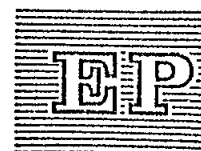




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for MED POL

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Long-Term Programme for Pollution Monitoring and Research
in the Mediterranean Sea (MED POL - PHASE II)

REPORT ON THE IMPLEMENTATION OF THE PROTOCOL FOR THE PREVENTION
OF POLLUTION OF THE MEDITERRANEAN SEA BY DUMPING
FROM SHIPS AND AIRCRAFT AND RECOMMENDATIONS FOR FUTURE ACTION

C O N T E N T S

	Paragraphs
INTRODUCTION	1 - 5
A. Report on the permits issued in accordance with Articles 5, 6 and 7 and on the amount of waste authorized for dumping according to these Articles	6 - 10
B. Report on the actual amounts of waste reported as dumped in the Mediterranean Sea Area on the basis of permits issued in accordance with Articles 5, 6 and 7	11 - 12
C. Report on dumping in accordance with Article 8	13 - 14
D. Report on consultations in accordance with Article 9	15 - 16
E. Other reports	17
F. Review of the implementation of the Protocol and the efficacy of the measures adopted	18 - 22
G. Recommendations	23 - 26
ANNEX I: Summary of the recommendations for the further implementation of the Protocol	
ANNEX II: Form of report for special and general permits	
ANNEX III: Form of annual report concerning actual dumping carried out by the Parties to the Protocol	

INTRODUCTION

1. The Convention for the Protection of the Mediterranean Sea against Pollution^{1/} in its Article 5 states that "The Contracting Parties shall take all appropriate measures to prevent and abate pollution of the Mediterranean Sea Area caused by dumping from ships and aircrafts".

2. The Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft^{2/} specifies the ways and means agreed by the Contracting Parties for the implementation of Article 5 of the Convention.

3. Article 14 of the Protocol states that "it shall be the function of the meetings of the Parties to this Protocol:

- (a) To keep under review the implementation of this Protocol, and to consider the efficacy of the measures adopted and the need for any other measures, in particular in the form of annexes;
- (b) To study and consider the records of the permits issued in accordance with Articles 5, 6 and 7 and of the dumping which has taken place;
- (c) To review and amend as required any annex to this Protocol; and
- (d) To discharge such other functions as may be appropriate for the implementation of this Protocol".

4. In pursuance of the provisions of Article 14 of the Protocol, the United Nations Environment Programme (UNEP) as the organization assigned by the Contracting Parties to carry out the secretarial functions for the Convention and the Protocol, has prepared this document covering:

- (a) The records of the special and general permits issued in accordance with Articles 5, 6 and 7 and on the amount of waste authorized for dumping according to these permits;
- (b) The records of the actual amount of waste reported as dumped into the Mediterranean Sea in accordance with Articles 5, 6 and 7;

^{1/} The Convention for the Protection of the Mediterranean Sea against Pollution entered into force on 12 February, 1978 and has the following Contracting Parties:

Algeria	Libyan Arab Jamahiriya
Cyprus	Malta
EEC	Monaco
Egypt	Morocco
France	Spain
Greece	Syria
Israel	Tunisia
Italy	Turkey
Lebanon	Yugoslavia

^{2/} All the Contracting Parties to the Convention are also Parties to the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft entered into force on 12 February 1978.

- (c) The records of reported dumping authorized in accordance with Article 8;
- (d) The records of consultations carried out in accordance with Article 9;
- (e) The review of the implementation of the Protocol and of the efficacy of the adopted measures; and
- (f) The recommendations of the secretariat for improved efficiency of the Protocol's implementation.

5. The present document was prepared for the Third Meeting of the Working Group for Scientific and Technical Co-operation, which is invited to provide the secretariat with comments on its contents and on the proposed recommendations. On the basis of the review of the document, and taking into account the comments expected from the members of the Working Group, the Working Group may wish to make recommendations to the Executive Director of UNEP, with a view of their transmission to the forthcoming Fourth Meeting of the Contracting Parties (September 1985).

A. Report on the permits issued in accordance with Articles 5, 6 and 7 and on the amount of waste authorized for dumping according to these Articles

6. Article 5 of the Protocol states that "the dumping into the Mediterranean Sea Area of wastes or other matter listed in Annex II to this Protocol requires, in each case, a prior special permit from the competent national authorities".

7. Permits to which Article 5 refers that have been issued between 12 February 1978 and 30 September 1984 by the Contracting Parties are listed in Tables 1 and 2.

8. Article 6 of the Protocol states that "the dumping into the Mediterranean Sea Area of all other wastes or other matter requires a prior general permit from the competent national authorities".

9. The permits to which Article 6 refers that have been issued between 12 February 1978 and 30 September 1984 by the Contracting Parties are listed in Table 3.

10. The total amounts of waste authorized for dumping under special and general permits are given in Table 4.

B. Report on the actual amounts of waste reported as dumped in the Mediterranean Sea Area on the basis of permits issued in accordance with Articles 5, 6 and 7

11. Reports on actual dumpings of waste or other matter carried out under special permits between 12 February 1978 and 30 September 1984, received from the Contracting Parties, are listed in Table 5.

12. Reports on actual dumpings of waste or other matter carried out under general permits, between 12 February 1978 and 30 September 1984, received from the Contracting Parties, are listed in Table 6.

C. Report on dumping in accordance with Article 8

13. Article 8 of the Protocol states that "The provisions of Articles 4, 5 and 6 shall not apply in case of force majeure due to stress of weather or any other cause when human life or the safety of a ship or aircraft is threatened. Such dumping shall immediately be reported to the Organization and, either through the Organization or directly, to any Party or Parties likely to be affected, together with full details of the circumstances and of the nature and quantities of the wastes or other matter dumped".

14. No reports on operations carried out under the provisions of Article 8 have been received from the Contracting Parties since 31 July 1983 (see document UNEP/WG.91/8 for previous years).

D. Report on consultations in accordance with Article 9

15. Article 9 of the Protocol states that "If a Party in a critical situation of an exceptional nature considers that wastes or other matter listed in Annex I to this Protocol cannot be disposed of on land without unacceptable danger or damage, above all for the safety of human life, the Party concerned shall forthwith consult the Organization. The Organization, after consulting the Parties to this Protocol, shall recommend methods of storage or the most satisfactory means of destruction or disposal under the prevailing circumstances. The party shall inform the Organization of the steps adopted in pursuance of these recommendations. The Parties pledge themselves to assist one another in such situations".

16. No Contracting Party has approached the secretariat with problems related to Article 9.

E. Other reports

17. The Government of Italy reported to the secretariat the case of the Greek tanker ALECOS that, through a control made by the Port Authorities of Cagliari on the oil register of the vessel, was found to have discharged greasy waters in international waters and in various harbours of the Mediterranean Sea. The case of the German vessel IMMANUEL KANT which had discharged at sea, 31 miles off the Palermo harbour, about 18 tons of ammonia without prior authorization was also reported by the Italian authorities.

F. Review of the implementation of the Protocol and the efficacy of the measures adopted

18. There have been no reports on dumping of wastes or other matter listed in Annex I to the Protocol between 12 February 1978 and 30 September 1984.

19. The majority of the Contracting Parties failed to inform the secretariat about their competent authorities expected to be designated in accordance with Article 10. This caused difficulties for the secretariat in communication and resulted, in general, in poor quality of information contained in this document.

20. The request of the secretariat for the submission of national annual reports (see paragraph 21(a)) on actual dumping carried out by the Contracting Parties has been answered only by a few States. Therefore, the information on the amounts of waste actually dumped into the Mediterranean Sea (Table 7) should be considered as inadequate and most probably under-estimated.

21. In addition to those already indicated in document UNEP/WG.91/8, only one Contracting Party has informed the secretariat about measures taken in the implementation of the Protocol:

Israel: The protocol has been ratified by Israel and national legislation and regulations have been issued in accordance with the protocol.

22. In addition to the measures reported in document UNEP/WG.91/8, the secretariat, through a consultant has reviewed the progress made in the implementation of the Protocol in the light of progress made by other regional and global conventions.

G. Recommendations

23. The recommendations of the secretariat for the further implementation of the Protocol, referring to administrative matters as well as to technical and scientific matters, are divided into "Recommendations for immediate action" and "Recommendations for future action". They are presented with explanations in this section for discussion by the Working Group and are listed in Annex 1 for the purpose of adoption by the Working Group with a view of their transmission, through the Executive Director of UNEP, to the forthcoming Meeting of the Contracting Parties (September 1985).

24. The secretariat wishes to emphasize the provisional nature of several of the "Recommendations for immediate action". In order to enable implementation of all of the provisions of the Protocol the issues concerned must be dealt with immediately. At a later stage these issues will have to be reviewed as proposed in the "Recommendations for future action".

25. Recommendations for immediate action

25.1 Administrative matters:

- (a) Designation of national authorities. The Contracting Parties which have not yet done so should designate without delay "competent authorities" in accordance with Article 10 of the Protocol.
- (b) Designation of national focal points. In order to enable implementation of Article 9 of the Protocol and implementation of the "Interim procedures and criteria for determining critical situations of an exceptional nature" adopted by the Second Meeting of the Contracting Parties (Cannes, March 1981), it is recommended that the Contracting Parties would designate "National Focal Points" for contact in critical situations.
- (c) Establishment of a Scientific Group on Dumping. As stated in Article 14 of the Protocol, it should be the function of the meeting of the Contracting Parties to keep under review the implementation of the Protocol, to consider the efficacy of the measures adopted and the need for further measures, to study and consider the records of dumping permits and dumping which has taken place, to review and amend as required any Annex to the Protocol and, to discharge such other functions as may be appropriate for the implementation of the Protocol. Because of the specialized nature of the issues concerned, it is essential that, prior to their consideration by the meetings of the Contracting Parties, they would be subject to a scientific and technical review by competent experts. It is, therefore, recommended that the Contracting Parties

would establish a standing Scientific Group on Dumping to provide them with advice on scientific and technical matters related to implementation of the Protocol and to keep them informed of scientific developments related to the dumping of wastes at sea. A proposal for the terms of reference for the Scientific Group is set forth in Annex I, Appendix I. Membership of the Scientific Group shall be open to all Contracting Parties. The Scientific Group shall meet at least once a year during the forthcoming five years and shall prepare reports on its activities and bring forward recommendations for consideration by the meeting of the Contracting Parties. The Contracting Parties should identify the budgetary allocations required for financing the activities of the Scientific Group.

- (d) Preparation of a roster of experts on dumping. In order to promote technical assistance relevant to implementation of the Protocol to those Contracting Parties which may so request, it is recommended that, on the basis of information provided by the Contracting Parties, the secretariat would prepare and circulate a roster of experts and institutions capable of providing technical assistance on matters of dumping of wastes at sea and on alternative methods for waste disposal.

25.2 Reporting and notification

- (a) Reports on national rules related to implementation of the Protocol. In order to promote sharing of the experience gained by the Contracting Parties in implementation of the Protocol and to assist the meeting of the Contracting Parties in reviewing the implementation of the Protocol, it is recommended that reports transmitted by the Contracting Parties to the secretariat in accordance with Article 20 of the Convention should include copies or alternatively summaries, of legal or administrative rules referring to implementation of the Protocol. The secretariat should prepare and circulate annual reports summarizing submissions made by the Contracting Parties.
- (b) Submission of "NIL reports" on dumping activities. In order to enable the secretariat to assess the scope of dumping activities in the Mediterranean Sea and hence to present complete reports to the meetings of the Contracting Parties, it is recommended that the Contracting Parties concerned should transmit to the secretariat "NIL reports" when no dumping permits were issued and no dumping has taken place during the period for which reports on permits issued and on actual dumping have to be submitted.
- (c) Amendment of the provisional Prior Consultation Procedures (PCP). The Second Meeting of the Contracting Parties adopted a provisional PCP (contained in UNEP/WG.28/3, Annex VII) which has to be followed when dumping of substances mentioned in Annex I of the Protocol is being considered on the assumption that they are "non toxic" or "rapidly converted" or appear only as "trace contaminants". No type of waste or other matter is exempt from the provisional PCP in its present form. As almost any type of waste or other matter may contain low levels of some of the substances concerned, especially mercury and cadmium, it is evident that the provisional PCP has to be followed almost universally. This may create serious complications in the process of issuing dumping permits, especially with regard to dumping of sewage sludge and dredge spoils for which in many cases, a land-based disposal alternative is not available or is impractical. It is, therefore, recommended that the Contracting Parties would amend the provisional PCP so that its opening sentence would read: "The following procedure which does not apply to sewage sludge and dredge spoils is recommended...".

25.3 Definition of terms mentioned in Annex I and criteria for application of Article 5 of the Protocol:

- (a) Substances mentioned in Annex I which are "non toxic" or "rapidly converted" or appear as "trace contaminants". Some of the substances mentioned in Annex I of the Protocol are exempt from the dumping prohibition when they qualify as "non toxic" or "are rapidly converted in the sea into substances which are biologically harmless" or are "rapidly rendered harmless by physical, chemical or biological processes in the sea" or appear as "trace contaminants". The meeting of experts on the Protocol convened by UNEP in 1979 (UNEP/WG.28/3) has recommended that the Contracting Parties would appoint a group of experts which would be assigned the task of defining the above expressions on basis of scientific data, including, in particular, tests of toxicity, bioaccumulation and degradation. That meeting also recommended that, as an interim measure, the Contracting Parties would adopt the PCP mentioned above. Since then, no progress was made on this subject. As definitions of the above expressions are required in order to enable implementation of the relevant provisions of Annex I, it is recommended that, on a provisional basis, the Contracting Parties would adopt the definitions set forth in paragraphs 1(a) and 1(b) of Appendix 2 of Annex I (these are essentially the definitions adopted by the Contracting Parties to the London Dumping Convention and they incorporate the concept of tests of toxicity, bioaccumulation and degradation). It is further recommended that the implications of these definitions should be taken into account when the provisional PCP would be applied.
- (b) Acid and alkaline compounds. Paragraph 8 of Annex I refers to "acid and alkaline compounds of such composition and in such quantity that they may seriously impair the quality of sea-water "and states that" the composition and quantity to be taken into account shall be determined by the Parties...". Annex II refers to acid and alkaline compounds which are not covered by Annex I. The meeting of experts on the Protocol convened by UNEP in 1979 recommended that the Contracting Parties would nominate experts to participate in a technical working group which would have the task of defining the acid and alkaline compounds referred to in Annex I and Annex II respectively, and of working out the practical guidelines for dumping of acid or alkaline substances listed in Annex II of the Protocol. Since then no progress was made on this subject and as a result, the relevant provisions of the Protocol cannot be implemented. In this connection it should be noted that the potential of acid and alkaline compounds to impair the quality of sea-water (i.e. to change the acidity or alkalinity) depends not only on their composition and quantity and on the buffering capacity of the receiving waters but also on kinetic factors, i.e. on the mixing conditions during and after dumping operations. Thus the distinction between Annex I and Annex II acid and alkaline compounds should take into account kinetic factors. In connection with the control of dumping of TiO_2 waste, the Oslo Commission adopted guidelines which recommend that dumping may be authorized under the condition that the pH of the receiving waters should reach pH 6 (i.e. about 25 per cent less than the normal pH of sea-water) within a maximum of 5 minutes after discharge. Along the same lines, it is recommended that, on a provisional basis, the Contracting Parties would adopt the definitions set forth in paragraph 1(c) of Appendix 2 of Annex I. It is further recommended that the secretariat would develop and circulate practical guidelines for dumping of acid and alkaline compounds covered by Annex II.

- (c) Radioactive wastes and other radioactive matter. Annex I refers to high-and medium-and low-level radioactive wastes or other high-and medium-and low-level radioactive matter to be defined by the International Atomic Energy Agency (IAEA), and Annex II refers to radioactive waste or other radioactive matter which is not included in Annex I. The Second Meeting of the Contracting Parties has recommended that no radioactive wastes and other radioactive matter shall be dumped in the Mediterranean Sea area until the IAEA definition of the de-minimis level of radioactivity for wastes and other matter of low-level radioactivity has been accepted by all the Parties to the Protocol. To this date the above definition has not been received by the Contracting Parties and it is recommended that the Contracting Parties would urge IAEA to complete its work on that definition and make it available for the Contracting Parties.
- (d) Criteria for application of Article 5. Article 5 of the Protocol states that: "The dumping into the Mediterranean Sea area of wastes or other matter listed in Annex II to this Protocol requires, in each case, a prior special permit from the competent national authorities". With regard to the substances listed in paragraph 1 of Annex II of the Protocol, implementation of Article 5 may become extremely difficult because many of these substances are contained at low concentrations in a wide variety of wastes and other matter (e.g. naturally occurring metals in uncontaminated dredge spoils). Thus, as the Protocol does not mention any exemption from the provision of Article 5 in relation to the substances mentioned above, it is evident that the dumping of almost any type of waste or other matter requires a special permit and cannot be authorized under a general permit. In this connection it should be mentioned that, in the London and Oslo Dumping Conventions, some of the substances listed in paragraph 1 of Annex II of the Protocol fall under the "Special permit" provision only if they are contained in wastes in "Significant amounts". Accordingly, the Contracting Parties to those conventions have agreed on interim interpretations which determine that "Significant amounts" of a substance contained in a waste shall mean 0.1 per cent or more by weight for arsenic, copper and zinc and their compounds and for cyanides and fluorides, and 0.05 per cent or more by weight for lead and lead compounds and for pesticides and their by-products not covered by Annex I. In order to overcome the difficulties mentioned above and to establish a clear distinction between wastes falling under the "special permits" provision and wastes falling under the "general permits" provision, it is recommended that, on a provisional basis, the Contracting Parties would agree on the interpretation of Article 5 of the Protocol set forth in paragraphs 2(a) and 2(b) of Appendix 2 of Annex I.

25.4 Monitoring and research

- (a) Monitoring of critical dumping sites. In order to provide the Contracting Parties with a scientific basis for assessing the consequences of dumping activities in the Mediterranean Sea area, it is recommended that the Contracting Parties concerned would include monitoring of critical dumping sites in their National Monitoring Programmes carried out within the framework of MED POL - PHASE II. Reports on the monitoring of dumping sites should be transmitted to the secretariat in conjunction with the reports on the National Monitoring Programmes.

- (b) Research activities relevant to implementation of the Protocol. Future developments in the implementation of the Protocol will to a great extent depend on the availability of relevant scientific and technical information. It is, therefore, recommended that the Contracting Parties would encourage their national research institutions to initiate and conduct, within the framework of MED POL - PHASE II, research projects relevant to the implementation of the Protocol.

25.5 Relationships with other organizations

Many of the problems related to implementation of the Protocol are common to all global and regional organizations concerned with the prevention of pollution of the marine environment by dumping from ships and aircraft. Thus, it would be useful to share the experience gained by the organizations concerned towards finding solutions to the common problems. It is, therefore, recommended that the Contracting Parties would promote co-operation, in particular with regard to the exchange of scientific and technical information, with other organizations concerned with the prevention of marine pollution of dumping from ships and aircraft.

26. Recommendations for future action

In order to ensure continuity of further developments related to implementation of the Protocol, the Contracting Parties should outline a work programme for the future. The secretariat proposes that for the time being the work programme would concentrate on the following subjects:

- (a) Review of the provisional definitions, procedures and criteria referred to in the above recommendations for immediate action. Attempts should be made to clarify the definitions of the terms "non toxic" and "harmless" substances, "trace contaminants" etc. on the basis of scientific data, in particular, on the basis of test procedures for wastes. Subsequently, the provisional PCP should be revised and its scope of application should be clearly defined. Similarly, the provisional numerical criteria proposed for the application of Article 5 of the Protocol should be reviewed.
- (b) Development of test procedures for wastes including acute toxicity and chronic toxicity tests, biodegradability tests and bioaccumulation tests. First, guidelines for test procedures should be developed and later on specific test may be considered.
- (c) Development of procedures for review and amendment of the annexes to the Protocol. As stated in Article 14 of the Protocol it is one of the functions of the meetings of the Contracting Parties to review and amend the annexes as required. Accordingly, appropriate procedures should be defined and, in particular, clear scientific criteria for assigning substances to Annex I and Annex II should be developed.
- (d) Development of guidelines for the application of Annex III of the Protocol, guidelines for the selection of dumping sites and guidelines for dumping of specific types of wastes. As stated in Article 7 of the Protocol, dumping permits shall be issued only after careful consideration of all the factors set forth in Annex III of the Protocol.

However, on one hand some of those factors may not be relevant to all materials to be dumped while, on the other hand, in certain cases they may be too general. Thus it may prove useful to develop guidelines which would take into account the special characteristics of the Mediterranean Sea, for the interpretation of Annex III, for the selection of dumping sites and for carrying out dumping operations of specific types of wastes.

It is recommended that the Contracting Parties would assign the Scientific Group on Dumping the task of discussing the above subjects and bringing forward appropriate recommendations for consideration by future meetings of the Contracting Parties. It is further recommended that the secretariat would invite the Contracting Parties to provide it with information relevant to these subjects and that, on the basis of that information, consultations with other relevant organizations and the advice of experts, the secretariat would prepare background documentation for the discussions of the Scientific Group on Dumping.

Table 1. Number of special permits reported to the secretariat as issued in accordance with Article 5 of the Protocol (1978-1984)

State	Industrial waste	Sewage sludge	Dredge spoil	Other
ALGERIA	-	-	-	-
CYPRUS	-	-	-	-
EEC	none	none	none	none
EGYPT	-	-	-	-
FRANCE	none	none	none	none
GREECE	-	-	-	-
ISRAEL*	none	none	none	none
ITALY	3	-	-	-
LEBANON	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-
MALTA	-	-	-	-
MONACO	none	none	none	none
MOROCCO	-	-	-	-
SPAIN	-	-	-	-
SYRIA	-	-	-	-
TUNISIA	-	-	-	-
TURKEY	-	-	-	-
YUGOSLAVIA	none	none	none	none

- = Issuance of special permits not reported to the secretariat

* = Israel ratified the Protocol in 1984. Data reported only for 1984.

Table 2. Special permits issued in accordance with Article 5 of the Protocol (See Table 1)

State	Type of waste	Annex II substances	Amount (metric tonnes)	Period of validity	Co-ordinates	Distance from the nearest land and depth at dumping site	Monitoring mandatory
ITALY (D.XVII Prot. No:5176043) Cap. Porto Livorno 26/6/81	Industrial waste	Heavy metals (Pb, Cu, Zn, Cr Ni, V, Se and traces of Cd, Hg)	Max. 1.5 million	18 months	A) 43°29'N 09°12'E B) 43°39'N 09°20'E C) 43°29'N 09°08'E D) 43°31'N 09°03'E	30 nm 1000-1700 m	No
ITALY (D.XVII Prot. No:5176714) Cap. Porto Venezia 16/6/82	Industrial waste	Fluorides	Max. 1.536 million	18 months	A) 45°14'00"N 12°53'30"E B) 45°13'15"N 12°55'20"E C) 45°11'15"N 12°53'15"E D) 45°12'10"N 12°51'30"E		Yes
ITALY Cap. Porto Genova 17/6/83	Industrial waste	Chromite slugs	Max. 4 million	6 months	A) 44°19'18"N 08°51'07"E B) 44°19'18"N 08°55'00"E C) 44°20'00"N 08°55'00"E D) 44°20'00"N 08°51'07"E	5 nm 200-500 m	Yes

Table 3. Number of general permits reported to the secretariat
as issued in accordance with Article 6 of the Protocol
(1978-1984)

State	Industrial waste	Sewage sludge	Dredge spoil	Other
ALGERIA	-	-	-	-
CYPRUS	-	-	-	-
EEC	none	none	none	none
EGYPT	-	-	-	-
FRANCE	none	none	none	none
GREECE	-	-	-	-
ISRAEL*	none	none	none	none
ITALY	-	-	-	-
LEBANON	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-
MALTA	-	-	-	-
MONACO	none	none	none	none
MOROCCO	-	-	-	-
SPAIN	-	-	-	-
SYRIA	-	-	-	-
TUNISIA	-	-	-	-
TURKEY	-	-	-	-
YUGOSLAVIA	none	none	none	none

- = Issuance of general permits not reported to the secretariat

* = Israel ratified the Protocol in 1984. Data reported only for 1984.

Table 4. Amounts of waste (in millions of metric tonnes) reported to the secretariat as authorized for dumping during 1978-1984 into the Mediterranean Sea in accordance with Articles 5 and 6 of the Protocol

State	Industrial waste				Sewage sludge				Dredge spoils				Other								
	78	79	80	81	82	83	84	78	79	80	81	82	83	84	78	79	80	81	82	83	84
ALGERIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CYPRUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EEC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EGYPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRANCE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GREECE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISRAEL	-	-	-	-	-	-	NA	-	-	-	-	-	-	NA	-	-	-	-	-	-	NA
ITALY	-	-	-	0.33	1.17	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEBANON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MALTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONACO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MOROCCO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPAIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SYRIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUNISIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TURKEY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YUGOSLAVIA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

- = No report received by the secretariat

NA = Report received by the secretariat stating that no dumping of waste authorized

Table 5. Number of reports received by the secretariat on dumping under special permits in accordance with Article 5 of the Protocol (1978-1984)

State	Industrial waste	Sewage sludge	Dredge spoil	Other
ALGERIA	-	-	-	-
CYPRUS	-	-	-	-
EEC	ND	ND	ND	ND
EGYPT	-	-	-	-
FRANCE	ND	ND	ND	ND
GREECE	-	-	-	-
ISRAEL*	ND	ND	ND	ND
ITALY	-	-	-	-
LEBANON	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-
MALTA	-	-	-	-
MONACO	ND	ND	ND	ND
MOROCCO	-	-	-	-
SPAIN	-	-	-	-
SYRIA	-	-	-	-
TUNISIA	-	-	-	-
TURKEY	-	-	-	-
YUGOSLAVIA	ND	ND	ND	ND

-- = No report on dumping received by the secretariat

ND = Report received by the secretariat stating that no dumping was carried out under permit

* = Israel ratified the Protocol in 1984. Data reported only for 1984.

Table 6. Number of reports received by the secretariat on dumping under general permits in accordance with Article 6 of the Protocol (1978-1984)

State	Industrial waste	Sewage sludge	Dredge spoil	Other
ALGERIA	-	-	-	-
CYPRUS	-	-	-	-
EEC	ND	ND	ND	ND
EGYPT	-	-	-	-
FRANCE	ND	ND	ND	ND
GREECE	-	-	-	-
ISRAEL*	ND	ND	ND	ND
ITALY	-	-	16	-
LEBANON	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-
MALTA	-	-	-	-
MONACO	ND	ND	ND	ND
MOROCCO	-	-	-	-
SPAIN	-	-	-	-
SYRIA	-	-	-	-
TUNISIA	-	-	-	-
TURKEY	-	-	-	-
YUGOSLAVIA	ND	ND	ND	ND

- = No report on dumping received by the secretariat

ND = Report received by the secretariat stating that no dumping was carried out under permit

* = Israel ratified the Protocol in 1984. Data reported only for 1984.

Table 7: Amounts of waste reported to the secretariat as actually dumped into the Mediterranean Sea Area between 1978 and 1984 (in thousands of metric tonnes)

State	Industrial waste				Sewage sludge				Dredge spoils				Other								
	78	79	80	81	82	83	84	78	79	80	81	82	83	84	78	79	80	81	82	83	84
ALGERIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CYPRUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EEC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EGYPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRANCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND	ND	ND
GREECE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISRAEL*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ITALY	-	-	-	-	1576	1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEBANON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LIBYAN ARAB JAMAHIRIYA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MALTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONACO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MOROCCO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPAIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SYRIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUNISIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TURKEY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YUGOSLAVIA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1/ In thousands of cubic metres. Partly dumped during 1980
 - = No report on dumping received by the secretariat
 ND = Report received by the secretariat stating that no dumping was carried out
 * = Israel ratified the Protocol in 1984. Data reported only for 1984

Annex I

Summary of recommendations for the further implementation
of the Protocol for the Prevention of Pollution
of the Mediterranean Sea by Dumping from Ships and Aircraft

Recommendations for immediate action:

1. Administrative matters

- (a) The Contracting Parties which have not yet done so should designate without delay "competent authorities" in accordance with Article 10 of the Protocol.
- (b) The Contracting Parties should designate "national focal points" for contact in critical situations.
- (c) The Contracting Parties should establish a standing Scientific Group on Dumping with the terms of reference set forth in Appendix 1. The Scientific Group on Dumping should meet at least once a year during the forthcoming five years and should prepare reports on its activities and bring forward recommendations for consideration by the meetings of the Contracting Parties. The Contracting Parties should identify the budgetary allocations required for financing the activities of the Scientific Group on Dumping.
- (d) On the basis of information provided by the Contracting Parties, the secretariat should prepare and circulate a roster of experts and institutions capable of providing technical assistance on matters of dumping of wastes at sea and on alternative methods for waste disposal.

2. Reporting and notification

- (a) Reports transmitted by the Contracting Parties to the secretariat in accordance with Article 20 of the Convention should include copies, or alternatively summaries, of legal or administrative rules referring to implementation of the Protocol. The secretariat should prepare and circulate annual reports summarizing submissions made by the Contracting Parties.
- (b) The Contracting Parties concerned should transmit to the secretariat "NIL reports" when no dumping permits were issued and no dumping has taken place during the period for which reports on permits issued and on actual dumping have to be submitted.
- (c) The Contracting Parties should amend the Provisional Prior Consultation Procedure adopted by the Second Meeting of the Contracting Parties so that its opening sentence would read: "The following procedure which does not apply to sewage sludge and dredge spoils is recommended...".

3. Definitions of terms mentioned in Annex I and criteria for application of Article 5 of the Protocol

- (a) The Contracting Parties should adopt, on a provisional basis, the definitions set forth in paragraphs 1(a) and 1(b) of Appendix 1 for the terms "non toxic", "rapidly converted in the sea into substances which are biologically harmless", "rapidly rendered harmless by physical, chemical or biological processes in the sea" and, "trace contaminants" mentioned in Annex I of the Protocol. The implication of these definitions should be taken into account when the Provisional Prior Consultation Procedure would be applied.
- (b) The Contracting Parties should adopt, on a provisional basis, the definition set forth in paragraph 1(c) of Appendix 2 for the expression "acid and alkaline compounds of such composition and in such quantity that they may seriously impair the quality of sea-water" mentioned in paragraph 8 of Annex I of the Protocol. The secretariat should develop and circulate practical guidelines for dumping of acid and alkaline compounds covered by Annex II of the Protocol.
- (c) The Contracting Parties should urge the International Atomic Energy Agency to complete its work on the definition of the de-minimis level of radioactivity for wastes and other matter of low-level radioactivity and to make it available for the Contracting Parties.
- (d) The Contracting Parties should agree, on a provisional basis, on the interpretation set forth in paragraph 2 of Appendix 2 for the application of Article 5 of the Protocol.

4. Monitoring and Research

- (a) The Contracting Parties concerned should include monitoring of critical dumping sites in their National Monitoring Programmes carried out within the framework of MED POL - PHASE II. Reports on the monitoring of dumping sites should be transmitted to the secretariat in conjunction with the reports on the National Monitoring Programmes.
- (b) The Contracting Parties should encourage their national research institutions to initiate and conduct, within the framework of MED POL - PHASE II, research projects relevant to the implementation of the Protocol.

5. Relationships with other organizations

The Contracting Parties should promote co-operation, in particular with regard to the exchange of scientific and technical information, with other organizations concerned with the prevention of marine pollution by dumping from ships and aircraft.

Recommendations for future action:

6. The Contracting Parties should assign the Scientific Group on Dumping the task of discussing the subject listed below and bringing forward appropriate recommendations for consideration by future meetings of the Contracting Parties:

- (a) Review of the provisional definitions, procedures and criteria referred to in the above recommendations for immediate action.
- (b) Development of test procedures for wastes including acute toxicity and chronic toxicity tests, biodegradability tests and bio-accumulations tests.
- (c) Development of procedures for review and amendment of the annexes to the Protocol and, in particular, development of scientific criteria for assigning substances to Annex I and Annex II of the Protocol.
- (d) Development of guidelines for the applications of Annex III of the Protocol, guidelines for the selection of dumping sites and guidelines for dumping of specific types of wastes and other matter.

7. The secretariat should invite the Contracting Parties to provide it with information relevant to the subjects listed above. On the basis of that information, consultations with other relevant organizations and the advice of experts, the secretariat should prepare background documentation for the discussions of the Scientific Group on Dumping.

Appendix 1

Terms of reference for the Scientific Group on Dumping

The Scientific Group on Dumping is established to provide timely advice to the meetings of the Contracting Parties on scientific and technical matters related to the implementation of the Protocol. Membership of the Scientific Group is open to all Contracting Parties.

In accomplishing its overall mission the Scientific Group on Dumping is required to do the following:

1. respond to specific requests from the meetings of the Contracting Parties for scientific and technical advice on matters related to the Protocol;
2. review relevant scientific information, particularly that arising from new scientific and technological developments insofar as this may assist implementation of the Protocol, and
3. keep under review the implementation of the Protocol and bring forward, for consideration by the meetings of the Contracting Parties, recommendations for the further implementation of the Protocol.

Appendix 2

Provisional definitions of terms mentioned in Annex I
and provisional criteria for application of Article 5 of the Protocol

1. Definitions of terms mentioned in Annex I:

- (a) Annex I substances listed in paragraphs 1, 2 and 8 of Annex I may be regarded as "non toxic" or "rapidly converted in the sea into substances which are biologically harmless" or "rapidly rendered harmless by physical, chemical or biological processes in the sea" if tests of the wastes or other matter proposed for dumping, including tests on the persistence of the material, show that the substances can be dumped so as not to cause acute or chronic toxic effects or bioaccumulation in sensitive marine organisms typical of the ecosystem at the disposal site.
- (b) Annex I substances listed in paragraphs 1-6 of Annex I shall not be regarded as "trace contaminants" under the following three conditions:
 - (1) if they are present in otherwise acceptable wastes or other material to which they have been added for the purpose of being dumped;
 - (2) if they occur in such amounts that the dumping of the wastes or other material could cause undesirable effects, especially the possibility of chronic or acute toxic effects on marine organisms or human health whether or not arising from the bioaccumulation in marine organisms and especially in food species, and
 - (3) if they are present in such amounts that it is practical to reduce their concentrations further by technical means.
- (c) In the context of paragraph 8 of Annex I, "acid and alkaline compounds of such composition and in such quantity that they may seriously impair the quality of sea-water" are acid and alkaline compounds that their dumping at sea may change the total acidity or total alkalinity of the receiving waters, after allowance for 5 minutes of initial mixing, by more than 25 per cent. All other acid and alkaline compounds may be regarded as substances covered by Annex II.

2. Provisional criteria for application of Article 5 of the Protocol.

The dumping of wastes and other matter containing the substances listed in paragraph 1 of Annex II of the Protocol must be subject to the provision of Article 5 of the Protocol only when these substances are contained in the wastes or other matter in significant concentrations. In this context the term "significant concentrations" shall mean 0.05 per cent or more by weight for lead and its compounds, for pesticides and their by-products not covered in Annex I, and, for synthetic organic chemicals other than those referred to in Annex I, likely to produce harmful effects on marine organisms or to make edible marine organisms unpalatable. For all of the other substances listed in paragraph 1 of Annex II the term "significant concentrations" shall mean 0.1 per cent or more by weight.

Annex II

Form of report for special and general permits
(Application of Articles 5 and 6 of the Protocol for the Prevention of
pollution of the Mediterranean Sea by Dumping from Ships and Aircraft)

1. Special permits issued in accordance with Article 5 of the Protocol concerning dumping by ships and aircraft of the Barcelona Convention should be notified immediately to the Organization. General permits issued in accordance with Article 6 of the Protocol should be reported annually to the Organization.

2. The notification should contain the following information, for each special and general permit or approval (unless in any individual case a particular item of information is clearly inappropriate):

- (a) Issuing authority:
- (b) Date issued:
- (c) Country of origin of wastes or other matter
and port of loading:
- (d) General description of waste or other matter and the process
from which the waste is derived:
.....
.....
- (e) Form in which waste or other matter is presented for disposal
(i.e. solid, liquid or sludge):
- (f) Total quantity (in metric units) of waste or other matter covered
by the permit:
- (g) Period for which permit is valid:
- (h) Expected frequency of dumping:
- (i) Chemical composition of waste or other matter (this should be
sufficiently detailed to provide adequate information to other countries
on the nature and composition):
.....
.....
.....

- (j) Properties of waste or other matter:
 - (i) solubility:
 - (ii) density:
 - (iii) pH:
- (k) Method of packaging:.....
- (l) Method of release:
- (m) Procedure and site for subsequent tank washing:
- (n) Approved dumping site:
 - (i) geographical position (latitude and longitude):
 - (ii) depth of water:
 - (iii) distance from the nearest coast:
- (o) Additional information (relevant factors listed in Annex III of the Protocol, e.g. toxicity, and other biological properties):
.....
.....
.....
.....
.....

Annex III

Form of annual report concerning actual dumping carried out
by the Parties to the Protocol

Annual report on all dumpings carried out during the year 19__

The purpose of this form is to facilitate an assessment of the Parties' inputs by dumping in the waters of the Protocol area. The form must be completed for each calendar year in retrospect and submitted to the Organization following the year to which the dumping relates.

The Parties are reminded that the figures for the quantities of substances dumped should relate to the actual amounts dumped during the report year and not to the quantities licensed.

As far as possible, the following information should be given for each dumping area:

1. Dumping area:

(a) Location - Longitude:
Latitude:

(b) Depth:metres

(c) Tidal flows: - Direction:
Maximum Speed:

(d) Type of waste dumped (delete as appropriate):

Industrial wastes
Sewage sludges
Dredgings
Others

(e) Other relevant information (e.g. residual water movements):
.....

2. Industrial wastes dumped:

Details need only be given for the categories listed in Section 1(d) as having been dumped during the reporting year.

Units of quantity should be in tonnes unless otherwise stated:

(a) Year of issue of the permits concerned:

(b) General description of these wastes:
.....

(c) Method of dumping (when more than one vessel is involved, give the range of loads and discharge conditions):

(i) Vessel(s) load:

(ii) Manner of discharge from vessel:

(iii) Rate of discharge:

(iv) Speed of vessel while dumping:

(d) Total quantity of wastes actually dumped:

(e) Total quantity of wastes licensed:

(f) Total quantity of insoluble solids:

(g) Total quantity of particulate organic components:

(h) Total quantity of trace contaminants of Annex II substances:

Mercury :

Cadmium :

Organohalogen compounds:(specify)

Others :

(i) Total quantity of the following metals:

Arsenic: Nickel:

Chromium: Zinc:

Copper: Others:

Lead:

(j) Any other compounds present in appreciable quantity:

.....

(k) Total quantity of strong acids:

strength/pH:

(l) Total quantity of strong alkalis:

strength/pH:

(m) Toxicity of waste(s) - Give LC-50 values and names of species tested (where more than one waste is involved give toxicity criteria e.g. 96-h-LC-50 values not below 1000 ppm to Crangon crangon or Agonus cataphractus):
.....
.....

(n) Monitoring authority:

(o) Other relevant information:

3. Sewage sludges dumped in each site:

Details need only be given for the categories listed in section 1(d) as having been dumped during the reporting year.

Units of quantity should be in tonnes unless otherwise stated.

(a) Year of issue of the permits concerned:

(b) Place of origin of the sewage sludge:

(c) Method of dumping (where more than one vessel is involved, give the range of loads and discharge conditions):

(i) Vessel(s) load:

(ii) Manner of discharge from vessel:

(iii) Rate of discharge:

(iv) Speed of vessel while discharging:

(d) Total quantity actually dumped:

(e) Total quantity licensed:

(f) Total quantity of insoluble solids:

(g) Total quantity of particulate organic compounds:

(h) Total quantity of trace contaminants of Annex I substances:

Mercury:

Cadmium:

Organohalogen compounds:(specify)

Others: ,.....

(i) Total quantity of the following metals:

Arsenic:	Nickel:
Chromium:	Zinc:
Copper:	Others:
Lead:	

(j) Monitoring authority:

4. Dredgings dumped in each site:

Details need only be given for the categories listed in section 1(d) as having been dumped during the reporting year.

Units of quantity should be in tonnes unless otherwise stated.

When less than 10,000 tonnes per year are dumped, chemical analysis of dredgings composition are not required unless the source of the dredgings is believed to be polluted.

(a) Year of issue of the permits concerned:

(b) Place of origin of the dredgings:

(c) Method of dumping: Stationary/Moving (delete as appropriate)

(d) Total quantity actually dumped:

(e) Total quantity licensed:

(f) Total quantity of insoluble solids:

(g) Total quantity of particulate organic components:

(h) Total quantity of trace contaminants of Annex I substances:

Mercury:	
Cadmium:	
Organohalogen compounds:	(specify)
Others:	

(i) Total quantity of the following metals:

Arsenic:	Nickel:
Chromium:	Zinc:
Copper:	Others:
Lead:	

(j) Monitoring authority: