$\begin{array}{c} 110 \text{TH Congress} \\ \textit{1st Session} \end{array}$

SENATE

Treaty Doc. 110-5

1996 PROTOCOL TO CONVENTION ON PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

1996 PROTOCOL TO THE CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER (THE "LONDON CONVENTION"), DONE IN LONDON ON NOVEMBER 7, 1996. THE PROTOCOL WAS SIGNED BY THE UNITED STATES ON MARCH 31, 2008, AND ENTERED INTO FORCE ON MARCH 24, 2006



SEPTEMBER 4, 2007.—Treaty was read the first time, and together with the accompanying papers, referred to the Committee on Foreign Relations and ordered to be printed for the use of the Senate

U.S. GOVERNMENT PRINTING OFFICE

LETTER OF TRANSMITTAL

THE WHITE HOUSE, September 4, 2007.

To the Senate of the United States:

I transmit herewith, with a view to receiving advice and consent, the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the "London Convention"), done in London on November 7, 1996. The Protocol was signed by the United States on March 31, 1998, and it entered into force on March 24, 2006.

The Protocol represents the culmination of a thorough and intensive effort to update and improve the London Convention. The London Convention governs the ocean dumping and incineration at sea of wastes and other matter and was a significant early step in international protection of the marine environment from pollution caused by these activities.

Although the Protocol and the London Convention share many features, the Protocol is designed to protect the marine environment more effectively. The Protocol moves from a structure of listing substances that may not be dumped to a "reverse list" approach, which prohibits ocean dumping of all wastes or other matter, except for a few specified wastes. This approach is combined with detailed criteria for environmental assessment of those materials that may be considered for dumping and potential dumping sites.

The Protocol would be implemented through amendments to the Marine Protection, Research, and Sanctuaries Act (MPRSA), which currently covers London Convention obligations. There will not be any substantive changes to existing practices in the United States, and no economic impact is expected from implementation of the Protocol. I recommend that the Senate give early and favorable consideration to this Protocol and give its advice and consent to ratification with the declaration and understanding contained in Articles 3 and 10 respectively in the accompanying report of the Department of State.

GEORGE W. BUSH.

LETTER OF SUBMITTAL

DEPARTMENT OF STATE, Washington, April 2, 2007.

The PRESIDENT, *The White House.*

THE PRESIDENT: I have the honor to submit to you, with a view towards its transmittal to the Senate for advice and consent, the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (the London Convention). The Protocol was adopted in London on November 7, 1996, and signed by the United States on March 31, 1998. It entered into force on March 24, 2006.

The Protocol is an update to the London Convention and is meant to eventually replace it. The treaties share many features, although the Protocol strengthens protection of the marine environment in a number of respects.

All interested agencies in the Executive Branch favor ratification of the Protocol.

Respectfully submitted,

CONDOLEEZZA RICE.

The 1996 Protocol to the Convention on the Prevention of Marine Pollution by

Dumping of Wastes and Other Matter, 1972

Article-by-Article Analysis

Article 1 (Definitions)

This article incorporates much of Article III of the London Convention. It makes certain modifications, deletions, and additions to the text of that article in order to reflect more clearly current international practices for the management of ocean dumping.

Paragraph 4.1.3 includes in the definition of dumping, "any storage of wastes or other matter in the seabed and the subsoil thereof. . ." Likewise, the definition of "sea" in paragraph 7 now includes the seabed and subsoil, while making clear that it does not include sub-seabed repositories accessed only from land. The proposed amendments to the MPRSA will make these provisions explicit.

Paragraph 4.3 of Article 1 of the Protocol, like Article III(1)(c) of the London Convention, provides that the disposal or storage of wastes or other matter directly arising from, or related to, the exploration, exploitation, and associated offshore processing of sea-bed mineral resources is not covered by the provisions of

this Protocol. This clarifies that the Protocol does not regulate disposal or storage, for example, of wastes or other matter directly arising from, or related to, offshore oil and gas operations. An amendment to the MPRSA will be sought to exclude from the definition of dumping the disposal or storage of such wastes or other matter in the seabed and the subsoil thereof.

Another noteworthy set of additions to this article may be found in paragraphs 4.1.4 and 4.2.3. Paragraph 4.1.4 specifies that dumping includes "any abandonment or toppling at site of platforms or other man-made structures as sea, for the sole purpose of deliberate disposal." Conversion of platforms or other man-made structures to other uses, *e.g.*, artificial reefs, would not constitute "dumping," since it would serve purposes other than disposal. However, paragraph 4.2.3, excludes from the definition of dumping "abandonment in the sea of matter (e.g., cables, pipelines and marine research devices) placed for a purpose other than the mere disposal thereof." This exclusion expands on London Convention Article III paragraph 1(b)(2). Both paragraphs would be implemented through the proposed amendments to the MPRSA.

Paragraph 5 of Article 1 sets forth a definition of "incineration at sea," which is designed to be consistent with, and to refine further, the definition of this term that was incorporated into the London Convention by an amendment to Annex I. The United States is a party to this amendment, which was adopted in

1993 and entered into force in 1994. The Protocol excludes from the definition of incineration at sea 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. The intent of this exclusion is to make clear that incineration practices addressed by Annex VI to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78) (Senate Treaty Doc. 108-7), are not covered by the London Protocol.

As explained in the discussion of Article 4 below, the Protocol does not distinguish between "special" and "general" ocean dumping permits, as the London Convention does. For this reason, paragraph 9 of Article 1 contains only a general definition of "permit," although individual Parties would not be barred from creating more than one category of permit.

Finally, paragraph 10 of Article 1 adds a definition of "pollution" that tracks closely the definition of "pollution of the marine environment" in Article 1(4) of the 1982 United Nations Convention on the Law of the Sea (LOS Convention).

Article 2 (Objectives)

Drawing from Articles I and II of the London Convention and Articles 192 and 194(1) of the LOS Convention, this provision states that Parties to the Protocol are individually and collectively to 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. It also instructs Parties to harmonize their policies in pursuit of these objectives where appropriate.

Article 3 (General Obligations)

Like the second paragraph of the preamble, paragraph 1 of this article serves to emphasize the utility of foresight or precaution in protecting and preserving the marine environment from pollution caused by ocean dumping. It does this by making clear that "appropriate" preventive measures are to be 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 effects.

Like paragraph 1, paragraph 2 serves to underline the relevance of a general concept to the Protocol's requirements. This time, however, the concept deals with

domestic allocation of the costs of pollution prevention and control measures. Paragraph 2 provides that 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 for the public interest." This provision will be implemented through existing legislation; *see e.g.* Sections 102(a), 104(a)(6) and 104b of the MPRSA. (33 U.S.C.A. §§ 1412(a), 1414(a)(6) and (b)).

The United States fully supports the objectives of paragraphs 1 and 2.

However, because these provisions reflect general concepts, which would not normally be an appropriate subject for dispute settlement, I recommend that the United States notify the Secretary-General of the following declaration pursuant to Article 16 upon deposit of its instrument of ratification:

As provided in Article 16.5, the United States of America declares that, when it is a party to a dispute about the interpretation or application of Article 3.1 or 3.2 of this Protocol, its consent shall be required before the dispute may be settled by means of the Arbitral Procedure set forth in Annex 3 of the Protocol.

Paragraph 3 requires that, in implementing the Protocol's provisions,
"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." This essentially reflects Article 195 of the LOS
Convention.

Paragraph 4 builds on Article VII(5) of the London Convention and provides that the Protocol does not prevent Parties, individually or jointly, from taking more stringent measures in accordance with international law in order to prevent, reduce and where practicable eliminate pollution.

Article 4 (Dumping of Wastes and Other Matter)

Like Article IV of the London Convention, Article 4 implements one of the core purposes of the Protocol, namely that Contracting Parties are to prohibit the dumping of wastes or other matter without a permit. The London Convention and the Protocol differ, however, in approach. Article IV of the London Convention embodies what has come to be known as the "black list/gray list" approach. Under this approach, wastes or other matter listed in the London Convention's Annex I (the "black list") may not be dumped except in emergency or *force majeure* situations; wastes or other matter listed on Annex II (the "gray list") may only be dumped if a special permit has been issued prior to dumping; and wastes or other matter not listed in either of these two Annexes require a general permit prior to dumping. Any permits for ocean dumping may be issued only after careful consideration of the factors listed in Annex III of the London Convention.

Article 4 of the Protocol works differently in that a substance must be included on, rather than excluded from, the Protocol's Annex 1 list (the "reverse list") before

issuance of a dumping permit may be considered. Under paragraph 1.2, Parties are obliged to adopt administrative or legislative measures to ensure that the issuance of permits and permit conditions complies with the provisions of Annex 2, which establishes a framework for evaluating the acceptability of dumping material on the reverse list at Annex 1. There are currently eight types of wastes or other matter listed in Annex 1. It should be noted that the Parties to the Protocol, through a process also involving observer States (including the United States), adopted an addition to the Annex I list to permit sub-seabed sequestration of carbon dioxide streams from carbon dioxide capture processes. This amendment entered into force in February 2007.

Article 4.2 of the Protocol provides that Parties to the Protocol may prohibit the dumping of even those wastes or other matter included on the reverse list at Annex 1. This is similar to Article IV(3) of the London Convention. Although sewage sludge is one of the materials that may be considered for dumping under Annex 1 of the Protocol, the MPRSA currently does not allow the ocean dumping of sewage sludge from wastewater treatment plants. The Executive branch will not seek to change this prohibition in the MPRSA.

Although Article 4 will not affect U.S. ocean dumping practice, amendments to the MPRSA will be sought to clarify that, except in emergency situations, only materials on the reverse list may be considered for dumping. The administrative

and legislative measures already in place for ocean dumping permit applications in the United States implement the assessment criteria set forth in Annex 2.

Article 5 (Incineration at Sea)

This article requires Parties to prohibit the incineration at sea of wastes and other matter. It expands on the ban of incineration at sea of industrial waste and sewage sludge that was adopted by the Parties as an amendment to the London Convention Annexes I and II in 1993, which entered into force in 1994. The United States supported and is a Party to this amendment, which is consistent with U.S. law under the MPRSA.

Although a statutory amendment to the MPRSA will be sought to harmonize U.S. law with Article 5's broader prohibition on incineration at sea, which encompasses all wastes and other matter, not only industrial waste and sewage sludge, this provision will not affect U.S. practice. The Environmental Protection Agency advises that it has not received any applications to issue permits for incineration at sea of wastes or other matter since the 1980's.

It should be noted that the Protocol's definition of "incineration at sea" excludes incineration at sea of wastes or other matter generated during the normal operation of a vessel, platform or other man-made structure on which they are being incinerated. Therefore, the obligation for Parties to the Protocol to ban

incineration at sea does not extend to incineration covered by MARPOL 73/78, Annex VI. Although this is consistent with U.S. practice, an amendment to the MPRSA will be sought to codify this provision.

Article 6 (Export of Wastes or Other Matter)

This article states that Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea. An amendment to the MPRSA will be sought to implement this provision.

Article 7 (Internal Waters)

Internal waters are explicitly excluded from the definition of "sea" under both the Protocol and the London Convention. Article 7.2 of the Protocol nonetheless provides that a 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. In the United States, discharge of waste and other matter in internal waters is regulated under, *inter alia*, the Federal Water Pollution Control Act (the Clean Water Act), 33 U.S.C.A. § 1251 *et seq.*Incineration within the United States is subject to regulation under, *inter alia*, the Clean Air Act, 42 U.S.C.A. § 7401 *et seq.*, and the Resource Conservation and

Recovery Act, 42 U.S.C.A. § 6901 et seq. Thus, dumping and incineration in internal waters are already effectively regulated in the United States.

Article 8 (Exceptions)

This article specifies exceptions to the prohibitions on dumping and incineration at sea contained in Articles 4.1 and 5. Paragraph 1 contains the same exception as London Convention Article V(I) regarding situations 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. In these situations, dumping or incineration at sea is permissible and does not require a permit, although it is to be conducted so as to minimize the likelihood of damage to human or marine life and it is to be reported to the International Maritime Organization.

Paragraph 2 applies to emergencies "posing an unacceptable threat to human health, safety, or the marine environment and admitting of no other feasible solution." This provision is broader than the corresponding London Convention provision (Article VIII(2)), which only allows an emergency permit in the case of an unacceptable threat to human health. The Protocol provision, which was strongly supported by the United States, gives greater authority to address threats

to humans and to the marine environment. Amendments to the MPRSA will be sought to codify this emergency provision.

Article 9 (Issuance of Permits and Reporting)

This article, which is drawn largely from Article VI of the London

Convention, sets forth regulatory and record-keeping requirements that Contracting

Parties are required to have in place in order to administer the dumping and
incineration at sea regime established by Articles 4, 5, and 8. EPA and the Army

Corps of Engineers share permitting authority and reporting responsibilities under

Sections 102 and 103 of the MPRSA.

Article 10 (Application and Enforcement)

Article 10 specifies the vessels, aircraft, and platforms or other man-made structures to which each Party is obliged to apply the measures required to implement the Protocol. It further clarifies the extent of each Party's responsibility to prevent and, if necessary, punish acts contrary to the Protocol. This article also addresses the Protocol's application to and enforcement against vessels and aircraft entitled to sovereign immunity under international law.

In large measure, Article 10 repeats the provisions of Article VII of the London Convention although it builds on the coastal State authorities reflected in Articles 210(5) and 216 of the LOS Convention. Thus, Article 10.1.3 obliges

coastal State Parties to apply the measures required to implement the Protocol to all 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. Moreover, the "appropriate" enforcement measures to which Article 10.2 refers are to be determined in accordance with international law (e.g., as reflected in the LOS Convention). Thus, the MPRSA will have to be amended to include all covered dumping or incineration activity in the Exclusive Economic Zone and continental shelf. Currently, dumping by non-U.S. vessels transporting material from outside the United States is regulated only when dumping material into the territorial sea or into the contiguous zone, to the extent that the dumping affects the territorial sea or the territory of the United States. Ocean dumping by vessels transporting material from the United States, or by vessels owned by or registered in the United States, will continue to be regulated wherever the dumping occurs (see MPRSA Section 101(a), 33 U.S.C.A. § 1411(a)).

Like Article VII of the London Convention, Article 10.3 states that Parties agree to co-operate in the development of procedures for effective application of the Protocol in areas beyond national jurisdiction (*i.e.*, the high seas), including procedures for the reporting of vessels and aircraft observed dumping or incinerating at sea in contravention of the Protocol.

Article 10.4, repeating verbatim Article VII(4) of the London Convention, exempts vessels and aircraft entitled to sovereign immunity under international law from coverage of the Protocol and provides that Parties take appropriate measures that such vessels and aircraft act in a manner consistent with the purpose of the Protocol. Further, a new provision, Article 10.5, allows a State to declare, at the time of ratification or accession or at any time thereafter, that it will apply the Protocol to its sovereign immune vessels and aircraft, recognizing that only that State may enforce the provisions of the Protocol with respect to such vessels and aircraft.

I do not recommend a formal declaration under Article 10.5, but the United States should make clear its understanding that the Protocol's dispute settlement procedures under Article 16 do not apply to the obligation to take appropriate measures to ensure that sovereign immune vessels and aircraft act in a manner consistent with the object and purpose of this Protocol. I therefore recommend that the United States notify the Secretary-General of the following understanding upon deposit of its instrument of ratification:

The United States understands, in light of Article 10.4 of the Protocol, which provides that the Protocol "shall not apply to those vessels and aircraft entitled to sovereign immunity under international law," that disputes regarding the interpretation or application of the Protocol in relation to such vessels and aircraft are not subject to Article 16 of the Protocol.

Article 11 (Compliance Procedures)

This article provides for the establishment of procedures and mechanisms necessary to assess and promote compliance with the Protocol. It further specifies that the Meeting of Contracting Parties to the Protocol may offer advice, assistance, or cooperation to Parties and non-Parties after full consideration of any information submitted pursuant to the Protocol and any recommendations made through compliance procedures and mechanisms once they are established. The United States is currently participating in the effort to develop these compliance procedures and mechanisms.

Article 12 (Regional Cooperation)

This article repeats the text of Article VIII of the London Convention with certain minor modifications to achieve consistency with other Protocol provisions. It encourages Contracting Parties with common interests to protect the marine environment in a given geographical area.

Article 13 (Technical Cooperation and Assistance)

This article builds on Article IX of the London Convention and calls on Contracting Parties to the Protocol to collaborate within the IMO and coordinate with other competent international organizations in order to promote support for technical cooperation and assistance to Parties that request it, in implementing the

Protocol. This article, which is more detailed than Article IX of the London Convention, reflects an awareness that technical cooperation and assistance are important in encouraging developing nations to adhere to and implement fully the Protocol's obligations. Article 13 also defines the role of the IMO in facilitating such cooperation and assistance.

Article 14 (Scientific and Technical Research)

This article recognizes the importance of scientific and technical research in preventing and controlling marine pollution. It obliges Parties to promote the availability of certain information relevant to such research to other Parties that request it. Scientific and technical information is generally exchanged between Contracting Parties at the Scientific Group meetings, which are convened once a year. Information is also made available through various seminars on specific topics and through reports on permits issued each year, inasmuch as such permits include information on amounts and types of wastes.

Article 15 (Responsibility and Liability)

Article 15 calls on the Parties to "undertake to develop procedures regarding liability arising from the dumping or incineration at sea of wastes or other matter." Article X of the London Convention also contains such a provision; however, such procedures have not been developed yet.

Article 16 (Settlement of Disputes)

Article 16 provides that, if resolution of a dispute regarding the interpretation or application of the Protocol is not possible within twelve months after one Contracting Party has notified another that a dispute exists between them, the dispute shall be settled, at the request of a party to the dispute, by means of the Arbitral Procedure set forth in Annex 3, unless the parties to the dispute agree to use one of the procedures listed in paragraph 1 of Article 287 of the LOS Convention.

In 1978, the Parties to the London Convention adopted amendments providing for mandatory arbitration of any disputes which arise regarding the Convention's interpretation or application. These amendments were intended to make the Convention's structure more effective. The United States deposited its instrument of ratification with respect to these amendments on October 24, 1980; however, the amendments have not been ratified by a sufficient number of Parties to enter into force. Annex 3 of the Protocol contains the same dispute settlement procedures as the 1978 amendments.

As referenced in the description of Article 3 above, paragraph 5 allows a State to opt out of dispute resolution with respect to disputes about the interpretation or application of Article 3.1 or 3.2. Paragraph 5 allows a State, at the time of ratification, to notify the Secretary-General of the IMO that its consent will

be required before such disputes may be settled by Annex 3 Arbitral Procedures. I recommend that the United States make such a declaration, as stated in the discussion of Article 3 above.

Article 17 (International Cooperation)

This article requires Parties to promote the Protocol's objectives within the competent international organizations.

Article 18 (Meetings of Contracting Parties)

This article, based on Article XIV(4) of the London Convention, provides for Meetings or Special Meetings of Contracting Parties to keep the implementation and effectiveness of the Protocol under continuing review. The language of Article 18 is sufficiently flexible to allow for coordination between Meetings of the Contracting Parties to the Protocol and Consultative Meetings of the Contracting Parties to the Convention.

Article 19 (Duties of the Organization)

This article follows common practice in international environmental agreements and provides for a secretariat to perform various administrative functions in support of the Protocol. In conjunction with the provisions of Article 1.2, it makes the IMO, which also serves as the Secretariat for the London

Convention, the organization responsible for secretariat duties under the Protocol. Finally, Article 19.3 specifies certain functions related to the Protocol that the IMO is only to undertake subject to the availability of adequate resources.

Article 20 (Annexes)

This article confirms that the three Annexes to the Protocol form an integral part of the Protocol.

Article 21 (Amendment of the Protocol)

An amendment to the articles of the Protocol is to be adopted by a two-thirds majority of the Contracting Parties and is to enter into force for the Contracting Parties that have accepted it on the sixtieth day after two-thirds of the Contracting Parties have deposited an instrument of acceptance. Any State becoming a Party to the Protocol after an amendment to it has entered into force will become a Party to the amended Protocol unless two-thirds of those present and voting when the amendment is adopted agree otherwise.

Article 22 (Amendment of the Annexes)

Amendments to Annexes 1 and 2 are to be based on scientific or technical considerations and, like an amendment to the Annexes of the London Convention, will enter into force for all Contracting Parties except those that make a declaration

within 100 days of their adoption, that it is unable to accept the amendment at that time. Amendments to Annex 3 (concerning the Arbitral Procedure) and new Annexes, like amendments to the Protocol itself described in Article 21, will only enter into force for those States that specifically accept them.

In the event that an amendment is of such a nature that it needs to be sent to the Senate for advice and consent in order for the United States constitutionally to be bound by it, the Executive branch will take the necessary steps to ensure that such an amendment does not enter into force for the United States absent such advice and consent.

Article 23 (Relationship between the Protocol and the Convention)

This article states that the Protocol will supersede the London Convention as between Parties to the Protocol that are also Parties to the Convention.

The Parties to the London Convention have determined that, while both the Protocol and Convention are in force, a State party to both instruments will not need to maintain dual systems of domestic implementation because the standards set by the Protocol are more comprehensive and more stringent. Therefore, following U.S. ratification of the Protocol, all dumping permits would be issued pursuant to the Protocol, as implemented through the MPRSA, and would be considered to comply fully with the London Convention.

Article 24 (Signature, Ratification, Acceptance, Approval and Accession)

This article sets forth standard procedures for signing and becoming Party to the Protocol.

Article 25 (Entry into Force)

The Protocol is to enter into force thirty days after at least 26 States have expressed their consent to be bound by the Protocol, at least 15 of which are also Parties to the London Convention. The Protocol entered into force March 24, 2006.

Article 26 (Transitional Period)

Like Article 13, this article is intended to make the Protocol more attractive to countries that have not become Parties to the London Convention because of perceived or real deficiencies in their domestic capacity to regulate ocean dumping. Article 26 allows non-parties to the London Convention to declare, when ratifying the Protocol, that they require up to five years to comply with specified Protocol provisions. No transitional period is allowed with respect to the dumping of radioactive wastes or the general prohibition against incineration at sea. Paragraphs 3, 5, and 6 of Article 26 place certain requirements on countries requesting a transitional period in order to ensure that it will be feasible for them to comply fully with the Protocol after that period has ended.

Articles 27-29 (Withdrawal, Depositary, Authentic Texts)

These are standard provisions regarding treaty operation.

Annex 1 (Wastes or Other Matter that May be Considered for Dumping)

As noted in the discussion of Article 4, this Annex sets forth the so-called "reverse list" of those wastes or other matter that may be considered for dumping. This list contains eight categories of substances: dredged material; sewage sludge; fish waste, or material resulting from industrial fish processing operations; vessels and platforms or other man-made structures at sea; inert, inorganic geological material; organic material of natural origin; in certain circumstances, bulky items primarily comprising iron, steel, concrete, and similarly unharmful materials for which the concern is physical impact; and carbon dioxide streams from carbon dioxide capture processes for sequestration. The presence of the "bulky items" category on the reverse list at Annex 1 allows Contracting Parties to dispose of bulky waste, such as captured war material, which meets the aforementioned criteria, when there is no practicable access to disposal options other than ocean dumping.

As mentioned above in the discussion of Article 4, amendments to the MPRSA will be sought to clarify that, except in emergency situations, only materials on the reverse list at Annex 1 may be considered for ocean dumping.

Furthermore, as discussed above and consistent with Article 4.2 of the Protocol, the United States will continue to prohibit the ocean dumping of sewage sludge from wastewater treatment plants.

Annex 1 further provides that material capable of creating floating debris or otherwise contributing to pollution of the marine environment must be removed to the maximum extent from vessels and platforms, other man-made structures at sea, and bulky items prior to dumping.

In addition, materials listed in Annex 1 containing levels of radioactivity greater than *de minimis* (exempt) concentrations, as defined by the International Atomic Energy Agency and adopted by Contracting Parties of the Protocol, will not be considered eligible for dumping. This Annex also specifies that the Contracting Parties are to complete scientific studies relating to radioactive wastes at 25-year intervals. The *de minimis* and 25-year review provisions are identical to what is already required under the London Convention, as amended. Therefore although ratification of the Protocol will not change U.S. practice, amendments to the MPRSA will be sought to codify this provision.

Annex 2 (Assessment of Wastes or Other Matter that May be Considered for Dumping)

This Annex contains a unified framework for evaluating the acceptability of dumping material on the reverse list at Annex 1. This framework calls for pollution prevention and stresses the need to consider a hierarchy of waste management options in addition to evaluating the potential impact of dumping. The MPRSA provides sufficient authority to implement the assessment criteria set forth in Annex 2. Annex 2 of the Protocol is a complete waste management strategy for allowed materials, including consideration of alternatives to ocean disposal, whereas Annex III of the London Convention focused on determining the suitability of material for ocean dumping. The administrative and legislative measures already in place for ocean dumping permit applications in the United States implement the assessment criteria set forth in Annex 2.

Annex 3 (Arbitral Procedure)

This Annex sets forth the arbitration procedures that will apply to disputes regarding the interpretation or application of the Protocol, unless those disputes are settled by peaceful means or unless the parties to them agree to use one of the procedures set forth in paragraph 1 of Article 287 of the LOS Convention.

1996 PROTOCOL TO THE CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER, 1972 (as amended in 2006)

THE CONTRACTING PARTIES TO THIS PROTOCOL,

STRESSING the need to protect the marine environment and to promote the sustainable use and conservation of marine resources,

NOTING in this regard the achievements within the framework of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 and especially the evolution towards approaches based on precaution and prevention,

NOTING FURTHER the contribution in this regard by complementary regional and national instruments which aim to protect the marine environment and which take account of specific circumstances and needs of those regions and States,

REAFFIRMING the value of a global approach to these matters and in particular the importance of continuing co-operation and collaboration between Contracting Parties in implementing the Convention and the Protocol,

RECOGNIZING that it may be desirable to adopt, on a national or regional level, more stringent measures with respect to prevention and elimination of pollution of the marine environment from dumping at sea than are provided for in international conventions or other types of agreements with a global scope,

TAKING INTO ACCOUNT relevant international agreements and actions, especially the United Nations Convention on the Law of the Sea, 1982, the Rio Declaration on Environment and Development and Agenda 21,

RECOGNIZING ALSO the interests and capacities of developing States and in particular small island developing States,

BEING CONVINCED that further international action to prevent, reduce and where practicable eliminate pollution of the sea caused by dumping can and must be taken without delay to protect and preserve the marine environment and to manage human activities in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and will continue to meet the needs of present and future generations,

HAVE AGREED as follows:

ARTICLE 1

DEFINITIONS

For the purposes of this Protocol:

"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 manmade 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.
- "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.

- "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.
- "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.

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.

ARTICLE 3

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.
- 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.
- 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.
- 4 No provision of this Protocol shall be interpreted as preventing Contracting Parties from taking, individually or jointly, more stringent measures in accordance with international law with respect to the prevention, reduction and where practicable elimination of pollution.

ARTICLE 4

DUMPING OF WASTES OR OTHER MATTER

- 1 .1 Contracting Parties shall prohibit the dumping of any wastes or other matter with the exception of those listed in Annex 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.
- 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.

ARTICLE 5

INCINERATION AT SEA

Contracting Parties shall prohibit incineration at sea of wastes or other matter.

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.

ARTICLE 7

INTERNAL WATERS

- Notwithstanding any other provision of this Protocol, this Protocol shall relate to internal waters only to the extent provided for in paragraphs 2 and 3.
- 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.
- 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.

ARTICLE 8

EXCEPTIONS

- 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.
- 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.
- Any Contracting Party may waive its rights under paragraph 2 at the time of, or subsequent to ratification of, or accession to this Protocol.

ARTICLE 9

ISSUANCE OF PERMITS AND REPORTING

- Each Contracting Party shall designate an appropriate authority or authorities to:
 - .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.
- 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:

- .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.
- 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.
- 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:
 - .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.

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.

Reports submitted under paragraphs 4.2 and 4.3 shall be evaluated by an appropriate subsidiary body as determined by the Meeting of Contracting Parties. This body will report its conclusions to an appropriate Meeting or Special Meeting of Contracting Parties.

ARTICLE 10

APPLICATION AND ENFORCEMENT

- Each Contracting Party shall apply the measures required to implement this Protocol to all:
 - .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.
- 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.
- Contracting Parties agree to co-operate in the development of procedures for the effective application of this Protocol in areas beyond the jurisdiction of any State, including procedures for the reporting of vessels and aircraft observed dumping or incinerating at sea in contravention of this Protocol.

- 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.
- 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.

COMPLIANCE PROCEDURES

- No later than two years after the entry into force of this Protocol, the Meeting of Contracting Parties shall establish those procedures and mechanisms necessary to assess and promote compliance with this Protocol. Such procedures and mechanisms shall be developed with a view to allowing for the full and open exchange of information, in a constructive manner.
- After full consideration of any information submitted pursuant to this Protocol and any recommendations made through procedures or mechanisms established under paragraph 1, the Meeting of Contracting Parties may offer advice, assistance or co-operation to Contracting Parties and non-Contracting Parties.

ARTICLE 12

REGIONAL CO-OPERATION

In order to further the objectives of this Protocol, Contracting Parties with common interests to protect the marine environment in a given geographical area shall endeavour, taking into account characteristic regional features, to enhance regional co-operation including the conclusion of regional agreements consistent with this Protocol for the prevention, reduction and where practicable elimination of pollution caused by dumping or incineration at sea of wastes or other matter. Contracting Parties shall seek to co-operate with the parties to regional agreements in order to develop harmonized procedures to be followed by Contracting Parties to the different conventions concerned.

ARTICLE 13

TECHNICAL CO-OPERATION AND ASSISTANCE

- 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:
 - .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
- 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.
- 2 The Organization shall perform the following functions:
 - .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.

ARTICLE 14

SCIENTIFIC AND TECHNICAL RESEARCH

- 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.
- 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:
 - .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.

RESPONSIBILITY AND LIABILITY

In accordance with the principles of international law regarding State responsibility for damage to the environment of other States or to any other area of the environment, the Contracting Parties undertake to develop procedures regarding liability arising from the dumping or incineration at sea of wastes or other matter.

ARTICLE 16

SETTLEMENT OF DISPUTES

- 1 Any disputes regarding the interpretation or application of this Protocol shall be resolved in the first instance through negotiation, mediation or conciliation, or other peaceful means chosen by parties to the dispute.
- If no resolution is possible within twelve months after one Contracting Party has notified another that a dispute exists between them, the dispute shall be settled, at the request of a party to the dispute, by means of the Arbitral Procedure set forth in Annex 3, unless the parties to the dispute agree to use one of the procedures listed in paragraph 1 of Article 287 of the 1982 United Nations Convention on the Law of the Sea. The parties to the dispute may so agree, whether or not they are also States Parties to the 1982 United Nations Convention on the Law of the Sea.
- In the event an agreement to use one of the procedures listed in paragraph 1 of Article 287 of the 1982 United Nations Convention on the Law of the Sea is reached, the provisions set forth in Part XV of that Convention that are related to the chosen procedure would also apply, mutatis mutandis.
- The twelve month period referred to in paragraph 2 may be extended for another twelve months by mutual consent of the parties concerned.
- Notwithstanding paragraph 2, any State may, at the time it expresses its consent to be bound by this Protocol, notify the Secretary-General that, when it is a party to a dispute about the interpretation or application of article 3.1 or 3.2, its consent will be required before the dispute may be settled by means of the Arbitral Procedure set forth in Annex 3.

ARTICLE 17

INTERNATIONAL CO-OPERATION

Contracting Parties shall promote the objectives of this Protocol within the competent international organizations.

ARTICLE 18

MEETINGS OF CONTRACTING PARTIES

- 1 Meetings of Contracting Parties or Special Meetings of Contracting Parties shall keep under continuing review the implementation of this Protocol and evaluate its effectiveness with a view to identifying means of strengthening action, where necessary, to prevent, reduce and where practicable eliminate pollution caused by dumping and incineration at sea of wastes or other matter. To these ends, Meetings of Contracting Parties or Special Meetings of Contracting Parties may:
 - .1 review and adopt amendments to this Protocol in accordance with articles 21 and 22;
 - .2 establish subsidiary bodies, as required, to consider any matter with a view to facilitating the effective implementation of this Protocol;
 - .3 invite appropriate expert bodies to advise the Contracting Parties or the Organization on matters relevant to this Protocol;
 - .4 promote co-operation with competent international organizations concerned with the prevention and control of pollution;
 - .5 consider the information made available pursuant to article 9.4;
 - .6 develop or adopt, in consultation with competent international organizations, procedures referred to in article 8.2, including basic criteria for determining exceptional and emergency situations, and procedures for consultative advice and the safe disposal of matter at sea in such circumstances;
 - .7 consider and adopt resolutions; and
 - .8 consider any additional action that may be required.
- 2 The Contracting Parties at their first Meeting shall establish rules of procedure as necessary.

DUTIES OF THE ORGANIZATION

- 1 The Organization shall be responsible for Secretariat duties in relation to this Protocol. Any Contracting Party to this Protocol not being a member of this Organization shall make an appropriate contribution to the expenses incurred by the Organization in performing these duties.
- 2 Secretariat duties necessary for the administration of this Protocol include:
 - .1 convening Meetings of Contracting Parties once per year, unless otherwise decided by Contracting Parties, and Special Meetings of Contracting Parties at any time on the request of two-thirds of the Contracting Parties;
 - .2 providing advice on request on the implementation of this Protocol and on guidance and procedures developed thereunder;
 - .3 considering enquiries by, and information from Contracting Parties, consulting with them and with the competent international organizations, and providing recommendations to Contracting Parties on questions related to, but not specifically covered by, this Protocol;
 - .4 preparing and assisting, in consultation with Contracting Parties and the competent international organizations, in the development and implementation of procedures referred to in article 18.6.;
 - .5 conveying to the Contracting Parties concerned all notifications received by the Organization in accordance with this Protocol; and
 - .6 preparing, every two years, a budget and a financial account for the administration of this Protocol which shall be distributed to all Contracting Parties.
- 3 The Organization shall, subject to the availability of adequate resources, in addition to the requirements set out in article 13.2.3.
 - .1 collaborate in assessments of the state of the marine environment; and
 - .2 co-operate with competent international organizations concerned with the prevention and control of pollution.

ARTICLE 20

ANNEXES

Annexes to this Protocol form an integral part of this Protocol.

AMENDMENT OF THE PROTOCOL

- 1 Any Contracting Party may propose amendments to the articles of this Protocol. The text of a proposed amendment shall be communicated to Contracting Parties by the Organization at least six months prior to its consideration at a Meeting of Contracting Parties or a Special Meeting of Contracting Parties.
- 2 Amendments to the articles of this Protocol shall be adopted by a two-thirds majority vote of the Contracting Parties which are present and voting at the Meeting of Contracting Parties or Special Meeting of Contracting Parties designated for this purpose.
- An amendment shall enter into force for the Contracting Parties which have accepted it on the sixtieth day after two-thirds of the Contracting Parties shall have deposited an instrument of acceptance of the amendment with the Organization. Thereafter the amendment shall enter into force for any other Contracting Party on the sixtieth day after the date on which that Contracting Party has deposited its instrument of acceptance of the amendment.
- 4 The Secretary-General shall inform Contracting Parties of any amendments adopted at Meetings of Contracting Parties and of the date on which such amendments enter into force generally and for each Contracting Party.
- After entry into force of an amendment to this Protocol, any State that becomes a Contracting Party to this Protocol shall become a Contracting Party to this Protocol as amended, unless two-thirds of the Contracting Parties present and voting at the Meeting or Special Meeting of Contracting Parties adopting the amendment agree otherwise.

ARTICLE 22

AMENDMENT OF THE ANNEXES

- Any Contracting Party may propose amendments to the Annexes to this Protocol. The text of a proposed amendment shall be communicated to Contracting Parties by the Organization at least six months prior to its consideration by a Meeting of Contracting Parties or Special Meeting of Contracting Parties.
- Amendments to the Annexes other than Annex 3 will be based on scientific or technical considerations and may take into account legal, social and economic factors as appropriate. Such amendments shall be adopted by a two-thirds majority vote of the Contracting Parties present and voting at a Meeting of Contracting Parties or Special Meeting of Contracting Parties designated for this purpose.
- 3 The Organization shall without delay communicate to Contracting Parties amendments to the Annexes that have been adopted at a Meeting of Contracting Parties or Special Meeting of Contracting Parties.
- Except as provided in paragraph 7, amendments to the Annexes shall enter into force for each Contracting Party immediately on notification of its acceptance to the Organization or 100 days after the date of their adoption at a Meeting of Contracting Parties, if that is later, except for those Contracting Parties which before the end of the 100 days make a declaration that

they are not able to accept the amendment at that time. A Contracting Party may at any time substitute an acceptance for a previous declaration of objection and the amendment previously objected to shall thereupon enter into force for that Contracting Party.

- 5 The Secretary-General shall without delay notify Contracting Parties of instruments of acceptance or objection deposited with the Organization.
- 6 A new Annex or an amendment to an Annex which is related to an amendment to the articles of this Protocol shall not enter into force until such time as the amendment to the articles of this Protocol enters into force.
- With regard to amendments to Annex 3 concerning the Arbitral Procedure and with regard to the adoption and entry into force of new Annexes the procedures on amendments to the articles of this Protocol shall apply.

ARTICLE 23

RELATIONSHIP BETWEEN THE PROTOCOL AND THE CONVENTION

This Protocol will supersede the Convention as between Contracting Parties to this Protocol which are also Parties to the Convention.

ARTICLE 24

SIGNATURE, RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION

- This Protocol shall be open for signature by any State at the Headquarters of the Organization from 1 April 1997 to 31 March 1998 and shall thereafter remain open for accession by any State.
- 2 States may become Contracting Parties to this Protocol by:
 - .1 signature not subject to ratification, acceptance or approval; or
 - .2 signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
 - .3 accession.
- 3 Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General.

ENTRY INTO FORCE

- This Protocol shall enter into force on the thirtieth day following the date on which:
 - .1 at least 26 States have expressed their consent to be bound by this Protocol in accordance with article 24; and
 - .2 at least 15 Contracting Parties to the Convention are included in the number of States referred to in paragraph 1.1.
- For each State that has expressed its consent to be bound by this Protocol in accordance with article 24 following the date referred to in paragraph 1, this Protocol shall enter into force on the thirtieth day after the date on which such State expressed its consent.

ARTICLE 26

TRANSITIONAL PERIOD

- 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.
- 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.
- 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.
- 4 Any transitional period specified in a notification made under paragraph 1 shall not extend beyond five years after such notification is submitted.
- 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.
- 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.

ARTICLE 27

WITHDRAWAL

- Any Contracting Party may withdraw from this Protocol at any time after the expiry of two years from the date on which this Protocol enters into force for that Contracting Party.
- Withdrawal shall be effected by the deposit of an instrument of withdrawal with the Secretary-General.
- 3 A withdrawal shall take effect one year after receipt by the Secretary-General of the instrument of withdrawal or such longer period as may be specified in that instrument.

ARTICLE 28

DEPOSITARY

- 1 This Protocol shall be deposited with the Secretary-General.
- 2 In addition to the functions specified in articles 10.5, 16.5, 21.4, 22.5 and 26.5, the Secretary-General shall:
 - .1 inform all States which have signed this Protocol or acceded thereto of:
 - .1 each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;
 - .2 the date of entry into force of this Protocol; and
 - .3 the deposit of any instrument of withdrawal from this Protocol together with the date on which it was received and the date on which the withdrawal takes effect.
 - .2 transmit certified copies of this Protocol to all States which have signed this Protocol or acceded thereto.
- 3 As soon as this Protocol enters into force, a certified true copy thereof shall be transmitted by the Secretary-General to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

AUTHENTIC TEXTS

This Protocol is established in a single original in the Arabic, Chinese, English, French, Russian and Spanish languages, each text being equally authentic.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed this $Protocol^1$.

DONE AT LONDON, this seventh day of November, one thousand nine hundred and ninety-

Signatures omitted.

ANNEX 1

WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING

- 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;
 - .7 bulky items primarily comprising iron, steel, concrete and similarly unharmful 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; and
 - .8 Carbon dioxide streams from carbon dioxide capture processes for sequestration.
- 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.
- Notwithstanding the above, materials listed in paragraphs 1.1 to 1.8 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.
- 4 Carbon dioxide streams referred to in paragraph 1.8 may only be considered for dumping, if:
 - .1 disposal is into a sub-seabed geological formation; and
 - .2 they consist overwhelmingly of carbon dioxide. They may contain incidental associated substances derived from the source material and the capture and sequestration processes used; and

.3 no wastes or other matter are added for the purpose of disposing of those wastes or other matter.

ANNEX 2

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

GENERAL

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.
- 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.
- 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

- 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.

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

- 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:
 - 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

- 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.
- 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.
- 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

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.

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.

ANNEX 3

ARBITRAL PROCEDURE

Article 1

- An Arbitral Tribunal (hereinafter referred to as the "Tribunal") shall be established upon the request of a Contracting Party addressed to another Contracting Party in application of article 16 of this Protocol. The request for arbitration shall consist of a statement of the case together with any supporting documents.
- 2 The requesting Contracting Party shall inform the Secretary-General of:
 - .1 its request for arbitration; and
 - .2 the provisions of this Protocol the interpretation or application of which is, in its opinion, the subject of disagreement.
- 3 The Secretary-General shall transmit this information to all Contracting States.

Article 2

- 1 The Tribunal shall consist of a single arbitrator if so agreed between the parties to the dispute within 30 days from the date of receipt of the request for arbitration.
- In the case of the death, disability or default of the arbitrator, the parties to a dispute may agree upon a replacement within 30 days of such death, disability or default.

Article 3

- Where the parties to a dispute do not agree upon a Tribunal in accordance with article 2 of this Annex, the Tribunal shall consist of three members:
 - .1 one arbitrator nominated by each party to the dispute; and
 - .2 a third arbitrator who shall be nominated by agreement between the two first named and who shall act as its Chairman.
- 2 If the Chairman of a Tribunal is not nominated within 30 days of nomination of the second arbitrator, the parties to a dispute shall, upon the request of one party, submit to the Secretary-General within a further period of 30 days an agreed list of qualified persons. The Secretary-General shall select the Chairman from such list as soon as possible. He shall not select a Chairman who is or has been a national of one party to the dispute except with the consent of the other party to the dispute.
- If one party to a dispute fails to nominate an arbitrator as provided in paragraph 1.1 within 60 days from the date of receipt of the request for arbitration, the other party may request the submission to the Secretary-General within a period of 30 days of an agreed list of qualified persons. The Secretary-General shall select the Chairman of the Tribunal from such list as

soon as possible. The Chairman shall then request the party which has not nominated an arbitrator to do so. If this party does not nominate an arbitrator within 15 days of such request, the Secretary-General shall, upon request of the Chairman, nominate the arbitrator from the agreed list of qualified persons.

- In the case of the death, disability or default of an arbitrator, the party to the dispute who nominated him shall nominate a replacement within 30 days of such death, disability or default. If the party does not nominate a replacement, the arbitration shall proceed with the remaining arbitrators. In the case of the death, disability or default of the Chairman, a replacement shall be nominated in accordance with the provision of paragraphs 1.2 and 2 within 90 days of such death, disability or default.
- A list of arbitrators shall be maintained by the Secretary-General and composed of qualified persons nominated by the Contracting Parties. Each Contracting Party may designate for inclusion in the list four persons who shall not necessarily be its nationals. If the parties to the dispute have failed within the specified time limits to submit to the Secretary-General an agreed list of qualified persons as provided for in paragraphs 2, 3 and 4, the Secretary-General shall select from the list maintained by him the arbitrator or arbitrators not yet nominated.

Article 4

The Tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

Article 5

Each party to the dispute shall be responsible for the costs entailed by the preparation of its own case. The remuneration of the members of the Tribunal and of all general expenses incurred by the arbitration shall be borne equally by the parties to the dispute. The Tribunal shall keep a record of all its expenses and shall furnish a final statement thereof to the parties.

Article 6

Any Contracting Party which has an interest of a legal nature which may be affected by the decision in the case may, after giving written notice to the parties to the dispute which have originally initiated the procedure, intervene in the arbitration procedure with the consent of the Tribunal and at its own expense. Any such intervenor shall have the right to present evidence, briefs and oral argument on the matters giving rise to its intervention, in accordance with procedures established pursuant to article 7 of this Annex, but shall have no rights with respect to the composition of the Tribunal.

Article 7

A Tribunal established under the provisions of this Annex shall decide its own rules of procedure.

Article 8

- Unless a Tribunal consists of a single arbitrator, decisions of the Tribunal as to its procedure, its place of meeting, and any question related to the dispute laid before it, shall be taken by majority vote of its members. However, the absence or abstention of any member of the Tribunal who was nominated by a party to the dispute shall not constitute an impediment to the Tribunal reaching a decision. In case of equal voting, the vote of the Chairman shall be decisive.
- 2 The parties to the dispute shall facilitate the work of the Tribunal and in particular shall, in accordance with their legislation and using all means at their disposal:
 - .1 provide the Tribunal with all necessary documents and information; and
 - .2 enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.
- The failure of a party to the dispute to comply with the provisions of paragraph 2 shall not preclude the Tribunal from reaching a decision and rendering an award.

Article 9

The Tribunal shall render its award within five months from the time it is established unless it finds it necessary to extend that time limit for a period not to exceed five months. The award of the Tribunal shall be accompanied by a statement of reasons for the decision. It shall be final and without appeal and shall be communicated to the Secretary-General who shall inform the Contracting Parties. The parties to the dispute shall immediately comply with the award.