

**GUIDANCE ON THE NATIONAL IMPLEMENTATION OF THE 1996 PROTOCOL TO
THE LONDON CONVENTION 1972
(Adopted in 2001)**

EXPLANATORY NOTE

1 The 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention 1972) was adopted in 1996 at the Special Meeting of Contracting Parties to the London Convention 1972. Eventually, the 1996 Protocol will supersede the London Convention 1972 as between Contracting Parties to the Protocol, which are also Contracting Parties to the Convention (Article 23).

2 The attached “Guidance on the National Implementation of the 1996 Protocol to the London Convention 1972” (“The Guidance”), adopted by the Contracting Parties to the Convention at their Twenty-third Consultative Meeting, is offered for the consideration of States which may be interested in becoming Party to the Protocol. Its purpose is to provide an outline of the types of action which States need to take, or consider taking, at the national level in order to implement the provisions of the Protocol. The Consultative Meeting expressed the hope that this Guidance would be found useful by those concerned, and furthermore, it was accepted that Contracting Parties to the Protocol would need to decide how best to implement their obligations in their national systems.

3 The Guidance covers only those provisions of the Protocol which require national action by individual Contracting Parties. It omits reference to provisions which refer to action to be taken collectively or by others, such as those providing for Meetings of Contracting Parties and the duties of the IMO.

4 The Guidance is set out in two columns: in Column I the principal provisions of the Protocol which are addressed to individual Contracting Parties are summarized. In Column II an outline is given of the content of national implementation action to be considered, including an indication of different possible approaches.

5 The Guidance is based upon recognition of the well-established rules of international treaty law that every treaty in force is binding upon the parties to it and must be performed by them in good faith and that a party may not invoke the provisions of its internal law as justification for its failure to perform a treaty¹.

6 The Consultative Meeting also acknowledged that it is for each Contracting Party to decide the most appropriate form and method for implementing its treaty obligations. It is not possible to formulate one type of model legislative or other kind of measure for implementing the Protocol. The nature of legislative, regulatory, administrative and policy measures suitable for each Contracting Party may depend on a variety of factors, for example:

- whether there is existing national legislation capable of adaptation or amendment or whether completely new legislation is needed;
- whether that Contracting Party wishes to develop legislation solely for implementation of this Protocol or also to cover obligations under other international or regional treaties;

¹ Vienna Convention on the Law of Treaties, Articles 26 and 27.

- the legal tradition of that country, e.g., common law or civil law, the mode of incorporation of treaties into national law; and
- whether that Contracting Party has any marine waters, etc.

7 The Guidance offers no judgment on the type of method best suited to any particular Contracting Party, but identifies some of the options available for consideration, based on the existing experience of States, particularly those which have already implemented the Protocol in their national systems.

ATTACHMENT

GUIDANCE ON THE NATIONAL IMPLEMENTATION OF THE 1996 PROTOCOL TO THE LONDON CONVENTION 1972

I PROTOCOL PROVISION²	II NATIONAL IMPLEMENTATION
<p>Article 1 - Definitions of:</p> <ul style="list-style-type: none"> • Dumping • Incineration at sea • Vessels and aircraft • Sea • Wastes or other matter • Permit • Pollution 	<p>In the preparation of legislation and/or regulations, Contracting Parties should consider defining the concepts set out in the Protocol definitions in a manner consistent with the scope of the Protocol.</p>

² Except for the Definitions and Annexes 1 and 2, the relevant Protocol provisions are included verbatim. Definitions and Annexes 1 and 2 are appended hereto.

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<p>Article 2 - Objectives: Contracting Parties shall individually and collectively protect and preserve the marine environment from all sources of pollution and take effective measures, according to their scientific, technical and economic capabilities, to prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea of wastes or other matter. Where appropriate, they shall harmonize their policies in this regard.</p>	<p>Contracting Parties may wish to consider incorporating language reflecting the Objectives in their legislation to guide their administrative authorities; Contracting Parties should consider whether further legal, policy or administrative measures are appropriate to achieve the Objectives.</p>
<p>Article 3.1 - General Obligations: In implementing this Protocol, Contracting Parties shall apply a precautionary approach to environmental protection from dumping of wastes or other matter whereby appropriate preventative measures are taken when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects.</p>	<p>Formulate a policy objective of applying a precautionary approach to environmental protection from the dumping of wastes or other matter.</p> <p>Ensure that legislation, regulations, and/or administrative measures adopted to implement the Protocol apply this precautionary approach. For example, Annexes 1 and 2 reflect this precautionary approach.</p>
<p>Article 3.2: Taking into account the approach that the polluter should, in principle, bear the cost of pollution, each Contracting Party shall endeavour to promote practices whereby those it has authorized to engage in dumping or incineration at sea bear the cost of meeting the pollution prevention and control requirements for the authorized activities, having due regard to the public interest.</p>	<p>Promote legal and/or administrative measures reflecting the polluter pays approach (e.g., pollution prevention and management activities, which could include cost-recovery for a waste prevention audit, sampling, analysis, supervision, inspection and monitoring to be borne by the applicant of permits).</p>
<p>Article 3.3: In implementing the provisions of this Protocol, Contracting Parties shall act so as not to transfer, directly or indirectly, damage or likelihood of damage from one part of the environment to another or transform one type of pollution into another.</p>	<p>Apply an integrated environmental approach which evaluates the potential effects on different environmental components through the application of Annex 2 and a comparative risk assessment of all environmental media such as land, air, water, groundwater, etc. The approach can be expressed through environmental legislation and/or regulations.</p>
<p>Article 4 - Dumping of Wastes or Other Matter: Article 4.1.1: Contracting Parties shall prohibit the dumping of any wastes or other matter with the exception of those listed in Annex 1.</p>	<p>Prepare legislation and/or regulations prohibiting the dumping of wastes or other matter, with the exception of those listed in Annex 1. Annex 1 identifies wastes or other matter that may be considered for dumping (including application of guidance developed under the Protocol). (The full text of Annex 1 is appended at the end of this document.)</p>

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<p>Article 4.1.2: The dumping of wastes or other matter listed in Annex 1 shall require a permit. Contracting Parties shall adopt administrative or legislative measures to ensure that issuance of permits and permit conditions comply with provisions of Annex 2. Particular attention shall be paid to opportunities to avoid dumping in favour of environmentally preferable alternatives.</p>	<p>Establish a permit-system including:</p> <ul style="list-style-type: none"> • designation or establishment of an appropriate authority or authorities responsible for the issuance of permits (see Article 9.1); • establishment of administrative procedures for the issuance of permits; • establishment of procedures to review permits at regular intervals; • setting of monitoring and surveillance conditions (see Article 9.1.3); • designation of approved sites <p>Annex 2 outlines a precautionary procedure for considering disposal at sea (including guidance on waste prevention, pollution prevention, application review, permit issuance, monitoring and assessment). (The full text of Annex 2 is appended at the end of this document.)</p> <p>In addition the following support elements warrant attention:</p> <ul style="list-style-type: none"> • certification of equipment and vessels involved in dumping operations; • quality assurance for sampling and analysis; • training/education of officers involved; • establishment of contacts with all involved parties.
<p>Article 4.2: No provision of this Protocol shall be interpreted as preventing a Contracting Party from prohibiting, insofar as that Contracting Party is concerned, the dumping of wastes or other matter mentioned in Annex 1. That Contracting Party shall notify the Organization of such measures.</p>	<p>If the Contracting Party opts to prohibit the dumping of wastes or other matter mentioned in Annex 1, legislation and/or regulations should be prepared setting forth such prohibitions.</p> <p>The authority established under Article 9.1 could be selected as a national focal point for notification of this and all other measures required under the Protocol.</p>
<p>Article 5 - Incineration at Sea: Contracting Parties shall prohibit incineration at sea of wastes or other matter.</p>	<p>Prepare legislation or regulations prohibiting incineration at sea.</p>
<p>Article 6 - Export of wastes or other matter: Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea.</p>	<p>Prepare legislation and/or regulations prohibiting the export of wastes to other countries for dumping or incineration at sea³; due account should be given to the requirements under the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.</p>

³ Contracting Parties may wish to consider the logic of banning import for disposal at sea at the same time they ban export.

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<p>Article 7 - Internal Waters: Article 7.2: Each Contracting Party shall at its discretion either apply the provisions of this Protocol or adopt other effective permitting and regulatory measures to control the deliberate disposal of wastes or other matter in marine internal waters where such disposal would be "dumping" or "incineration at sea" within the meaning of article 1, if conducted at sea.</p>	<p>Identify marine internal waters.</p> <p>Prepare legislation and/or regulations where necessary regarding the rules applicable to the dumping of wastes or other matter in marine internal waters (i.e. either the Protocol rules or "other effective permitting and regulatory measures").</p>
<p>Article 7.3: Each Contracting Party should provide the Organization with information on legislation and institutional mechanisms regarding implementation, compliance and enforcement in marine internal waters. Contracting Parties should also use their best efforts to provide on a voluntary basis summary reports on the type and nature of the materials dumped in marine internal waters.</p>	<p>Consider utilizing the designated authority or national focal point for notification of this and all other reporting required under the protocol (see Article 9.1).</p> <p>Consider the establishment of mechanisms for the voluntary reporting of wastes or other matter dumped in marine internal waters.</p>
<p>Article 8 – Exceptions: Article 8.1: The provisions of articles 4.1 and 5 shall not apply when it is necessary to secure the safety of human life or of vessels, aircraft, platforms or other man-made structures at sea in cases of force majeure caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels, aircraft, platforms or other man-made structures at sea, if dumping or incineration at sea appears to be the only way of averting the threat and if there is every probability that the damage consequent upon such dumping or incineration at sea will be less than would otherwise occur. Such dumping or incineration at sea shall be conducted so as to minimize the likelihood of damage to human or marine life and shall be reported forthwith to the Organization.</p>	<p>Develop legislation and/or regulations regarding force majeure dumping or incineration at sea, addressing inter alia:</p> <ul style="list-style-type: none"> • the Article 8.1 conditions, (including the requirement to minimize the likelihood of damage to human or marine life) • Contracting Parties should consider appropriate legal or administrative means within their respective jurisdictions for obtaining this information for such reporting. <p>Establish administrative mechanisms to report force majeure dumping and incineration at sea to the IMO.</p>

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<p>Article 8.2: A Contracting Party may issue a permit as an exception to articles 4.1 and 5, in emergencies posing an unacceptable threat to human health, safety, or the marine environment and admitting of no other feasible solution. Before doing so the Contracting Party shall consult any other country or countries that are likely to be affected and the Organization which, after consulting other Contracting Parties, and competent international organizations as appropriate, shall, in accordance with article 18.6 promptly recommend to the Contracting Party the most appropriate procedures to adopt. The Contracting Party shall follow these recommendations to the maximum extent feasible consistent with the time within which action must be taken and with the general obligation to avoid damage to the marine environment and shall inform the Organization of the action it takes. The Contracting Parties pledge themselves to assist one another in such situations.</p>	<p>Develop legislation and/or regulations instituting procedures regarding emergency dumping or incineration at sea under the conditions set out in Article 8.2, including inter alia:</p> <ul style="list-style-type: none"> • establishment of an emergency permit system; • establishment of a consultation procedure with IMO and other Contracting Parties.
<p>Article 9 - Issuance of Permits and Reporting: Article 9.1: Each Contracting Party shall designate an appropriate authority or authorities to:</p> <ul style="list-style-type: none"> .1 issue permits in accordance with this Protocol; .2 keep records of the nature and quantities of all wastes or other matter for which dumping permits have been issued and where practicable the quantities actually dumped and the location, time and method of dumping; and .3 monitor individually, or in collaboration with other Contracting Parties and competent international organizations, the condition of the sea for the purposes of this Protocol. 	<p>Prepare legislation and/or regulations authorizing the designated authority to issue permits in accordance with Articles 4.1.2 and 8.2 of the Protocol and enabling the designated authority to, inter alia:</p> <ul style="list-style-type: none"> • inventory current sea disposal operations; • assess applications for dumping permits (including application of guidance developed under Annex 2); • designate and monitor disposal sites. <p>Identify national capability to assess marine scientific data, and collaborate with other Contracting Parties as needed.</p>
<p>Article 9.2: The appropriate authority or authorities of a Contracting Party shall issue permits in accordance with this Protocol in respect of wastes or other matter intended for dumping or, as provided for in article 8.2, incineration at sea:</p> <ul style="list-style-type: none"> .1 loaded in its territory; and .2 loaded onto a vessel or aircraft registered in its territory or flying its flag, when the loading occurs in the territory of a State not a Contracting Party to this Protocol. 	<p>Issue permits for wastes loaded in its territory or loaded on vessels registered in its territory when the loading occurs in the territory of a non-Contracting Party.</p>
<p>Article 9.3: In issuing permits, the appropriate authority or authorities shall comply with the requirements of article 4, together with such additional criteria, measures and requirements as they may consider relevant.</p>	<p>Apply Article 4 of the Protocol and other additional criteria considered relevant.</p>

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<p>Article 9.4: Each Contracting Party, directly or through a secretariat established under a regional agreement, shall report to the Organization and where appropriate to other Contracting Parties:</p> <ul style="list-style-type: none"> .1 the information specified in paragraphs 1.2 and 1.3; .2 the administrative and legislative measures taken to implement the provisions of this Protocol, including a summary of enforcement measures; and .3 the effectiveness of the measures referred to in paragraph 4.2 and any problems encountered in their application. <p>The information referred to in paragraphs 1.2 and 1.3 shall be submitted on an annual basis. The information referred to in paragraphs 4.2 and 4.3 shall be submitted on a regular basis.</p>	<p>Report to the IMO permit and dumping information, administrative and legislative measures taken to implement the Protocol.</p>
<p>Article 10 - Application and Enforcement: Article 10.1: Each Contracting Party shall apply the measures required to implement this Protocol to all:</p> <ul style="list-style-type: none"> .1 vessels and aircraft registered in its territory or flying its flag; .2 vessels and aircraft loading in its territory the wastes or other matter which are to be dumped or incinerated at sea; and .3 vessels, aircraft and platforms or other man-made structures believed to be engaged in dumping or incineration at sea in areas within which it is entitled to exercise jurisdiction in accordance with international law. 	<p>Each Contracting Party is required to apply the measures required to implement the Protocol to its vessels and aircraft, those loading in its territory, and those engaged in dumping or incineration at sea in areas within which it is entitled to exercise jurisdiction in accordance with international law.</p> <p>Some Contracting Parties may need to extend the scope of their legislative and enforcement jurisdiction in order to implement these provisions. Those Contracting Parties which have not established an Exclusive Economic Zone as permitted by the UN Convention on the Law of the Sea may wish to consider doing so.</p>

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<p>Article 10.2: Each Contracting Party shall take appropriate measures in accordance with international law to prevent and if necessary punish acts contrary to the provisions of this Protocol.</p>	<p>Prepare legislation and/or regulations required to establish offences and penalties for infringements of national laws implementing the 1996 Protocol. Such penalties could include fines, compensation, or restitution for environmental damage.</p> <p>Designate an authority or authorities responsible for compliance with and enforcement of permit conditions whose duties could include inter alia:</p> <ul style="list-style-type: none"> • inspection of dumping vessels; • compliance monitoring of permit conditions; • networking with national inspection services at sea such as fisheries inspection, customs, navy, coast guard, and maritime administrations; • networking with private sector operating at sea (offshore industry, tourist industry, fisheries) in order to create public support for the observance of Protocol rules; • review of disposal site monitoring.
<p>Article 10.4: This Protocol shall not apply to those vessels and aircraft entitled to sovereign immunity under international law. However, each Contracting Party shall ensure by the adoption of appropriate measures that such vessels and aircraft owned or operated by it act in a manner consistent with the object and purpose of this Protocol and shall inform the Organization accordingly.</p>	<ul style="list-style-type: none"> • Develop appropriate measures to ensure that those vessels and aircraft entitled to sovereign immunity act in a manner consistent with the object and purpose of Protocol; • Identify a national focal point for notification of this and all other reporting required under the Protocol; • Inform the IMO about measures applicable to such vessels and aircraft.
<p>Article 10.5: A State may, at the time it expresses its consent to be bound by this Protocol, or at any time thereafter, declare that it shall apply the provisions of this Protocol to its vessels and aircraft referred to in paragraph 4, recognising that only that State may enforce those provisions against such vessels and aircraft.</p>	<p>Inform the Secretary-General that it will apply the Protocol provisions to its vessels and aircraft entitled to sovereign immunity.</p>

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<p>Article 13: Contracting Parties shall, through collaboration within the Organization and in co-ordination with other competent international organizations, promote bilateral and multilateral support for the prevention, reduction and where practicable elimination of pollution caused by dumping as provided for in this Protocol to those Contracting Parties that request it for:</p> <ul style="list-style-type: none"> .1 training of scientific and technical personnel for research, monitoring and enforcement, including as appropriate the supply of necessary equipment and facilities, with a view to strengthening national capabilities; .2 advice on implementation of this Protocol; .3 information and technical co-operation relating to waste minimization and clean production processes; .4 information and technical co-operation relating to the disposal and treatment of waste and other measures to prevent, reduce and where practicable eliminate pollution caused by dumping; and .5 access to and transfer of environmentally sound technologies and corresponding know-how, in particular to developing countries and countries in transition to market economies, on favourable terms, including on concessional and preferential terms, as mutually agreed, taking into account the need to protect intellectual property rights as well as the special needs of developing countries and countries in transition to market economies. <p>The Organization shall perform the following functions:</p> <ul style="list-style-type: none"> .1 forward requests from Contracting Parties for technical co-operation to other Contracting Parties, taking into account such factors as technical capabilities; .2 co-ordinate requests for assistance with other competent international organizations, as appropriate; and .3 subject to the availability of adequate resources, assist developing countries and those in transition to market economies, which have declared their intention to become Contracting Parties to this Protocol, to examine the means necessary to achieve full implementation. 	<p>Prepare policy and administrative procedures for handling requests for technical co-operation and assistance to complement the responsibilities of IMO in this regard.</p>

I PROTOCOL PROVISION	II NATIONAL IMPLEMENTATION
<p>Article 14.1: Contracting Parties shall take appropriate measures to promote and facilitate scientific and technical research on the prevention, reduction and where practicable elimination of pollution by dumping and other sources of marine pollution relevant to this Protocol. In particular, such research should include observation, measurement, evaluation and analysis of pollution by scientific methods.</p>	<p>Adopt measures for promoting and facilitating scientific and technical research on the prevention, reduction and where practicable elimination of pollution by dumping and other sources of marine pollution; ongoing identification or designation of an authority responsible for the promotion and facilitation of scientific and technical research may contribute to the reliability of those measures.</p>
<p>Article 14.2: Contracting Parties shall, to achieve the objectives of this Protocol, promote the availability of relevant information to other Contracting Parties who request it on:</p> <ul style="list-style-type: none"> .1 scientific and technical activities and measures undertaken in accordance with this Protocol; .2 marine scientific and technological programmes and their objectives; and .3 the impacts observed from the monitoring and assessment conducted pursuant to article 9.1.3. 	<p>Prepare policy and administrative procedures for handling requests for relevant information.</p>
<p>Article 26.1: Any State that was not a Contracting Party to the Convention before 31 December 1996 and that expresses its consent to be bound by this Protocol prior to its entry into force or within five years after its entry into force may, at the time it expresses its consent, notify the Secretary-General that, for reasons described in the notification, it will not be able to comply with specific provisions of this Protocol other than those provided in paragraph 2, for a transitional period that shall not exceed that described in paragraph 4.</p>	<ul style="list-style-type: none"> • State to assess whether it is eligible to claim a transitional period. • Specify the provisions of the Protocol with which it will not be able to comply during the permitted transitional period. • Describe the reasons for non-compliance. • Notify the Secretary-General.
<p>Article 26.2: No notification made under paragraph 1 shall affect the obligations of a Contracting Party to this Protocol with respect to incineration at sea or the dumping of radioactive wastes or other radioactive matter.</p>	<p>Prepare legislation and/or regulations prohibiting incineration at sea (Article 5) and the dumping of radioactive wastes or other radioactive matter (Article 4).</p>
<p>Article 26.3: Any Contracting Party to this Protocol that has notified the Secretary-General under paragraph 1 that, for the specified transitional period, it will not be able to comply, in part or in whole, with article 4.1 or article 9 shall nonetheless during that period prohibit the dumping of wastes or other matter for which it has not issued a permit, use its best efforts to adopt administrative or legislative measures to ensure that issuance of permits and permit conditions comply with the provisions of Annex 2, and notify the Secretary-General of any permits issued.</p>	<p>Prepare legislation or regulations during the transitional period to prohibit:</p> <ul style="list-style-type: none"> • the dumping of wastes or other matter at sea for which no permits have been issued ; • establish a permit system as far as achievable. <p>Notify the Secretary-General.</p>

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<p>Article 26.5: Contracting Parties that have made a notification under paragraph 1 shall submit to the first Meeting of Contracting Parties occurring after deposit of their instrument of ratification, acceptance, approval or accession a programme and timetable to achieve full compliance with this Protocol, together with any requests for relevant technical co-operation and assistance in accordance with article 13 of this Protocol.</p>	<p>Appoint a national authority responsible for reporting a programme and timetable of efforts to achieve full compliance with the Protocol. These reports may include requests for technical assistance.</p>
<p>Article 26.6: Contracting Parties that have made a notification under paragraph 1 shall establish procedures and mechanisms for the transitional period to implement and monitor submitted programmes designed to achieve full compliance with this Protocol. A report on progress toward compliance shall be submitted by such Contracting Parties to each Meeting of Contracting Parties held during their transitional period for appropriate action.</p>	<p>Designate an authority to:</p> <ul style="list-style-type: none"> • establish procedures and mechanisms regarding the implementation and monitoring of submitted programmes; • prepare the reports to be submitted to the Meeting of Contracting Parties.

DEFINITIONS AS CONTAINED IN ARTICLE 1 OF THE 1996 PROTOCOL

For the purposes of this Protocol:

- 1 "Convention" means the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended.
- 2 "Organization" means the International Maritime Organization.
- 3 "Secretary-General" means the Secretary-General of the Organization.
- 4 .1 "Dumping" means:
 - .1 any deliberate disposal into the sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea;
 - .2 any deliberate disposal into the sea of vessels, aircraft, platforms or other man-made structures at sea;
 - .3 any storage of wastes or other matter in the seabed and the subsoil thereof from vessels, aircraft, platforms or other man-made structures at sea; and
 - .4 any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of deliberate disposal.
- .2 "Dumping" does not include:
 - .1 the disposal into the sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or other man-made structures;
 - .2 placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of this Protocol; and
 - .3 notwithstanding paragraph 4.1.4, abandonment in the sea of matter (e.g., cables, pipelines and marine research devices) placed for a purpose other than the mere disposal thereof.

- .3 The disposal or storage of wastes or other matter directly arising from, or related to the exploration, exploitation and associated off-shore processing of seabed mineral resources is not covered by the provisions of this Protocol.
- 5 .1 "Incineration at sea" means the combustion on board a vessel, platform or other man-made structure at sea of wastes or other matter for the purpose of their deliberate disposal by thermal destruction.
- .2 "Incineration at sea" does not include the incineration of wastes or other matter on board a vessel, platform, or other man-made structure at sea if such wastes or other matter were generated during the normal operation of that vessel, platform or other man-made structure at sea.
- 6 "Vessels and aircraft" means waterborne or airborne craft of any type whatsoever. This expression includes air-cushioned craft and floating craft, whether self-propelled or not.
- 7 "Sea" means all marine waters other than the internal waters of States, as well as the seabed and the subsoil thereof; it does not include sub-seabed repositories accessed only from land.
- 8 "Wastes or other matter" means material and substance of any kind, form or description.
- 9 "Permit" means permission granted in advance and in accordance with relevant measures adopted pursuant to article 4.1.2 or 8.2.
- 10 "Pollution" means the introduction, directly or indirectly, by human activity, of wastes or other matter into the sea which results or is likely to result in such deleterious effects as harm to living resources and marine ecosystems, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

FULL TEXT OF ANNEX 1 TO THE 1996 PROTOCOL

WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING

- 1 The following wastes or other matter are those that may be considered for dumping being mindful of the Objectives and General Obligations of this Protocol set out in articles 2 and 3:
 - .1 dredged material;
 - .2 sewage sludge;
 - .3 fish waste, or material resulting from industrial fish processing operations;
 - .4 vessels and platforms or other man-made structures at sea;
 - .5 inert, inorganic geological material;
 - .6 organic material of natural origin; and
 - .7 bulky items primarily comprising iron, steel, concrete and similarly non-harmful materials for which the concern is physical impact, and limited to those circumstances where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping.
- 2 The wastes or other matter listed in paragraphs 1.4 and 1.7 may be considered for dumping, provided that material capable of creating floating debris or otherwise contributing to pollution of the marine environment has been removed to the maximum extent and provided that the material dumped poses no serious obstacle to fishing or navigation.
- 3 Notwithstanding the above, materials listed in paragraphs 1.1 to 1.7 containing levels of radioactivity greater than *de minimis* (exempt) concentrations as defined by the IAEA and adopted by Contracting Parties, shall not be considered eligible for dumping; provided further that within 25 years of 20 February 1994, and at each 25 year interval thereafter, Contracting Parties shall complete a scientific study relating to all radioactive wastes and other radioactive matter other than high level wastes or matter, taking into account such other factors as Contracting Parties consider appropriate and shall review the prohibition on dumping of such substances in accordance with the procedures set forth in article 22.

FULL TEXT OF ANNEX 2 TO THE 1996 PROTOCOL

ASSESSMENT OF WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING

GENERAL

- 1 The acceptance of dumping under certain circumstances shall not remove the obligations under this Annex to make further attempts to reduce the necessity for dumping.

WASTE PREVENTION AUDIT

- 2 The initial stages in assessing alternatives to dumping should, as appropriate, include an evaluation of:
 - .1 types, amounts and relative hazard of wastes generated;
 - .2 details of the production process and the sources of wastes within that process; and
 - .3 feasibility of the following waste reduction/prevention techniques:
 - .1 product reformulation;
 - .2 clean production technologies;
 - .3 process modification;
 - .4 input substitution; and
 - .5 on-site, closed-loop recycling.
- 3 In general terms, if the required audit reveals that opportunities exist for waste prevention at source, an applicant is expected to formulate and implement a waste prevention strategy, in collaboration with relevant local and national agencies, which includes specific waste reduction targets and provision for further waste prevention audits to ensure that these targets are being met. Permit issuance or renewal decisions shall assure compliance with any resulting waste reduction and prevention requirements.
- 4 For dredged material and sewage sludge, the goal of waste management should be to identify and control the sources of contamination. This should be achieved through implementation of waste prevention strategies and requires collaboration between the relevant local and national agencies involved with the control of point and non-point sources of pollution. Until this objective is met, the problems of contaminated dredged material may be addressed by using disposal management techniques at sea or on land.

CONSIDERATION OF WASTE MANAGEMENT OPTIONS

- 5 Applications to dump wastes or other matter shall demonstrate that appropriate consideration has been given to the following hierarchy of waste management options, which implies an order of increasing environmental impact:
 - .1 re-use;
 - .2 off-site recycling;
 - .3 destruction of hazardous constituents;
 - .4 treatment to reduce or remove the hazardous constituents; and
 - .5 disposal on land, into air and in water.
- 6 A permit to dump wastes or other matter shall be refused if the permitting authority determines that appropriate opportunities exist to re-use, recycle or treat the waste without undue risks to human health or the environment or disproportionate costs. The practical availability of other means of disposal should be considered in the light of a comparative risk assessment involving both dumping and the alternatives.

CHEMICAL, PHYSICAL AND BIOLOGICAL PROPERTIES

- 7 A detailed description and characterization of the waste is an essential precondition for the consideration of alternatives and the basis for a decision as to whether a waste may be dumped. If a waste is so poorly characterized that proper assessment cannot be made of its potential impacts on human health and the environment, that waste shall not be dumped.
- 8 Characterization of the wastes and their constituents shall take into account:
 - .1 origin, total amount, form and average composition;
 - .2 properties: physical, chemical, biochemical and biological;
 - .3 toxicity;
 - .4 persistence: physical, chemical and biological; and
 - .5 accumulation and biotransformation in biological materials or sediments.

ACTION LIST

- 9 Each Contracting Party shall develop a national Action List to provide a mechanism for screening candidate wastes and their constituents on the basis of their potential effects on human health and the marine environment. In selecting substances for consideration in an Action List, priority shall be given to toxic, persistent and bioaccumulative substances from anthropogenic sources (e.g., cadmium, mercury, organohalogens, petroleum hydrocarbons, and, whenever relevant, arsenic, lead, copper, zinc, beryllium, chromium, nickel and vanadium, organosilicon compounds, cyanides, fluorides and pesticides or their by-products other than organohalogens). An Action List

can also be used as a trigger mechanism for further waste prevention considerations.

- 10 An Action List shall specify an upper level and may also specify a lower level. The upper level should be set so as to avoid acute or chronic effects on human health or on sensitive marine organisms representative of the marine ecosystem. Application of an Action List will result in three possible categories of waste:
 - .1 wastes which contain specified substances, or which cause biological responses, exceeding the relevant upper level shall not be dumped, unless made acceptable for dumping through the use of management techniques or processes;
 - .2 wastes which contain specified substances, or which cause biological responses, below the relevant lower levels should be considered to be of little environmental concern in relation to dumping; and
 - .3 wastes which contain specified substances, or which cause biological responses, below the upper level but above the lower level require more detailed assessment before their suitability for dumping can be determined.

DUMP-SITE SELECTION

- 11 Information required to select a dump-site shall include:
 - .1 physical, chemical and biological characteristics of the water-column and the seabed;
 - .2 location of amenities, values and other uses of the sea in the area under consideration;
 - .3 assessment of the constituent fluxes associated with dumping in relation to existing fluxes of substances in the marine environment; and
 - .4 economic and operational feasibility.

ASSESSMENT OF POTENTIAL EFFECTS

- 12 Assessment of potential effects should lead to a concise statement of the expected consequences of the sea or land disposal options, i.e., the "Impact Hypothesis". It provides a basis for deciding whether to approve or reject the proposed disposal option and for defining environmental monitoring requirements.
- 13 The assessment for dumping should integrate information on waste characteristics, conditions at the proposed dump-site(s), fluxes, and proposed disposal techniques and specify the potential effects on human health, living resources, amenities and other legitimate uses of the sea. It should define the nature, temporal and spatial scales and duration of expected impacts based on reasonably conservative assumptions.

- 14 An analysis of each disposal option should be considered in the light of a comparative assessment of the following concerns: human health risks, environmental costs, hazards, (including accidents), economics and exclusion of future uses. If this assessment reveals that adequate information is not available to determine the likely effects of the proposed disposal option then this option should not be considered further. In addition, if the interpretation of the comparative assessment shows the dumping option to be less preferable, a permit for dumping should not be given.
- 15 Each assessment should conclude with a statement supporting a decision to issue or refuse a permit for dumping.

MONITORING

- 16 Monitoring is used to verify that permit conditions are met - compliance monitoring - and that the assumptions made during the permit review and site selection process were correct and sufficient to protect the environment and human health - field monitoring. It is essential that such monitoring programmes have clearly defined objectives.

PERMIT AND PERMIT CONDITIONS

- 17 A decision to issue a permit should only be made if all impact evaluations are completed and the monitoring requirements are determined. The provisions of the permit shall ensure, as far as practicable, that environmental disturbance and detriment are minimized and the benefits maximized. Any permit issued shall contain data and information specifying:
 - .1 the types and sources of materials to be dumped;
 - .2 the location of the dump-site(s);
 - .3 the method of dumping; and
 - .4 monitoring and reporting requirements.
- 18 Permits should be reviewed at regular intervals, taking into account the results of monitoring and the objectives of monitoring programmes. Review of monitoring results will indicate whether field programmes need to be continued, revised or terminated and will contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.
