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ANNEX 3

RESOLUTION LDC.24(10)

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

THE TENTH CONSULTATIVE MEETING,

RECALLING that pursuant to Article IV of the Convention the dumping of wastes or other matter listed in Annex I is prohibited,

RECOGNIZING that by virtue of Annex I, paragraphs 8 and 9, a number of substances listed in Annex I may be dumped at sea in cases where they are rapidly rendered harmless in the sea or where they are contained in wastes or other materials as trace contaminants.

RECALLING that the Fourth Consultative Meeting adopted Interim Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I to the London Dumping Convention,

RECALLING FURTHER that specific Guidelines for the Application of the Annexes to the Disposal of Dredged Material have been adopted by this Consultative Meeting and that these include provisions for the disposal at sea of dredged material containing Annex I substances which are rapidly rendered harmless or are contained in dredged material as trace contaminants,

NOTING that a new set of Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I to the London Dumping Convention have been developed by the Scientific Group on Dumping excluding consideration of disposal at sea of dredged material because such dumping is addressed in the specific Guidelines mentioned above,

ADOPTS the Guidelines for the Implementation of Paragraphs 8 and 9 of Annex I to the London Dumping Convention, as shown in Annex hereto, and

INVITES Contracting Parties to implement the Guidelines and to report on experiences gained with the Guidelines to the Consultative Meeting with a view to initiating their further refinement and improvement.

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ANNEX

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

1 Introductory note

These Guidelines apply to all wastes and other matter with the exception of dredged material. For guidance on the implementation of paragraphs 8 and 9 of Annex I to the Convention related to dredged material, reference should be made to the Guidelines for the Application of the Annexes to the Disposal of Dredged Material (resolution LDC.23(10).

- 2 Conditions under which permits for dumping of wastes and other matter containing Annex I substances may be issued
- 2.1 Under article IV(1)(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:
 - .1 Annex I substances which are rapidly rendered harmless by physical, chemical or biological processes in the sea provided they do not (i) make edible marine organisms unpalatable; or (ii) endanger human health or that of domestic animals (paragraph 8 of Annex I); or
 - .2 wastes or other materials, such as sewage sludge, which may contain matters listed in paragraphs 1 to 5 of Annex I as trace contaminants (paragraph 9 of Annex I).
- 2.2 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.
- 2.3 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.

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3 Evaluation of "trace contaminants" and "rapidly rendered harmless"

- 3.1 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.
- 3.2 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:
 - .1 if they are present in otherwise acceptable wastes or other materials to which they have been added for the purpose of being dumped;
 - .2 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
 - .3 if they are present in such amounts that it is practical to reduce their concentrations further by technical means.
- 3.3 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).

4 Test procedures to be employed

4.1 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.

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- 4.2 For 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.
- 4.3 The test procedures used should be:
 - .1 those described in Appendix 1 and, when appropriate,
 - .2 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.
- 4.4 The Organization should be notified of the test procedures to be adopted by a Contracting Party.

5 Procedures for consultation

- 5.1 When acceptable test procedures referred to in section 4 above 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, 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.
- 5.2 If the Contracting Party has doubts about the results of the tests referred to in section 4 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.
- 5.3 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 2.

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- 5.4 The Organization, upon being informed by a Party that consultation is necessary, may:
 - .1 convene a Special Meeting of Contracting Parties in accordance with article XIV(3)(a) of the Convention to consider the problems; or
 - .2 establish a Panel of Contracting Parties which could be convened or consulted by the Secretariat at short notice.
- 5.5 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.
- 5.6 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 2 and not already notified under paragraph 5.3 above. The Organization shall circulate this information to other Parties.
- 5.7 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.
- 5.8 If a Contracting Party to the London Dumping Convention 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 5.2 to 5.7 above. The Secretariat of the regional convention should inform the Organization of the result of the consultation which has taken place.

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APPENDIX 1

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

1 GENERAL PROVISIONS

- 1.1 Each Contracting Party may develop and use individually or through a regional convention test procedures as laid down in section 4 of the Interim Guidelines for the Implementation of paragraphs 8 and 9 of Annex I to the London Dumping Convention.
- 1.2 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 2.1.1 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.
- 1.3 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.

2 SPECIFIC CONSIDERATIONS

2.1 Test procedures

- 2.1.1 Test procedures should include the following:
 - .1 acute toxicity tests on plankton, crustaceans or molluscs, and fish;
 - .2 chronic toxicity tests capable of evaluating long-term sublethal effects, such as bioassays covering an entire life cycle;

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- .3 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
- .4 tests for determining the persistence of Annex I substances.

 Potential for degradability of Annex I substances should be
 determined where appropriate. The tests should reflect the
 conditions at the dumping site.

2.2 Dilution and dispersion of the dumped material

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.

2.3 Chemical characterization of the dumped material

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.

2.4 Application of the results of field surveys

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

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- 2.4.2 Field survey data may be used as part of acceptable test procedures (see paragraph 1.2) when the following conditions are met:
 - .l 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;
 - .2 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 4.1 of the Guidelines; and
 - .3 the data collected are adequate to make a determination in regard to the impacts listed in paragraph 4.1 of the Guidelines.

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APPENDIX 2

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

1 INTRODUCTION

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.

2 REQUIRED INFORMATION

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

2.1 Alternative disposal options

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

2.2 Origin of waste

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.