Procedures for Consultation) of the Guidelines annexed to the Report, appears, by virtue of the cross reference in paragraph 8 of Annex I, to pertain to Article XIV(4)(e) and thence to Article V(2) of the Convention. After discussion of this question, it was concluded that, in this respect, the Convention is rather unclear and requires clarification.

71. With regard to the future work of the Scientific Group, it was noted that although the Group had considered all the items referred to it by the Consultative Meeting, because of the short time available it had not been able to complete the work on several items which called for detailed study. These included, in order of priority:

- development of details of proposed tests for "harmlessness" and "trace contaminants";
- detailed consideration of the scientific data presented on proposals for the review of Annex I;
- detailed consideration of the scientific data presented on proposals for the review of Annex II and further consideration of the definition of "significant amounts";
- detailed consideration of the scientific data presented on proposals for the review of Annex III.

72. In view of this situation the Meeting agreed that an intersessional working group should be established to carry out further work on the above items as well as those items mentioned in paragraphs 29 and 63 above, and report the outcome for consideration by the Third Consultative Meeting. The implications of this decision were considered under item 10 of the Agenda.

X. FUTURE WORK PROGRAMME AND DATE OF NEXT SESSION

73. Taking into account the work accomplished during the present meeting, the Consultative Meeting considered its future work programme and agreed that the items to be considered at the Third Consultative Meeting should include the following:

- incineration at sea;
- consideration of the revised IAEA Definition and Recommendations on dumping of radioactive substances;
- procedures for the settlement of disputes;
- review of the annual report on permits issued during 1977, and research and monitoring programmes;
- promotion of technical assistance;
- relations with other organizations;
- consideration of the reports of the intersessional working groups.

74. With regard to the legal aspects of dumping, the Meeting felt that the consideration of proposed instruments on incineration at sea and the settlement of disputes at the Third Consultative Meeting would be greatly facilitated if intersessional work was organized to consider various proposals submitted by the Contracting Parties. The Meeting agreed that an intersessional legal working group should be set up to consider the subjects and to make appropriate recommendations to the Third Consultative Meeting.

75. Recalling its decisions to set up intersessional working groups on the technical aspects of incineration at sea (paragraph 19 above) and on the scientific aspects of dumping (paragraph 72 above) the Meeting agreed that the following three meetings should be convened in June/July 1978:

- Ad Hoc Scientific Group on Dumping
- Ad Hoc Group on Incineration at Sea
- Ad Hoc Group of Legal Experts.

The Secretariat was requested to make the necessary arrangements for convening these meetings. The Meeting invited the Contracting Parties to submit proposals and other documents at least two months in advance of the meetings (April 1978).

76. With regard to the possible convening of a diplomatic conference to adopt a new instrument on incineration at sea, the Meeting felt it premature to take a decision on this matter.

77. The Meeting recommended that the meetings referred to in paragraph 75 above should be provided with interpretation for the duration of at least

one week but preferably two weeks. The Meeting also requested the Secretary-General to make appropriate recommendations to the IMCO Council and Assembly with regard to the budgetary provisions necessary for these meetings.

78. Having regard to Rule 7 of the Rules of Procedure, the Meeting requested the Secretary-General to remind the Contracting Parties that, depending upon the outcome of the Ad Hoc Group of Legal Experts, delegations participating in the Third Consultative Meeting may need to be duly accredited by their Governments so that, if appropriate, necessary decisions could be taken at that Meeting to exercise the functions conferred upon the Consultative Meeting under the London Dumping Convention.

79. Some observers queried whether observers would be allowed to submit relevant documents on incineration at sea and settlement of disputes. It was explained that under Rule 4(1) of the Rules of Procedure observers may submit documents relevant to any subject.

80. The Meeting agreed that the Third Consultative Meeting should be held from 9-13 October 1978.

ANNEX I

AGENDA FOR THE SECOND CONSULTATIVE MEETING

1. Election of Chairman and Vice-Chairmen

LDC II/1/1 - Secretariat

2. Adoption of the Agenda

LDC II/1 - Provisional Agenda
 LDC II/2 - Secretary-General
 LDC II/2/1 - Annotations to the Provisional Agenda
 LDC II/WP.1 - Secretariat

3. Report of the Secretary-General on the state of ratification of the Convention

LDC II/3 - Secretary-General
 LDC II/3/Add.1 - Secretary-General

4. Incineration at Sea

LDC II/4 - Secretary-General
 LDC II/4/Add.1 - Secretary-General
 LDC II/4/Add.2 - Secretariat
 LDC II/4/Add.3 - Secretariat
 LDC II/4/Add.4 - Secretariat
 LDC II/4/1 - Secretary-General
 LDC II/WP.2 - Secretariat
 LDC II/WP.3 - Ad Hoc Working Group
 LDC II/WP.3/Rev.1 - Ad Hoc Working Group

5. Consideration of the form and manner of notifications under Article VI(4) of the Convention

LDC II/5 - Secretariat
 LDC II/5/Add.1 - Secretariat

6. Dumping of radioactive substances:

(a) Consideration of the progress report by IAEA on the pending revision of the Definition and Recommendations

LDC II/6(a) - Secretariat

(b) Notification and prior consultation procedures with regard to dumping of radioactive waste

LDC II/6 - Secretariat
 LDC II/6/Add.1 - Secretariat

7. Promotion of technical assistance under Article IX of the Convention

| | |
|----------------|---------------|
| LDC II/7 | - Secretariat |
| LDC II/7/Add.1 | - Secretariat |
| LDC II/7/1 | - France |

8. Procedures for the settlement of disputes

| | |
|-------------|---------------|
| LDC II/8 | - Secretariat |
| LDC II/WP.4 | - Canada, USA |

9. Consideration of the progress report of the Ad Hoc Scientific Advisory Body

| | |
|---------|--------------------------------------|
| LDCSG/9 | - Ad Hoc Scientific Group on Dumping |
|---------|--------------------------------------|

10. Future work programme and date of next session

| | |
|-----------|---------------|
| LDC II/10 | - Secretariat |
|-----------|---------------|

11. Any other business

12. Consideration and adoption of the report

| | |
|-------------|---------------|
| LDC II/WP.5 | - Secretariat |
| LDC II/11 | - Report |

ANNEX II

INCINERATION AT SEA

THE SECOND CONSULTATIVE MEETING,

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

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

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

HAVING CONSIDERED the Report of the Consultation on Incineration at Sea held at IMCO Headquarters, London from 21 to 25 March 1977 including, in particular, the recommendations of the experts concerning the Technical Guidelines on the Control of Incineration of Wastes at Sea,

RECOMMENDS Contracting Parties:

- (a) to implement the Guidelines, the text of which is set out in the Annex, for the purpose of controlling incineration operations at sea as soon as possible; and
- (b) to report to the Secretary-General of the Inter-Governmental Maritime Consultative Organization any experiences which may be gained in applying the provisions of the Guidelines with a view to their future revision by the Consultative Meeting,

DECIDES that the provisions for the control of incineration at sea should be implemented by Contracting Parties on a mandatory basis in the form of a legal instrument adopted within the framework of the London Dumping Convention, and, to this end, invites Contracting Parties to submit proposals for such a legal instrument for consideration and, if possible, adoption by the Third Consultative Meeting.

ANNEX

TECHNICAL GUIDELINES ON THE CONTROL OF
INCINERATION OF WASTES AT SEA

1. Introduction

1.1 The incineration of wastes at sea by Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter must be controlled in such a way that the incineration products and the unburnt residues which may enter the marine environment are in compliance with the London Convention and Annexes I, II and III of the Convention.

1.2 The technical guidelines in this document have been drafted with this objective and are based on the existing scientific knowledge on the incineration process and on a knowledge of current technology. Although the state of knowledge on the incineration of liquid organohalogen wastes in existing vessels has enabled specific guidelines to be drawn up covering the incineration of these wastes, there remain types of waste where knowledge is insufficient at present. Scientific work is, however, proceeding in several countries and consequently these guidelines should need to be kept under review as the results of further research and investigations become available.

1.3 Additionally, it is important not to exclude the development of new techniques provided that it can be clearly shown that they improve the efficiency of destruction.

2. Definition of "Incineration at Sea"

For the purposes of the present Guidelines:

"Incineration at sea" means the deliberate combustion of wastes or other matter on board vessels, platforms or other man-made structures at sea for the purpose of their thermal destruction."

Note: This definition is wider than is necessary to cover the existing vessels which load wastes for the purpose of incineration and is so drafted to ensure that controls on incineration at sea should apply also to 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. 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 platforms) should be excluded from the scope of this definition.

3. Scope of the Technical Guidelines

3.1 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 of the Convention. Thus, the practice of incineration and the residues from it must not harm marine life nor must they interfere with shipping, fishing, amenities, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance and other legitimate uses of the sea.

3.2 Additionally the resolution of the first Consultative Meeting of Contracting Parties to the Convention recognized that the risks of atmospheric pollution should also be taken into account.

3.3 In order to achieve this objective it is necessary to adhere to technical guidelines on the following aspects:

- (a) the specifications, controls and approval of the incinerator;
- (b) the control over the nature of the wastes incinerated;
- (c) the selection of the site of incineration;
- (d) the control on the ship and its operation;
- (e) methods of ensuring compliance with regulations;
- (f) forms of report to the Organization.

Note: It is also necessary to first consider the practical availability of alternative land-based methods of treatment, disposal or elimination, or of treatment to render the matter less harmful, before issuing a permit for incineration at sea according to these guidelines. Bearing this in mind, incineration at sea should in no way be interpreted as discouraging progress towards other environmentally better solutions.

4. Controls and Approval of the Incinerator

4.1 Every vessel which it is proposed to use for the incineration of waste at sea should comply with the technical provisions of this section and should be subject to the surveys specified below. These should be carried out by the Flag State if it is a Contracting Party (in collaboration with other Contracting Parties as necessary) or by another Contracting Party's appropriate authority.

- (a) An initial survey before the vessel, platform or structure is put into service to ensure that the incinerator system will meet the technical guidelines and:

- (i) to approve the siting and types of control thermocouples;
 - (ii) to approve the gas sampling and analytical devices and the manner of recording;
 - (iii) to define the wall temperature at which waste is automatically shut off;
 - (iv) to approve the device by which waste is automatically shut off.
- (b) Periodic surveys, not exceeding every two years, which should ensure that the incinerator continues to comply with the technical guidelines.

4.2 After any survey has been completed, no significant change which could affect the performance of the incineration system should be made without approval of the appropriate authority. Following the satisfactory completion of the survey, a form of approval should be issued if the incineration system is found to be in compliance with the technical guidelines by the Flag State or other appropriate authority.

5. Technical Specifications for the Incinerator

5.1 Means of Introducing the Waste into the Incinerator

5.1.1 The rate and quantity of liquid waste and fuel which is fed to the combustion system should be measured and recorded by a suitable continuous flow measuring device.

5.1.2 Until such devices are installed on existing vessels, an interim method of control should be based on a continuous display of the waste and fuel pump status supplemented by manual checks of the amount of waste burnt every hour, to be recorded in the ship's log.

5.1.3 Where solid wastes are burnt the rate of input should also be recorded.

5.2 Control of the Air Feed to the Incinerator

5.2.1 The amount of air entering the incinerator must be sufficient to ensure that a minimum of 3 per cent excess oxygen is present in the combustion gases near the incinerator stack exit.

5.2.2 The requirement to provide excess air should be monitored by a continuous automatic oxygen analyser to record the oxygen concentration. The position of the gas sampling probe within the incinerator should be approved by the appropriate authority.

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

5.3 Definition of Control Temperatures and the Method of their Recording

5.3.1 The operation of the incinerator should be controlled so as to ensure that the incineration of wastes may not take place at flame temperatures of less than 1200°C and is normally in the range 1300°C - 1600°C .

5.3.2 Temperature records and controls will however be based on the measurement of wall temperature by thermocouples which will have a relationship to the flame temperature which is unique to each incinerator. The appropriate authority should therefore establish the relationship between the readings of each wall thermocouple and the flame temperature, and define the position and type of thermocouples which are to act as control thermocouples. Unless otherwise determined by the appropriate authority, there should be three or more control thermocouples for each incinerator.

5.3.3 From the relationship between wall and flame temperatures, the authority should define:

- (a) the wall temperature below which the flow of waste to the incinerator shall be automatically shut-off via approved equipment (corresponding to a minimum flame temperature of 1200°C);
- (b) the normal operating wall temperatures (corresponding to flame temperature of 1300°C - 1600°C).

The temperature readings of the control thermocouples should be measured and recorded automatically as a continuous and permanent record.

5.4 Residence Time of Incinerator

5.4.1 The residence time of all wastes in the incinerator should be of the order of 1 second or longer at a flame temperature of 1200°C .

5.5 Efficiency of the Incinerator

5.5.1 The efficiency with which the waste is burnt in the incinerator should be based on:

- (i) the combustion efficiency which should be at least 99.9 per cent based on

$$\text{Combustion efficiency} = \frac{C_{\text{CO}_2} - C_{\text{CO}}}{C_{\text{CO}_2}} \times 100$$

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

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

- (ii) The destruction efficiency which is based on a determination of the amount of the organohalogens added to the furnace which is not destroyed.

5.5.2 The routine measurement of the combustion efficiency should be made using automatic analysers for carbon monoxide and carbon dioxide in the combustion gases based on a gas sampling point and analytical apparatus approved by the appropriate authority.

5.5.3 The measurement of destruction efficiency requires further technological development before it can be used routinely or on periodic surveys. However, it is considered that the destruction efficiency of the incinerator should be determined during the initial vessel survey and that this should be in excess of 99.9 per cent.

5.5.4 Although the primary controls on the effectiveness of incineration are through paragraphs 3.3(a) to (e), an additional operational guideline is that there should be no continuous or intermittent flame extension above the plane of the stack or presence of black smoke. In the future it may be possible to routinely measure the total particulate matter in the combustion gases.

5.5.5 Where an appropriate authority proposes to licence the incineration of solid wastes or organohalogen wastes over which doubts as to the efficiency of combustion exist (e.g. PCBs, PCT, TCDD, BHC, DDT), the incinerator operation should be subject to the intensive stack monitoring associated with the initial vessel survey (i.e. including the measurement of O_2 , CO, CO_2 , chlorinated organic content, total hydrocarbon content) plus the monitoring of total particulate matter emitted in the combustion gases.

6. Control over the Nature of Wastes Incinerated

6.1 Every incineration operation at sea should be subject to a permit issued by the appropriate authority or authorities in which the wastes to be incinerated should be specified.

6.2 Before issuing a permit relating to the incineration of waste at sea in an approved incinerator, the information on the characteristics of the waste listed in Appendix A should be required.

6.3 In determining whether to grant a permit, the appropriate authority may, if necessary, analyse representative samples of the producers' waste. Samples may be taken from storage tanks when a number of wastes are mixed before loading on to the ship.

6.4 The appropriate authority should also ensure 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 organohalogen compounds, this requirement is considered to be met if the guidelines of Section 4 are observed.

7. Selection of the Site of Incineration

7.1 In selecting a site for the incineration of wastes, the licensing authority should have regard to the following:

- (a) the area's geographical position, depth of water, and distance from the nearest coast;
- (b) its location in relation to biologically sensitive areas, breeding, spawning and fishing grounds, shellfish breeding grounds or passage areas of living resources in adult or juvenile phases;
- (c) its location in relation to other sensitive areas including beaches and other amenity areas, areas of population, shipping, recreation, mineral extraction, desalination, and other areas of special importance and other legitimate uses of the sea;
- (d) types and quantities of wastes proposed to be incinerated;
- (e) existence of areas where other incineration activities take place;
- (f) the atmospheric dispersal characteristics of the area (including such parameters as wind speed and direction, atmospheric stability, frequency of inversions and fog, precipitation types and amounts, humidity, etc.) in order to determine the potential impact on the surrounding environment of pollutants released from the incineration vessel, giving particular attention to the possibility of atmospheric transport of pollutants to coastal areas;

- (g) oceanic dispersal characteristics of the area (e.g. effects of currents, tides, wind, horizontal transport and vertical mixing) in order to evaluate the potential impact of pollutants introduced into the ocean through atmospheric plume interaction with the water surface;
- (h) the possible presence of submarine cables or pipelines if the vessel is to anchor in the incineration area.

8. General Controls on the Vessel and its Operation

8.1 Disposal of Residues

8.1.1 There must be no means of discharging liquid wastes from the vessel's tanks except by means of the incinerator during normal operations. Consequently where facilities to empty the tanks exist on an incinerator vessel, these should be sealed by the national authority at the port of loading. Breaking of the seal to discharge wastes at sea should subsequently be justified by the master of the vessel on the grounds of force majeure (Article V(1)).

8.1.2 Tank washings should be incinerated at sea in accordance with these guidelines or discharged to port facilities in consultation with the relevant national authorities.

8.1.3 In the combustion of containerised solid wastes, certain residues may remain as ash in the incinerator which may require periodic removal. Such residues should not be removed from the incinerator except while the vessel is in harbour where they should be removed for safe disposal to land. They should not be dumped in the sea from the incinerator vessel.

8.2 The Loading of Wastes

8.2.1 Liquid wastes should not be transferred from barges or other vessels outside harbour limits.

8.2.2 Solid wastes in damaged containers should not be taken on board.

8.2.3 Unless the regulations in the "International Maritime Dangerous Goods Code" prescribe otherwise, containerised solid waste should be stowed on the tween-decks or in the lower hold for new incinerator vessels. With existing incinerator vessels where storage below deck is not possible, containers stored on deck must be held securely within special enclosures to be approved by the Flag State or appropriate authority.

8.2.4 Measures should also be taken to ensure that containers loaded on board are adequately labelled and that they and their contents can only be discharged via the incinerator.

8.3 Prevention of Hazards to other Vessels

8.3.1 In licensing the incineration of wastes on approved incinerator vessels, the appropriate authority should have regard to the need to avoid hazards to other vessels by selecting a proper location of the incineration zones concerned and by ensuring that the relevant maritime authorities are notified of the vessel's date of sailing and intended schedule, as well as its intended movements during incineration (whether underway, at anchor, etc.).

8.3.2 The co-ordinates of permanently designated incineration zones and recommended off-shore incineration routes should be widely promulgated to maritime interests including the marking on navigational charts at the discretion of coastal Administrations.

8.3.3 Regular radio warnings should be broadcast during the period of incineration. The vessel shall respond promptly to radio calls from other vessels or shore stations at all times during the incineration.

8.4 Construction of the Incinerator Vessel

8.4.1 For the carriage of liquid wastes, the incinerator vessel must carry a valid "Certificate of Fitness" as is required under the IMCO Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

8.4.2 The incinerator vessels should comply with the requirements for a Type II ship of the IMCO Code and should adhere to such other provisions as may be defined on the carriage of dangerous chemicals.

9. Methods of Ensuring Compliance with Regulations

9.1 Any vessel used for the incineration of wastes at sea should provide for photographic or other methods as may be approved by the Flag State or appropriate licensing authority of recording essential control variables during each voyage. These records should be reviewed by the national authorities which have granted the incineration permits.

9.2 These records should provide independent confirmation of the following parameters by recording automatically (at a frequency of at least every 15 minutes):

Wall temperature measurements of approved control thermocouples

The oxygen concentration in combustion gases

The date and time of incineration

The vessel position by appropriate navigational means (e.g. LORAN or DECCA NAVIGATION SYSTEMS)

The status of waste, fuel and air pumps (i.e. on/off).

9.3 Additionally, a number of records are to be maintained for inspection by licensing authorities. These are:

Records of the CO and CO₂ concentration in combustion gases

Ship's course and speed (if applicable)

Meteorological conditions, e.g. wind speed and direction

The tank from which waste is taken

The rate of waste input to the furnace

Copies of incineration permits issued by the appropriate authority

Future parameters which may be required subject to satisfactory technical development with regard to measurements, destruction efficiency and total particulate matter in the combustion gases.

10. Notification of Permits to Incinerate Wastes at Sea

10.1 The Organization should be notified immediately following the issuing of a permit to incinerate waste at sea. The form of report for notification is given in Appendix B.

10.2 For the purposes of reporting the details of permits received to Contracting Parties, the Organization should treat notifications of incineration permits in the same way as notifications of general permits to dump (i.e. shall prepare an annual summary of the permit details received for circulation to Contracting Parties).

APPENDIX A

INFORMATION OF RELEVANCE TO APPLICATIONS FOR A PERMIT FOR
INCINERATION OF WASTE AT SEA

- (a) Quantities of substances to be incinerated in each operation.
Frequency of incineration operations (daily, weekly, monthly).
- (b) Form in which the waste is to be incinerated, i.e. solid, sludge, liquid, in bulk or in containers. When waste is packed in containers, give the shape, size and nature of the containers.
- (c) Origin of waste, i.e. industrial processes and/or type of production, from which it comes.
- (d) Composition of the waste (detailed analysis including, as necessary, data on toxicity, persistence and other properties such as reactivity). Information should relate to the following substances:

(Specify whether the analysis relates to dry or wet weight. For low concentrations, give the above information in ppm).

- principal organic compounds
- organohalogens
- other components, e.g.

| | |
|----|----------------|
| Hg | Ni |
| Cd | V |
| As | Fe |
| Pb | |
| Cu | Organosilicons |
| Zn | |
| Be | |
| Cr | |

- (e) Physical properties of the waste:

- | | |
|--------------------|------------------------|
| - specific gravity | - solids in suspension |
| - pH (if relevant) | - viscosity |
| - ash content | - flashpoint |
| - calorific value | |

Other properties which may be of interest to authorities (gel point, vapour pressure, freezing/melting point, solubility, physical stability, etc.)

- (f) Chemical and physical transformation of the waste after incineration, in particular subsequent formation of new compounds, composition of ashes or unburnt residues if possible.

APPENDIX B

FORM OF REPORT TO THE ORGANIZATION ON PERMITS FOR INCINERATION AT SEA

It is proposed that the following information be sent to the Secretariat immediately following the issuing of an incineration permit:

1. General Details

- (a) Authority responsible for issuing permit and inspecting records
.....
- (b) Name of vessel used
- (c) Period of Permit
- (d) Area of incineration (geographical location, distance from nearest coast)
.....
- (e) Total quantity of waste licensed to be burnt during the period in (b)
- (f) Special conditions on the operation of the incinerator and/or vessel outside those specified in the technical guidelines on the incineration of waste at sea
.....
.....
.....
- (g) Special conditions attached to the permit, e.g. monitoring investigations
.....

2. Details of the Wastes to be Burnt

For each waste to be incinerated during the period of the incineration permit, the following information should be included:

- (a) Quantity of waste
- (b) Physical form
- (c) Bulk or containers (size, labelling etc.)
- (d) Industrial process giving rise to the waste

- (e) Composition of the waste:
(Specify whether the analysis relates
to dry or wet weight either in % or ppm)
- Principal organic components
.....
- Organohalogens
Incombustible residues (Hg, Cd,
As, Pb, Zn, Cu, etc.)
- (f) Physical properties of the waste:
- Specific gravity
Calorific value
- (g) Other properties

ANNEX III

SETTLEMENT OF DISPUTES

THE SECOND CONSULTATIVE MEETING,

CONSIDERING the obligations contained in Articles X and XI of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter whereby the Contracting Parties undertake, inter alia, to develop procedures for the settlement of disputes,

RECALLING that at the First Consultative Meeting the Contracting Parties undertook a preliminary examination of procedures for the settlement of disputes in accordance with Article XI of the Convention,

AGREEING that procedures for the settlement of disputes should be developed within the framework of the Convention,

TAKING INTO ACCOUNT the progress of discussions on the peaceful settlement of disputes at the Third United Nations Conference on the Law of the Sea,

AGREES to consider proposals at the Third Consultative Meeting of Parties to incorporate provisions for the settlement of disputes within the framework of the Convention,

INVITES the Contracting Parties to submit suggestions for such provisions to the Secretary-General of the Inter-Governmental Maritime Consultative Organization during the intersessional period,

REQUESTS the Secretary-General of the Organization to circulate, in advance of the Third Consultative Meeting, any such submissions received with a view to the development and possible adoption of such provisions by that Meeting,

INVITES all Contracting Parties, until such time as provisions for the settlement of disputes are adopted, to resolve any disputes in accordance with their obligations under Article 33 of the United Nations Charter.

ANNEX IV

REPORT OF THE AD HOC SCIENTIFIC GROUP ON DUMPING

First Meeting, 27-28 September 1977

I. INTRODUCTION

1. The First Meeting of the Ad Hoc Scientific Group on Dumping was held at IMCO Headquarters from 27 to 28 September 1977 and was attended by representatives from the following States:

| | |
|------------------------------|----------------------|
| AUSTRALIA | NETHERLANDS |
| BELGIUM | NORWAY |
| CANADA | PORTUGAL |
| DENMARK | SOUTH AFRICA |
| FRANCE | SPAIN |
| GERMANY, FEDERAL REPUBLIC OF | SWEDEN |
| GREECE | TRINIDAD AND TOBAGO |
| ICELAND | UNITED ARAB EMIRATES |
| IRELAND | USSR |
| JAPAN | UNITED KINGDOM |
| LIBERIA | UNITED STATES |
| MEXICO | |

and by observers from the following international organizations:

UNITED NATIONS
UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)
INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)
COMMISSION OF THE EUROPEAN COMMUNITIES (EEC)
GROUP OF EXPERTS ON THE SCIENTIFIC ASPECTS OF MARINE POLLUTION (GESAMP)
OSLO COMMISSION
INTERIM PARIS COMMISSION
INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)

2. At the opening of the Meeting Dr. M. Waldichuk (Canada) was unanimously elected Chairman.

Adoption of the Agenda

3. The Agenda adopted by the Scientific Group is shown at Appendix I. This includes all items referred to the Ad Hoc Scientific Group on Dumping by the First Consultative Meeting of Contracting Parties. The action taken by the Group with respect to these items is described in the following paragraphs.

II. HARMLESSNESS OF ANNEX I MATERIALS

4. The Scientific Group was informed of the action taken by GESAMP at its ninth session (7-11 March 1977) in response to the request made by the First Consultative Meeting, i.e. to study the scientific aspects of the problem with respect to the development of criteria for determining "harmlessness" of

Annex I materials (as set out in paragraph 8 of Annex I). In particular it was noted that GESAMP had requested its Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships to carry out this task and prepare a report on the subject for submission to GESAMP at its tenth session in March 1978.

5. As agreed by GESAMP, the Chairman of the Working Group informed the Scientific Group of the progress made on this question (LDCSG/8) including:

- (a) an analysis of the physical, chemical and biological processes which should be taken into account;
- (b) the particular types of substances governed by the term "harmlessness" to which paragraph 8 of Annex I could apply;
- (c) the factors to be considered in determining effects on marine organisms particularly with regard to determining whether or not the minimum criterion for exposure to the substance could be met in a particular situation;
- (d) the possible alternative procedures that could be followed for determination of harmlessness in a given situation.

6. The UNEP observer pointed out that the problem under consideration was a positive and difficult one from the point of view of the protection of the environment. He expressed concern with the introduction of the concept "harmlessness" in relation to substances of concern to the environment. Owing to the complexity of the problem, UNEP, as a sponsoring body of GESAMP, has not yet been in the position to submit a final comment on the report of the GESAMP Working Group on harmlessness of Annex I materials. Hence it was very important that the findings in the report be considered preliminary until GESAMP had had the opportunity of considering the report in its next session in March 1978. Further considerations on the subject might emerge from that session.

7. The UNEP observer also emphasized that UNEP welcomed the fact that the Contracting Parties of the London Convention made use of the GESAMP machinery for obtaining advice on technical questions of this nature. He confirmed that UNEP would financially support the work carried out by the Working Group of GESAMP for the London Convention Parties and would be glad to consider favourably further requests for support of this kind of work.

8. A substantial majority of the Scientific Group concurred with the view expressed by the GESAMP experts that, at the present stage, the concept of harmlessness was mainly applicable to organohalogenes. However, some representatives expressed reservations on this question as, in their view, other substances listed in paragraphs 2-7 of Annex I could be included.

9. The Scientific Group expressed its appreciation to GESAMP for the intensive work which had been carried out with high priority. With regard to paragraph 5(d) above particular note was taken of the various alternative procedures which the Working Group had proposed and the views expressed by the experts regarding their feasibility and practicability. These procedures included the following:

Alternative (A) "Use of Fixed Limits", i.e.

To interpret the wording of Annex I to the Convention in such a way as to enable firm, unequivocal decisions to be made on dumping, by comparing the values of one or a few of the factors referred to in paragraph 5(c) above with specific pass/fail criteria.

Alternative (B) "Use of the Consultative Procedure", i.e.

To provide data referred to in paragraph 5(c) above, but without clear guidance as to what are acceptable fixed limits. The decision on dumping can then be made by a form of consultative procedure that may involve some or all of the Contracting Parties to the Convention.

Alternative (C) "Use of Independent Scientific Body"

To provide data referred to in paragraph 5(c) above, but in each case where dumping is proposed, to submit these data to an agreed independent scientific body for advice to the Contracting Party or Parties on the risk to the marine environment as to whether the dumping could be permitted.

Alternative (D) "Use of Independent Scientific Advice and
a Consultative Procedure"

To provide data referred to in paragraph 5(c) above to an independent scientific body for advice to the Contracting Party or Parties of the hazards to the marine environment of the proposed dumping. The decision on dumping can then be made by a form of consultative procedure that may involve some or all of the Contracting Parties to the Convention.

10. In considering the above Alternatives, the Meeting noted that Alternative (B) had in fact been adopted by the Oslo Commission for the implementation of similar requirements under the Oslo Convention. The Commission has also provisionally agreed on a series of tests for deciding whether or not a substance could be considered to be biologically harmless. Some representatives expressed support for following a similar procedure under the London Convention.

11. A number of representatives felt that there would be a need for a procedure which provided for an administrative decision in addition to a scientific determination. Considerable support was expressed for a proposal by the United States that guidelines for a procedure to interpret the term "harmlessness" should be prepared based on an assessment of the possible environmental impact of the proposed dumping. Assessment would include specified tests as well as consideration of the characteristics of the receiving area. Although the guidelines would enable administrative decisions to be made in some cases, provision should also be made for following a consultation procedure in a situation which could not be covered in the guidelines. The Meeting decided to follow this proposal and, on the basis of a draft prepared by the United States (LDCSG/WP.1), agreed on the Procedure for Consultation set out at Appendix II which is recommended to the Consultative Meeting for adoption.

III. DEFINITION OF "TRACE CONTAMINANTS" REFERRED TO IN ANNEX I, PARAGRAPH 9

12. The Scientific Group reviewed submissions by Canada, the United Kingdom and the United States on the definition of "trace contaminants". After considerable discussion, it was decided to modify a definition provided by the United Kingdom to take into account certain points raised by various delegations. A small drafting party in which the representatives of the United Kingdom, the Federal Republic of Germany and Portugal took part, was formed to redraft the definition. This version was discussed in the Meeting of the Scientific Group and modified to read as follows:

"Trace contaminants are substances which, when present in otherwise acceptable wastes to which they have not been added for the purpose of being dumped, do not occur in such amounts that the dumping of wastes 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".

* The draft definition included "cause significant undesirable effects", but the word "significant" was finally deleted because of difficulties in translation to other languages, especially Russian and Japanese.

It was agreed that the same procedures could be followed for the interpretation of the term "trace contaminants" as for "harmlessness". The procedure in the Annex was consequently amended to apply to both terms.

13. However, some representatives were of the opinion that the definition of "trace contaminants" should be regarded as an interim definition and should be open to further discussion. The Federal Republic of Germany proposed that contaminants should not be regarded as "trace contaminants" if they exist in the wastes in question in concentrations that could be lowered by appropriate technical means.

14. The Netherlands representative informed the Meeting of research carried out over a period of three years on the development of methods for determining toxicity, bioaccumulation and persistence of Annex I substances. The manual which resulted from this study has now been published in Dutch and is expected to become available in English in 1978.

IV. DEFINITION OF "SIGNIFICANT AMOUNTS" AS GIVEN IN ANNEX II, PART A

15. Submissions on the definition of "significant amounts" by Canada and the United States were presented and discussed. An attempt was made to link the definition of "trace contaminants" to one for "significant amounts" in the Canadian proposal. The United States submission proposed that substances contained in wastes or materials should be considered to be present in significant amounts if chronic toxic effects on marine organisms are shown in bioassays. However, some representatives preferred the establishment of a fixed administrative limit to facilitate the distinction of special from general permits, it being recognized that the setting of an arbitrary figure such as 0.1 per cent did not imply a prohibition on wastes containing significant quantities of Annex II substances provided that the requirements of Annex III were met.

16. In discussion, there was some opposition to each of the two approaches presented. The subject was considered too complex to deal with rationally in the brief time available at this session, and the Scientific Group decided that further consideration of the definition should be undertaken by a working group set up to function intersessionally. This working group should also consider the definition proposed by the United States. In the meantime, the interim definition could continue to be used, i.e. a significant amount would be interpreted to mean "in which 0.1 per cent or more by weight of the quantities of waste for disposal consist of one of".

V. REVIEW OF ANNEX I AND ANNEX II MATERIALS

17. The Scientific Group considered the lists of substances contained in Annexes I and II to the Convention on the basis of comments and proposals submitted by Canada and the United Kingdom (LDCSG/5 and LDCSG/6). Some representatives supported the Canadian proposal to expand the list in Annex I by transferring certain materials from Annex II to Annex I and include certain new groups of substances in each Annex. Other representatives, however, agreed with the United Kingdom view that it would be preferable to refrain from making substantial changes in the Annexes until more experience has been gained in their implementation and the relevant scientific information is available. It was also pointed out that considerable advantage could be gained by following a uniform classification procedure for allocating substances to particular Annexes.

18. After discussion of the problem, it was agreed that amendments such as those put forward by Canada should be decided on the basis of firm scientific evidence in support of the proposed changes. It was further agreed that these proposals, together with any others which may be submitted in future, should be given full consideration when such scientific information has been made available. The Meeting agreed that these questions should be referred to an intersessional working group for detailed consideration.

VI. REVIEW OF ANNEX III CRITERIA

19. In considering the review of the criteria specified in Annex III to the Convention, the Scientific Group took note of the work carried out by GESAMP in 1975 with regard to the preparation of guidelines to clarify the criteria (GESAMP Report No.3, 1975).

20. The observer from ICES also informed the meeting of the work of ICES on the criteria for the selection and monitoring of dumping sites included in the 1977 report of ICES to the Oslo and Interim Paris Commissions.

21. With respect to Annex III the Australian representative proposed that consideration be given to the inclusion of certain additional factors such as:

Section B - existence of any significant natural or cultural features that might be affected

- climatic conditions that exist at the dumping site
- combined effects of several wastes dumped together
- feasibility of carrying out monitoring and surveillance at the dumping site
- comparison of packaged and unpackaged materials to be dumped.

Section C might be expanded to consider effects on:

- endangered species
- migration routes
- marine species used as food by living resources of commercial importance
- areas with potential for artificial propagation.

22. The Portuguese representative expressed views concerning the need for giving consideration to the study of vertical currents in dumping zones and offered to supply the Secretariat with the available data, from studies carried out in the Azores submarine valleys.

23. Further comments by Portugal suggested that consideration be given to the application of a rotation principle to avoid repeated use of the same site. It was further suggested by the Japanese representative that Section B, paragraph 5, be amended to read "Dispersal characteristics (e.g. effects of currents, tides and wind on horizontal and vertical transport and mixing)".

24. The Scientific Group expressed appreciation to GESAMP for the preparation of its Study No.3 which had proved extremely useful in the definition of criteria for the selection of dumping sites and in enumerating various aspects in which further research was required.

25. Having considered that Report, the Scientific Group gave some preliminary consideration to the question of what additional criteria are needed for the designation of emergency disposal sites. It was proposed that Annex III should contain such criteria for use when emergency dumping does take place but, in view of time constraints, it was not possible to pursue the matter in depth at the present Meeting. It was agreed that this question, together with other proposals relating to Annex III, could be referred to an intersessional working group for examination in detail.

VII. FUTURE WORK PROGRAMME

26. In view of the work which it was not possible to complete at the present Meeting, the Scientific Group recommended that an intersessional working group should be set up to carry out detailed work with a view to preparing firm proposals for consideration by the Third Consultative Meeting. It was noted that such a working group could possibly meet at IMCO Headquarters in June or July 1978.

27. The Meeting identified the following priority tasks which should be referred to the working group in order of priority:

- development of details of proposed tests for "harmlessness" and "trace contaminants";
- detailed consideration of the scientific data presented on proposals for the review of Annex I;
- detailed consideration of the scientific data presented on proposals for the review of Annex II and further consideration of the definition of "significant amounts";
- detailed consideration of the scientific data presented on proposals for the review of Annex III.

28. The Scientific Group requested the Secretariat to prepare an appropriate agenda for the working group on the basis of the above-mentioned subjects.

VIII. ACTION BY THE CONSULTATIVE MEETING

29. The Consultative Meeting is invited to take note of the foregoing information and to approve the Report. In particular, the Consultative Meeting is invited:

- (a) to adopt the Draft Guidelines for the Implementation of paragraphs 8 and 9 of Annex I of the London Dumping Convention as referred to in paragraph 11 above and Appendix II to the Report;
- (b) to establish an intersessional working group as recommended in paragraph 26 above and, if necessary, make recommendations to the IMCO Secretary-General accordingly.

APPENDIX I

FIRST MEETING OF THE AD HOC SCIENTIFIC GROUP ON DUMPING

27-28 September 1977

AGENDA

1. Election of Chairman
2. Adoption of the Agenda
LDCSG/1 - Provisional Agenda
3. Definition of trace contaminants referred to in Annex I, paragraph 9
LDCSG/3 - Secretariat
4. Review of the definition of "significant amounts of" referred to in Annex II, Section A
LDCSG/4 - Secretariat
5. Review of Annex I list of materials
LDCSG/5 - Secretariat
6. Review of Annex II materials and criteria
LDCSG/6 - Secretariat
7. Review of Annex III criteria and GESAMP Report No.3
LDCSG/7 - Secretariat
8. Consultation on GESAMP Report on harmlessness of Annex I material
LDCSG/8 - Secretariat
LDCSG/8/Add.1 - Secretariat
LDCSG/WP.1 - United States
9. Future work programme
10. Any other business
11. Consideration and adoption of the Report
LDCSG/WP.2 - Secretariat
LDCSG/9 - Report

APPENDIX II

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

A. Evaluation of "harmlessness" and "trace contaminants"

1. Under Article IV(a) of the Convention, the dumping of waste or other matter 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. In this context "trace contaminants" means substances which, when present in otherwise acceptable wastes to which they have not been added for the purpose of being dumped, do not occur in such amounts that the dumping of wastes 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.

3. With the exception of sewage sludge and dredged spoils, dumping of wastes or other matter referred to in paragraph 1(a) or (b) above may be permitted only if laboratory 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 organohalogen compound, present as other than a trace contaminant, should not be regarded as harmless.

4. It is recognized that for many of these compounds viable alternative methods of treatment, destruction or disposal on land might be available and these alternative methods should be pursued as required by the Convention.

B. Test procedures to be employed

5. 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, inhibition of life processes, or bioaccumulation under the proposed disposal conditions.

6. The test procedures used should be:

- (i) those recommended by a scientific advisory group* acting at the request of, or on behalf of, the Contracting Parties, and, when appropriate,
- (ii) those procedures acceptable to neighbouring States 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.

C. Procedures for Consultation

7. When acceptable test procedures referred to in Section B are used and the results of tests show that the material is not persistent and will not 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.

8. A Contracting Party may issue a special permit for the dumping of waste containing an Annex I substance provided that the substance has not been added for the purpose of dumping it and is determined to be rapidly rendered harmless or to be present as a trace contaminant and that the requirements of Annex III have been met.

9. If there are doubts about the results of the tests referred to in paragraph 5 above, the Contracting Party, in addition to paragraph 8 above, should consult with the Organization, other Parties and international organizations as appropriate, as provided for under Article XIV, before issuance of the special permit.

10. 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:

- (a) type and nature of material including relevant chemical characterization;

* This could be the intersessional working group proposed in paragraph 26 of the Report.

- (b) amount of material to be dumped, location of disposal site and intended frequency of disposal;
- (c) alternative methods of treatment and disposal considered;
- (d) results of laboratory tests carried out; and
- (e) any other information relevant to the requirements of Annex III of the Convention.

11. 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 smaller Panel of Contracting Parties which could be convened or consulted by the Secretariat at short notice.

12. 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.

13. The results of all scientific tests and evaluations of viable alternative methods of treatment, destruction and disposal should be provided by the Contracting Party for prior consultation.

14. 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 these Guidelines.

15. If a Contracting Party to the London Dumping Convention which is also a Party to a regional convention has followed a consultation procedure established under that regional convention, such procedure may be substituted for the procedures set out in paragraphs 9 to 13 above. The Secretariat of the regional convention should inform the Organization of the result of the consultation which has taken place.
