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MEDITERRANEAN ACTION PLAN

Fifth Meeting of the Working Group  
for Scientific and Technical  
Co-operation for MED POL

Athens, 6-10 April 1987

REPORT OF THE FIFTH MEETING OF THE WORKING GROUP  
FOR SCIENTIFIC AND TECHNICAL CO-OPERATION FOR MED POL

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UNEP  
Athens, 1987



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(Corrigendum)

REPORT OF THE FIFTH MEETING OF THE WORKING GROUP  
FOR SCIENTIFIC AND TECHNICAL CO-OPERATION FOR MED POL  
(paragraph 46)

46. A number of delegations considered that in order to achieve a more efficient reduction of pollution by mercury, it would be opportune, in the case of certain specific industrial establishments, to establish limit values at the point where waste waters leave the plant.

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PLAN D'ACTION POUR LA MEDITERRANEE

Cinquième réunion du groupe de travail  
sur la coopération scientifique et  
technique pour le programme MED POL

Athènes, 6-10 avril 1987

(Corrigendum)

RAPPORT DE LA CINQUIEME REUNION DU GROUPE DE TRAVAIL  
SUR LA COOPERATION SCIENTIFIQUE ET TECHNIQUE POUR LE PROGRAMME MED POL  
(paragraphe 46)

46. Certains délégations ont estimé qu'afin d'arriver a une réduction plus efficace de la pollution due au mercure, il serait opportun pour certains établissements industriels spécifiques de prévoir des valeurs limites à la sortie des installations.

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UNEP

Athens, 1987



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## INTRODUCTION

1. The Contracting Parties to the Convention for the Protection of the Mediterranean Sea against pollution and its related protocols adopted, at their Second Ordinary Meeting (Cannes, 2-7 March 1981), the Long-term Programme for Pollution Monitoring and Research in the Mediterranean Sea (MED POL - PHASE II) (document UNEP/IG.23/11, annex V). A standing Working Group for Scientific and Technical Co-operation was thereby established by the Contracting Parties to assist them in reviewing the progress of the programme and in the evaluation of the results. The Working Group's terms of reference included advising UNEP on technical and policy matters relating to the MED POL programme and related matters, and the preparation of recommendations for submission to the Contracting Parties, through UNEP as the secretariat of the Convention.

2. As a result of the decisions of the Cannes Meeting, the Working Group held its first meeting in Athens, from 28 September to 2 October 1981 (UNEP/WG.62/7), its second in Athens from 21 to 25 November 1983 (UNEP/WG.91/12), its third in Athens from 27 to 31 May 1985 (UNEP/WG.118/9) and its fourth in Athens from 16 to 20 June 1986 (UNEP/WG.144/13).

3. In pursuance of its mandate, the Co-ordinating Unit of the Mediterranean Action Plan invited designated National Co-ordinators for MED POL to attend the Fifth Meeting of the Working Group which was convened at the premises of the Co-ordinating Unit in Athens from 6 to 10 April 1987. Representatives of the Co-operating Agencies: Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO), World Meteorological Organization (WMO), International Atomic Energy Agency (IAEA), Intergovernmental Oceanographic Commission (IOC), United Nations Industrial Development Organization (UNIDO) and International Maritime Organization (IMO), as well as four Regional Activity Centres for MAP, were invited.

4. The Meeting was attended by National Co-ordinators, or appointed representatives, for MED POL from 13 Mediterranean countries and the EEC, and representatives of 6 United Nations Agencies. A list of participants is attached as annex I to this report.

### Agenda item 1. Opening of the meeting

5. Mr A. Manos, Co-ordinator of the Mediterranean Action Plan, welcomed the participants on behalf of the Executive Director of UNEP, and declared open the Fifth Meeting of the Working Group for Scientific and Technical Co-operation for MED POL.

6. He referred to a number of recent events concerning other aspects of MAP, including:

- the entry into force of the Protocol concerning Mediterranean Specially Protected Areas;
- the official inauguration at Tunis of the Centre for Protected Areas;

- the recommendation for the gradual inclusion of other dangerous substances among the responsibilities of the Regional Oil Combating Centre in Malta;
- the preparation of the Blue Plan report based on the work of 350 national experts, 12 sectoral studies and a number of national scenarios;
- the adoption of a regional programme for seismic areas proposed by the PAP Centre, to which Italy has offered its financial support;
- the decision of the 11 ministers of labour of Mediterranean countries, at their meeting in Tunis in March 1987, to establish a study unit on labour problems in the Mediterranean "within the framework of MAP";
- the participation by EEC in the financing of floating reception facilities in the ports of Rijeka and Patras.

While other aspects of MAP were developing considerably, MED POL, which was the most ambitious scientific programme of its kind, should also review its performance and remedy its weak points with a view to progressing with imagination.

He proposed a number of points for consideration.

Only six countries had submitted data covering all the approved parameters, and the Working Group was thus unable to assess the state of pollution of the Mediterranean as a whole or to evaluate the impact of the measures taken by governments to protect the marine environment.

In 1986, 148 research projects were ongoing at a cost to the programme of \$261,800. At the same time, 33 projects were completed. They had run for several years at a total cost to the programme of some \$250,000. Their genuine support to the monitoring effort and to the adoption of common quality standards which is the purpose for which they are intended, should be examined.

At Genoa, the Contracting Parties decided to take measures to ensure, as a minimum common condition, that the quality of bathing waters conformed with the provisional WHO/UNEP criteria. Since then, none of the countries had taken the national measures required to incorporate that decision in its domestic law.

The new measures proposed by the secretariat, particularly concerning the quality of shellfish-growing waters, might well also remain a dead issue.

The list of substances contained in annexes I and II to the Land-Based Sources Protocol was very long and complex. It was not intended that they should all be added gradually to the parameters to be monitored. On the contrary, it must be concluded that the knowledge gained on certain substances was sufficient to provide for any necessary regulation and that their continued and generalised monitoring could therefore be suspended.

Mr Manos announced with regret the untimely death of Mr Alain Vatrican, one of the founders of MED POL, and of Dr Simon Aston, IAEA expert at Monaco. The Committee observed a minute of silence in memory of the two colleagues who had passed away.

Agenda item 2. Rules of procedure

7. Mr A. Manos informed the meeting that the rules of procedure for the meetings and conferences of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against pollution and its related protocols (UNEP/IG.23/11, annex VII) would apply mutatis mutandis to the meeting of the Working Group as a subsidiary body of the Conference of the Contracting Parties.

Agenda item 3. Election of officers

8. The meeting elected the following officers:

Chairman:	Mr Andreas DEMETROPOULOS	(Cyprus)
Vice-chairmen:	Mr Lorenzo VILLA	(Italy)
	Mr Yuval COHEN	(Israel)
Rapporteur:	Mr Raphael PATINIOTT	(Malta)

9. The National Co-ordinator for Syria expressed his objection to the election of the National Co-ordinator for Israel to the Bureau of the Meeting, on the basis of his country's reservation expressed in the ratification of the Convention for the Protection of the Mediterranean Sea against Pollution. The National Co-ordinator for Syria requested this objection to be recorded in the final report of the Meeting.

10. In connexion with the objection expressed by the MED POL National Co-ordinator for Syria regarding the election of the MED POL National Co-ordinator for Israel to the Bureau of the Meeting, the National Co-ordinator for Israel made the following statement: "The objection expressed by the National Co-ordinator for Syria was of a political character in respect to Israel. On the basis of his country's statement in connexion with the reservation expressed by the Government of Syria in the ratification of the Convention for the Protection of the Mediterranean Sea against Pollution, in the view of the National Co-ordinator for Israel, the Meeting of the Working Group for Scientific and Technical Co-operation for MED POL was not the proper place for making such political pronouncements, which were moreover in flagrant contradiction to the principles, objectives and purposes of the Mediterranean Action Plan and the Convention for the Protection of the Mediterranean Sea against Pollution."

Agenda item 4. Adoption of the agenda

11. The meeting adopted the agenda which appears in annex II to this report. Documents which were available to the meeting are listed in annex III.

Agenda item 5. Organization of work

12. The meeting agreed to work only in plenary session with the proviso that ad hoc discussion groups or drafting committees would be formed by the Bureau in consultation with the secretariat if any specific matter so required.

Agenda item 6. Progress report on the implementation of MED POL during 1986-1987 and proposed activities and budgetary requirements for the biennium 1988-1989

13. The secretariat introduced document UNEP/WG.160/3 which reported on progress in monitoring, research and other MED POL - PHASE II activities, including the Land-based Sources Protocol, up to February 1987. When introducing the document, the secretariat orally provided updated information on activities and developments which had taken place since the document was issued, stressing its special satisfaction for the numerous data that had been recently received also from countries with no signed monitoring agreement.

14. The National Co-ordinator for Italy announced that three regions (Veneto, Emilia Romagna, Marche) had already formally agreed on pollution monitoring programmes within the framework of MED POL. Procedures for agreements on programmes in another four coastal regions were in an advanced stage, and important progress was expected as a result of a meeting of potential MED POL monitoring participants, scheduled in May 1987. Efforts were also being made to co-ordinate relevant activities being implemented within the framework of the subregional agreements between Italy on the one hand, and Greece and Yugoslavia, respectively on the other, as well as France and Monaco (RAMOGE agreement). The National Co-ordinator for Italy also informed the Group that a complete national report on the quality of bathing waters for the year 1986, including all the Italian coast, had been prepared and would be sent to the secretariat by the Ministry of Health.

15. The National Co-ordinator for Turkey stated that his country's National Monitoring Programme, in line with MED POL - PHASE II monitoring requirements, had actually been operational since 1982. He submitted to the secretariat complete sets of data on heavy metal, microbial, petroleum hydrocarbon and chlorinated hydrocarbon pollution levels as well as basic oceanographic and meteorological parameters at source, coastal and reference stations covering the period 1983-1985.

16. The National Co-ordinators for France and Spain reminded the meeting that it had already been agreed that in the case of countries not receiving financial assistance, the signature of a formal agreement was not necessary, and exchange of data could be achieved on the basis of an agreed programme.

17. The National Co-ordinator for Spain referred to the difficulties being encountered in implementing the monitoring component dealing with pollution sources. He also pointed out that the river inputs of organic matter and suspended solids cannot be considered in the same way as those originating from towns and industries.

18. The National Co-ordinator for Syria explained that his country's national monitoring programme had only become operational recently, and the first reports would be submitted shortly.



19. The National Co-ordinator for France stated that although microbiological data had not yet been submitted, the relevant results obtained by the large number of existing networks would be submitted following clarification of format requirements and eventual utilization by the MED Unit. He also mentioned that a large permanent network of jellyfish monitoring stations would be included in the national monitoring programme.

20. The National Co-ordinator for Greece stated that although the relevant agreement had still not been signed, the national monitoring programme had been operational since 1983. The data obtained, dealing with all MED POL parameters and covering land-based sources, coastal areas and reference areas, was being elaborated. She also informed the Working Group that since October 1986, a comprehensive Environmental Protection Law had been in force in Greece. In addition, she stressed the need for the strengthening of the MAP library services through the acquisition of relevant material, and improved arrangements for its dissemination to MED POL participating institutions in order to provide essential scientific assistance. In this context, an adequate financial provision would be necessary and this could be arranged from existing funds.

21. A number of National Co-ordinators stressed the importance of data quality. In this regard, it was pointed out that, although in very general terms one could consider some of the data as requiring quality improvement, this was not the case in some countries where the quality of data submitted was completely reliable.

22. The National Co-ordinator for the EEC reminded the Group that it would be appropriate to convene small consultation meetings on the subject of the proposed reference methods for analytical techniques.

23. The representative of WMO briefed the Working Group on the progress of implementation of the pilot project on studying pollution of the Mediterranean Sea through the atmosphere, in which twelve countries were at present participating. He also informed the meeting about a Workshop on Airborne Pollution of the Mediterranean Sea to be held in Belgrade, Yugoslavia in the second half of November 1987 and about an International Training Course on Background Air Pollution Measurements being organized by WMO in Budapest, Hungary, from 15 August to 12 September 1987 which would be conducted in French. Nomination forms should reach WMO not later than 30 June 1987.

24. During the discussion on reporting formats the meeting stressed the importance of utilizing to the extent possible formats already developed by other organizations.

25. During the discussion on progress achieved in the research component of MED POL, a number of specific issues were raised by various National Co-ordinators. These were mainly related to (a) the criteria for approval or rejection of research proposals, (b) the financial assistance allocated to projects, including the ceiling, and (c) the role of National Co-ordinators in the whole process.

26. The secretariat and the representatives of the specialized Agencies involved explained that, in accordance with established procedure, research proposals were considered only if formally submitted by the relevant National Co-ordinator who therefore had an essential preliminary screening role. Within the Co-ordinating Unit and the Agencies, proposals were evaluated on relevance to the respective MED POL activities, in particular to their action-orientation with respect to the implementation of the LBS Protocol, and on overall technical merits. Financial assistance was individually allocated on the basis of the total budget available, on the possibility of other funding (internal or external), and on the requirements of the project itself.

27. In accordance with the terms of a previous decision of the Working Group that any individual grant exceeding 10,000 US Dollars over a one-year period would be subject to prior approval by the Group, the representative of WMO submitted a proposal for a grant of 15,000 Dollars for the Federal Hydrometeorological Institute of Yugoslavia for a project on "Definition of synoptic scale driving parameters for a model of atmospheric pollution transport towards and into the Mediterranean Sea". After examining a brief description of the project prepared and distributed by WMO during the meeting, the Group felt that the exceeding of the 10,000 US Dollars ceiling was not justified. In this connexion, the participant from Morocco stated that he could not evaluate the proposal due to lack of sufficient advance information and the Group agreed that in future such requests should be circulated in advance with the meeting documentation.

28. In discussing intercalibration exercises on analysis of chemical pollutants, the Group agreed that the results should not be made public, but that each National Co-ordinator should be provided with full details of those results pertaining to laboratories in his own country to enable any necessary internal action to be taken. Regarding the 1982-1985 series of intercalibration exercises on microbiological methods, the representative of WHO, on request, summed up the results (previously presented to the Group as document UNEP/WG.144/Inf.6), which indicated the need for training especially in the evaluation of results.

29. The secretariat presented the preliminary evaluation of the first five years of the MED POL - PHASE II Programme, particularly regarding the monitoring component and, on the basis of such evaluation, described the activities proposed for the 1988-1989 biennium. Following a comprehensive discussion, the Group agreed on a set of recommendations for submission to the next meeting of the Contracting Parties, which are reproduced in annex IV.

30. It was also agreed that a comprehensive evaluation of the research component of MED POL - PHASE II should be completed by 1989, and that in such evaluation, as well as in the continuation of the ongoing evaluation of the monitoring component, Mediterranean experts should be involved to the greatest possible extent. The results of such evaluation would, as usual, be submitted to the Working Group.

31. In presenting the proposed budget for 1988-1989, the secretariat explained the reasons for its increase as compared with that for the current biennium. Such increase was mainly due to the introduction of activities regarding the progressive implementation of the LBS Protocol, which formed part of the MED POL component for the first time, as well as to the increased

emphasis on data quality assurance, and to the necessity of supporting more national monitoring programmes. In explaining the proposed budget, the secretariat had also taken into account the views of the Bureau of the Contracting Parties as expressed at their last Meeting in Istanbul in March 1987 concerning the 15 per cent increase in the overall MAP budget.

32. Following a lengthy discussion both on the budget in general, and on specific items therein, the Working Group approved the proposed budget for MED POL for the 1988-89 biennium, for submission to the Contracting Parties at their next Meeting, as appearing in annex V. A number of delegations expressed their concern about the high increase, although justified, of the proposed budget and they pointed out the necessity to have a budget with a more moderate increase, considering the prospects at the Meeting of the Contracting Parties. Other delegations expressed their satisfaction with the budget as proposed, as the increased assistance would help developing countries in improving their monitoring programmes (including data quality) and implementation of the LBS Protocol.

33. The National Co-ordinator for the EEC took note of the budgetary allocations proposed for the 1988-1989 biennium relative to Chapters 3 and 4.

34. It was also agreed by the Working Group that in allocating direct assistance to countries for the implementation of their national MED POL the monitoring programmes, the amount of such assistance provided to any individual country within any one-year period should be proportional to the overall amount allocated and should not exceed 60,000 US Dollars.

35. The secretariat presented documents UNEP/WG.160/5 and UNEP/WG.160/Inf.3, dealing respectively with draft definitions and lists of substances and the glossary of terms used in the Land-based Sources Protocol. The meeting agreed that:

- in the case of mercury and cadmium, a formal definition and list of compounds for adoption were not necessary;
- in the case of organohalogen compounds, there was no need for formal lists of specific compounds to be incorporated into annex I to the Protocol. However, the list submitted by the secretariat could be used as an indicative list on which to base the relative assessment document, and this list would be supplemented by any additions received from National Co-ordinators;
- in the case of the glossary, the Working Group noted this as an information document for general guidance, and agreed that following its translation into French, further editions could be prepared as required on the basis of suggestions received;
- in the case of used lubricating oils, this subject would be discussed under agenda item 9.

Agenda item 7. Progress in the implementation of the Land-based Sources Protocol

36. The secretariat presented document UNEP/WG.160/4, which gave an account of the current status of the Land-based Sources Protocol and summarized information received from Contracting Parties and announced the ratification of the protocol by Greece.

37. The representative of Morocco informed the meeting that his country had now ratified the Protocol.

38. The situation regarding the revised guidelines for authorizations for the discharge of liquid wastes into the Mediterranean Sea was clarified. As agreed during the Fourth Meeting of the Working Group, the provisional forms agreed on, were being used temporarily until revision and adoption of the complete guidelines. As this task would be undertaken in the near future it was agreed that any country not having already done so, should submit comments and suggestions regarding the document (including formats) to the secretariat by 31 May 1987.

Agenda item 8. Progress in the implementation of the Dumping and Emergency Protocols

39. The secretariat introduced document UNEP/WG.160/6, which summarized progress achieved in the implementation of the Dumping Protocol. Concern was expressed by some National Co-ordinators regarding the low degree of implementation of the relevant recommendations of the Fourth Meeting of the Contracting Parties (Genoa, September 1985). The National Co-ordinator for Italy informed the Group that, since July 1986, the issue of, and reporting on, authorizations for dumping had become the responsibility of the Ministry of Environment. The National Co-ordinators for France and Greece and the representative of Morocco informed the Group that no dumping authorizations had been issued in 1986.

Agenda item 9. Assessment of the state of pollution in the Mediterranean Sea by used lubricating oils and proposed measures

40. The secretariat introduced document UNEP/WG.160/7, constituting an assessment of the current situation and proposed measures.

41. After discussion, the Group agreed that the present document and the proposed definition of used lubricating oils (UNEP/WG.160/5) required thorough revision and the inclusion of more up-to-date information regarding the situation in the various countries. In this regard, it was agreed that those countries not having already done so, would submit relevant information by 31 July 1987 to the secretariat and that a revised version of the document incorporating such information would be submitted to the next meeting of the Working Group.

42. The National Co-ordinators for Italy and France provided the secretariat with a set of questionnaires filled in with all the data on used lubricating oils which was possible to acquire.

43. A number of National Co-ordinators expressed concern over the available formats which were difficult to complete. It was however agreed by the Group that for the revision of the present document, the same formats would continue to be utilized to the extent possible.

Agenda item 10. Assessment of the state of pollution in the Mediterranean Sea by mercury and mercury compounds and proposed measures

44. The secretariat introduced document UNEP/WG.160/8. The Group considered the document as very comprehensive and of high quality, and expressed its satisfaction in this regard. Following a lengthy discussion over the proposed measures and the feasibility of their application the Group agreed that the assessment component of the document should be published in the MAP Technical Reports Series, following slight revision on the basis of information received by the secretariat from National Co-ordinators by 31 May 1987. The Group also agreed on a set of recommendations on proposed measures for mercury, for submission to the next meeting of the Contracting Parties, with a view to their adoption. These recommendations are reproduced in annex VI.

45. The National Co-ordinator for the EEC took note of the recommendations contained in annex VI without prejudging his final position on this matter. His understanding was that the concentration proposed in paragraph (a) therein could not be considered as an emission standard.

46. The National Co-ordinators for the EEC and Italy also considered that in order to reduce pollution by mercury, it would be opportune, for example in the case of certain specific industrial establishments, to establish limit values at the point where waste waters leave the plant.

47. The Group agreed that reference methods relative to mercury analysis in the various matrices should be prepared by the secretariat as soon as possible.

Agenda item 11. Assessment of the state of pollution in the Mediterranean Sea by cadmium and cadmium compounds and proposed measures

48. The secretariat introduced document UNEP/WG.160/9, which was comprehensively discussed by the Group. It was considered that more information was necessary regarding the treatment of wastes from certain types of industries. It was therefore decided that the document should be revised to ensure the incorporation of such information, and re-submitted to the next meeting of the Working Group. In order to ensure timely preparation of the revised document, it was agreed that National Co-ordinators would supply relevant country information to the secretariat by 1 July 1987.

Agenda item 12. Assessment of the state of microbial pollution in the Mediterranean Sea and proposed measures for shellfish and shellfish-growing waters

49. The secretariat introduced document UNEP/WG.160/10 and outlined the results of the WHO/UNEP Consultation Meeting (Athens, 26-27 March 1987), where the whole matter had been reviewed and recommendations made. Following discussion, the meeting agreed on recommendations to the Contracting Parties regarding environmental quality criteria for shellfish waters, which are contained in annex VII.

Agenda item 13. Assessment of the state of pollution by petroleum hydrocarbons in the Mediterranean Sea

50. The secretariat introduced document UNEP/WG.160/11. Following discussion, the meeting agreed that the document was of high quality and that, after slight modification, the part dealing with assessment should be issued in the MAP Technical Reports Series. Concrete comments regarding modifications were to reach the secretariat by 31 May 1987. Concerning the second part of the document (legal, administrative and technical arrangements) and its recommendations, the Group considered that this aspect fell within the competence of the Regional Oil Combating Centre's Focal Points.

Agenda item 14. Assessment of organosilicons as marine pollutants, with particular reference to their status in the Mediterranean Dumping and Land-based Sources Protocols

51. The secretariat introduced document UNEP/WG.160/12, constituting an assessment of organosilicons as marine pollutants. Following discussion, the Group agreed that the necessary steps should be initiated towards the deletion of organosilicon compounds from the relative annexes of the Land-based Sources and Dumping Protocols. The recommendations agreed upon by the Group for submission to the Contracting Parties are contained in annex VIII.

52. In this regard, the National Co-ordinator for the EEC made a reservation with respect to the deletion of organosilicon compounds from annex II of the Land-based Sources Protocol.

Agenda item 15. Other business

53. The National Co-ordinator for France informed the meeting that, following the recommendations of the Fourth Meeting of the Contracting Parties regarding interim environmental quality criteria for bathing waters, studies had been effected on the comparability of application of the different criteria, and the results of such studies, which demonstrated a satisfactory degree of comparability, would be submitted to the secretariat shortly for appropriate action. The representative of Italy informed also the meeting, that similar studies were ongoing in his country and results would also be made available shortly.

54. The National Co-ordinator for Spain referred to the artificial division of the Mediterranean into subregions, used for the purposes of the MED POL X Pilot Project, implemented in 1976/77, and expressed the opinion that this particular type of subdivision should be reconsidered. The secretariat assured the meeting that in the presentation of future data, it was not intended to continue to use this type of subdivision and National Co-ordinators would be consulted as appropriate.

55. The representative of Libya apologized to the meeting for the lateness of his arrival, which was solely due to internal organizational restructuring. He affirmed the interest of his country in MED POL and informed the meeting that, following signature of the National Monitoring Agreement, the necessary procedures for its implementation were in progress. He also expressed his agreement with the proposed budget for 1988-1989.

56. The secretariat proposed 23-27 May 1988 as the dates of the Sixth Meeting of the Working Group. These dates were agreed to. In this context, the secretariat was requested to make all possible efforts to ensure that documentation reached National Co-ordinators as early as possible. In the case of documents of more than 50 pages in length, the secretariat was requested to provide a summary.

Agenda item 16. Adoption of the report

57. During the adoption of the report, the representative of Libya associated himself with the reservation and objection made by the representative of Syria concerning the election of the National Co-ordinator for Israel to the Bureau of the Meeting. He requested that his reservation and objection be recorded in the final report of the meeting.

58. In connexion with the statement made by the representative of Libya at the time of adoption of the report of the Meeting regarding the election of the MED POL National Co-ordinator for Israel to the Bureau of the Meeting, the National Co-ordinator for Israel stated that the essence of his statement made in connexion with the objection expressed by the National Co-ordinator for Syria under Agenda item 3 also applied to the statement made by the representative of Libya.

59. The participants adopted the report of the Meeting on 10 April 1987.

Agenda item 17. Closure of the Meeting

60. In his closing remarks, Mr Manos pointed out the major achievements of the Fifth Meeting of the Working Group for Scientific and Technical Co-operation for MED POL. He noted with satisfaction that valuable information had been provided during the meeting, in particular, the transmission of monitoring data from Turkey and the preliminary results of the work carried out by Italian and French scientists in order to intercompare the EEC and the WHO/UNEP standards for bathing waters. The meeting had also provided the secretariat with clear guidance on various issues and made important decisions: the assessment documents presented to the meeting had been carefully analysed and the secretariat had now received precise instructions on the follow-up; the approval of an increased budget for the 1988-1989 biennium, reflecting the increased needs for the implementation of the Land-based Sources Protocol and a more effective data quality assurance; the agreement reached on the proposed measures for mercury, shellfish-growing waters and organosilicon compounds reflected the very constructive and efficient work that the National Co-ordinators had carried out before and during the meeting. In concluding his remarks, Mr Manos, welcomed some of the countries' representatives who had participated at the Working Group meeting for the first time, and thanked Mr P. Balland and Mr Y. Cohen, who had been called to other duties in their respective countries and would not attend the next Working Group meetings, for their constructive work during the past years. He also thanked the representative of IAEA, Mr R. Fukai, former director of International Laboratory of Marine Radioactivity, now retired, for the high level scientific collaboration he had provided since the first years of MED POL.

61. The Chairman, in thanking all the participants, the secretariat as well as the interpreters and translators for the contribution to the success of the meeting, associated himself to the conclusions of Mr Manos who considered the meeting as an important step forward towards the achievement of the MED POL objectives.

62. Mr Y. Cohen, who was attending his last meeting of the Working Group in his capacity of MED POL National Co-ordinator for Israel, expressed his appreciation for the high level of work that the secretariat had been implementing and for the excellent degree of co-operation between countries shown during the past years.

63. Mr R. Fukai, representative of IAEA, also associated himself with the appreciations expressed by Mr Cohen, and recalled the many years of collaboration between IAEA, as well as himself personally, and MED POL.

64. The Chairman closed the meeting at 13.30 hours on 10 April 1987.



Annex I

List of participants  
Liste des participants

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Annex II

Agenda

1. Opening of the Meeting.
2. Rules of procedure.
3. Election of Officers.
4. Adoption of Agenda.
5. Organization of work.
6. Progress report on the implementation of MED POL during 1986-1987 and proposed activities and budgetary requirements for the biennium 1988-1989.
7. Progress in the implementation of the Land-based Sources Protocol.
8. Progress in the implementation of the Dumping and Emergency Protocols.
9. Assessment of the state of pollution in the Mediterranean Sea by used lubricating oils and proposed measures.
10. Assessment of the state of pollution in the Mediterranean Sea by mercury and mercury compounds and proposed measures.
11. Assessment of the state of pollution in the Mediterranean Sea by cadmium and cadmium compounds and proposed measures.
12. Assessment of the state of microbial pollution in the Mediterranean Sea and proposed measures for shellfish and shellfish-growing waters.
13. Assessment of the state of pollution by petroleum hydrocarbons in the Mediterranean Sea.
14. Assessment of organosilicons as marine pollutants, with particular reference to their status in the Mediterranean Dumping and Land-based Sources Protocols.
15. Other business.
16. Adoption of Report.
17. Closure of the Meeting.



Annex III

List of documents

Working documents

- UNEP/WG.160/1 Provisional agenda.
- UNEP/WG.160/2 Provisional annotated agenda.
- UNEP/WG.160/3 Progress report on the implementation of MED POL during 1986 and 1987 and proposed activities and budget for the biennium 1988-1989.
- UNEP/WG.160/4 Progress report on the implementation of the Protocol for the Protection of the Mediterranean Sea against pollution from Land-based Sources.
- UNEP/WG.160/5 Draft definitions and lists of substances for mercury and mercury compounds, cadmium and cadmium compounds, organohalogen compounds and used lubricating oils.
- UNEP/WG.160/6 Progress report on the implementation of the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft.
- UNEP/WG.160/7 Assessment of used lubricating oils in the Mediterranean Sea and proposed measures for their elimination.
- UNEP/WG.160/8 Assessment of the state of pollution of the Mediterranean Sea by mercury and mercury compounds and proposed measures.
- UNEP/WG.160/9 Assessment of the state of pollution of the Mediterranean Sea by cadmium and cadmium compounds and proposed measures.
- UNEP/WG.160/10 Assessment of the state of microbial pollution of shellfish waters in the Mediterranean Sea and proposed measures.
- UNEP/WG.160/11 Assessment of the present state of pollution by petroleum hydrocarbons in the Mediterranean Sea.
- UNEP/WG.160/12 Assessment of organosilicons as marine pollutants, with particular reference to their status in the Mediterranean Dumping and Land-based Sources Protocols.

Information documents

- UNEP/WG.160/Inf.1 List of documents.
- UNEP/WG.160/Inf.2 List of participants.
- UNEP/WG.160/Inf.3 Glossary of terms appearing in the Protocol for the Protection of the Mediterranean Sea against pollution from Land-based Sources and its annexes I, II and III.
- UNEP/WG.160/Inf.4 FAO/UNEP Meeting on the effects of pollution on marine ecosystems (Blanes, Spain, 7-11 October 1985).
- UNEP/WG.160/Inf.5 Consultation Meeting on Health Effects of Methylmercury in the Mediterranean Area (WHO/FAO/UNEP Joint Project, MED POL - PHASE II) (Athens, 15-19 September, 1986).
- UNEP/WG.160/Inf.6 IAEA Report No. 29 - Results of MED POL II Exercise for the Intercalibration of Chlorinated Hydrocarbon Measurements on Mussel Homogenate (MA-M-2/OC), December 1986.
- UNEP/WG.160/Inf.7 IAEA Report No. 31 - Results of MED POL II Exercise for the Intercomparison of Trace Element Measurements on Mussel Tissue Homogenate and Marine Sediment (MA-M-2/TM and SD-N-1/2/TM), December 1986.

Reference documents

- UNEP/IG.56/5 Report of the Fourth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against pollution and its related protocols (Genoa, 9-13 September 1985).
- UNEP/WG.144/13 Report of the Fourth Meeting of the Working Group for Scientific and Technical Co-operation for MED POL (Athens, 16-20 June 1986).
- UNEP/WHO Coastal water quality control (MED POL VII). MAP Technical Reports Series No. 7. UNEP, Athens 1986.
- UNEP/IAEA/IOC Biogeochemical studies of selected pollutants in the open waters of the Mediterranean (MED POL VIII). MAP Technical Reports Series No. 8. UNEP, Athens 1986.

- UNEP Biogeochemical studies of selected pollutants in the open waters of the Mediterranean (MED POL VIII). Addendum, Greek Oceanographic Cruise 1980. MAP Technical Reports Series No. 8, Addendum. UNEP, Athens 1986.
- UNEP Co-ordinated mediterranean pollution monitoring and research programme (MED POL - PHASE I). Final report 1975 - 1980. MAP Technical Reports Series No. 9. UNEP, Athens 1986.
- UNEP/FAO Research on the toxicity, persistence, bioaccumulation, carcinogenicity and mutagenicity of selected substances (activity G). Final reports on projects dealing with toxicity (1983-85). MAP Technical Reports Series No. 10. UNEP, Athens 1987.

Annex IV

Recommendations on monitoring and research

1. Monitoring (general)

- (a) continuation of negotiations with the MED POL National Co-ordinators in order to increase the contributions to MED POL - PHASE II through their MED POL National Monitoring Programmes or other monitoring programmes; specific efforts will be made to improve the presently still incomplete coverage of the Mediterranean and to achieve a more efficient and meaningful regular reporting on the obtained results;
- (b) continuation of contacts with national research centres designated as participants in the monitoring activities of MED POL - PHASE II (in consultation with National Co-ordinators) in order to facilitate their participation in the programme;
- (c) continued support to the participants in MED POL through the common maintenance service, provision of equipment, training and fellowships to national research centres and scientists, at the request of, and in consultation with, MED POL National Co-ordinators in the States with signed National Monitoring Programmes;
- (d) sponsorship of the participation of Mediterranean scientists/experts in meetings organized by other bodies on subjects relevant to monitoring activities of MED POL including the IX ICSEM/IOC/UNEP Workshop on Marine Pollution;
- (e) stimulation of the creation of long-term relations between more developed institutes from the northern Mediterranean and institutes from the southern Mediterranean through joint projects and exchanges of visiting scientists in order to stimulate collection and analysis of data and launch a long-lasting scientific collaboration;
- (f) continue the evaluation of the monitoring component of the MED POL programme through:
  - a meeting of responsible investigators in monitoring programmes (1988);
  - ad hoc consultation meetings on monitoring (1988, 1989);
  - Inter-Agency Advisory Committees (1988, 1989);
  - meetings of the Working Group for Scientific and Technical Co-operation (1988, 1989).

## 2. Selection of parameters

(a) On the basis of the experience gained during the first 5 years of implementation of the monitoring component of MED POL Phase II, as well as the general objectives of MED POL and the specific needs of the Land-based Sources Protocol, the parameters agreed with at the Second Meeting of the Contracting Parties (see Annex I) are proposed to be continued, with minor changes.

(b) The parameters to be monitored would be divided into two categories:

### Category I:

- Parameters which should be included in national monitoring programmes within the framework of MED POL.

### Category II:

- Parameters which should be included in national monitoring programmes whenever necessary and applicable.

## Monitoring of effluents

### Category I parameters:

Volume and characteristics of discharge (e.g. pH, temperature, general composition).

- Total mercury
- Total cadmium
- Total suspended solids
- Total phosphorus
- Total nitrogen
- Faecal coliforms
- BOD/COD
- High molecular weight halogenated hydrocarbons

### Category II parameters:

- Petroleum hydrocarbons
- Detergents
- Phenols
- Total chromium
- Selected radionuclides
- Other pollutants known to be discharged in significant quantities

Note: In the specific case of monitoring industrial effluents, the parameters listed above and/or other parameters should be selected in accordance with the specific composition of the wastewater discharged.

Monitoring of coastal waters including sediments and biota

Category I parameters:

- Total mercury in organisms and sediments
- Organic mercury in organisms
- Cadmium in organisms and sediments
- High molecular weight halogenated hydrocarbons in organisms and sediments
- Faecal coliforms in recreational waters and bivalves

Category II parameters:

- Basic oceanographic and meteorological parameters (e.g. salinity, oxygen, temperature, chlorophyll, wind).
- Floating tar balls and tar balls on beaches
- Total arsenic in organisms
- Radionuclides in organisms
- Pathogenic microorganisms
- Polynuclear aromatic hydrocarbons in organisms

Note: Other parameters could be included according to local requirements.

Monitoring of estuaries including the areas defined in Article 3(b) of the Land-based Sources Protocol

Category I parameters:

- Total mercury in organisms and sediments
- Organic mercury in organisms
- Total cadmium in organisms and sediments
- High molecular weight halogenated hydrocarbons in organisms and sediments
- Faecal coliforms in water and bivalves
- Total phosphorus in water and suspended matter
- Total nitrogen in water and suspended matter
- Total suspended matter
- COD
- Basic oceanographical and meteorological parameters (salinity, oxygen, temperature, chlorophyll)

Category II parameters:

- Radionuclides in organisms
- Polynuclear aromatic hydrocarbons in organisms
- Phenols in water

Monitoring of reference area

The same parameters (both Category I and Category II) selected for coastal waters.

3. Pilot monitoring exercises

- (a) In addition to the parameters listed in paragraph 2, pilot studies for the determination of the levels in selected areas as well as the analytical method which could be recommended, should be either continued or launched as appropriate, for the following parameters:
- Pollutant transport into the Mediterranean sea through the atmosphere (ongoing since 1986);
  - Organotin compounds (item 3 of Annex I A to the Land-based Sources Protocol) (1987);
  - Organophosphorus compounds (item 2 of Annex I A to the Land-based Sources Protocol) (1987);
  - Persistent synthetic materials (item 7 of Annex I A to the Land-based Sources Protocol) (1987);
  - Polynuclear aromatic hydrocarbons in organisms (item 8 of Annex I A to the Land-based Sources Protocol) (1988).
- (b) On the basis of the results of the pilot studies, recommendations will be presented to the Working Group for Scientific and Technical Co-operation for the possible introduction of the parameters in the National Monitoring Programmes.

4. Land-based Sources Protocol

- (a) Activities connected with the progressive implementation of the LBS Protocol constitute a new component of MED POL not covered in previous budgets.
- (b) During the biennium 1988-1989, the corresponding activities listed in the approved indicative calendar for the progressive implementation of this Protocol (UNEP/WG.125/10, Annexes VII and VIII) should be initiated or implemented, as appropriate, and should be adequately provided for in the relevant component of the MED POL budget proposals.
- (c) Apart from the above activities, direct assistance should also be provided to countries in order to facilitate their implementation of the terms of the Protocol at national level. Such assistance should be provided mainly in the form of expert visits and local training, as well as in any other form which might be required according to individual circumstances.

5. Research and study topics

- (a) During the 1988/1989 biennium the selection and funding of research proposals will follow the procedures endorsed by the Working Group for scientific and technical co-operation and approved by the Contracting Parties.
- (b) The already existing close link between the research and the monitoring components of MED POL should be further strengthened in order to make full use of the results of the research activities in the assessments of the state of pollution of the Mediterranean Sea.
- (c) To ensure maximum cost-effectiveness of utilization of the limited funds allocated for research, during the biennium 1988-1989, the number of research projects should be limited as appropriate by giving priority to topics of specific relevance to the Mediterranean.
- (d) It is recommended to convene during the biennium 1988-1989 the following meetings:
- review meeting on activities relevant to oceanographic processes responsible for transfer and distribution of pollutants (activity 'F') (1988);
  - consultation meeting to discuss the reference methods on toxicity and review the progress of work (activity 'G') (1988);
  - consultation meeting on epidemiological and related studies regarding environmental quality criteria (activity 'D') (1989);
  - consultation meeting on programmes and measures in connection with Article 7 of the Land-based Sources Protocol (activity 'E') (1989).
  - workshop on monitoring and assessment of the airborne pollution of the Mediterranean Sea (activity 'L') (1989).

6. Environmental quality criteria

Work should continue on the progressive formulation of common guidelines and, as appropriate, standards and criteria for the substances listed for 1988-1989 in the indicative workplan for the implementation of the Land-based Sources Protocol (UNEP/WG.125/10 annexes VII and VIII) in accordance with article 7.1(c) of the Land-based Sources Protocol.



7. Data collection

Continue to collect data through:

- official channels, through MED POL National Monitoring Programmes;
- open scientific literature of high international standards;
- regional and sub-regional research and monitoring programmes;
- other sources of information, as appropriate.

8. Data quality assurance

(a) In order to ensure a high quality, reliability and compatibility of the data collected the following is recommended:

- formulation, review and amendment, as appropriate, of Reference Methods;
- formulation of data reporting formats for all the monitoring parameters;
- continuation of the regular intercalibration exercises of analytical techniques for agreed parameters;
- provision of standards and reference materials;
- visits of experts to laboratories in order to work together with local scientists on sampling, analysis, quality assurance procedures, presentation and evaluation of results;
- intercomparison of results including sampling and analysis of split samples and expert assistance to laboratories for sampling, analysis, presentation and evaluation of results;
- assistance to countries for the preparation, design and enhancement of monitoring programmes;
- joint exercises, where appropriate on monitoring including intercomparison of sampling and analysis.

(b) In addition, the following specific activities are also recommended for implementation during the biennium:

- intercalibration and training course on determination of chlorinated hydrocarbons (1988);
- training course on treatment and interpretation of biological effects data (1988);

- intercalibration and training course on determination of organic mercury (1989);
- training course on analysis of physical oceanographic data and time-series (1989);
- intercalibration and training courses on determination of microbiological pollution (1988; 1989).

9. Data processing, management and utilization

(a) The processing of the monitoring data should continue with the following objectives:

- to prepare, in consultation with National Co-ordinators, maps (contouring if possible) of pollution in the Mediterranean, or its sub-regions;
- to prepare periodically reports on the overall state of marine pollution in the Mediterranean or its sub-regions;
- to prepare standard statistical and correlation analysis of available data;
- to prepare assessments of the state of pollution of the Mediterranean Sea with respect to particular pollutants;
- to help countries to prepare national reports on the state of marine pollution in the areas under their jurisdiction;
- to exchange processed data with other international bodies and organizations.

(b) Two small ad hoc consultation meetings will be held in 1988 and 1989 with scientists/experts to advise the secretariat in the implementation of the activities listed under (a).

Annex V

Budget for MED POL for the 1988-89 biennium

CHAPTER 3 - MED POL - MONITORING

	1988	1989
1. PERSONNEL <u>A/</u>		
(a) <u>Experts/Staff</u>		
- FAO Fishery Expert, P-5	12m/m 67,000	12m/m 68,000
- WHO Senior Scientist, P-5	12m/m 75,000	12m/m 76,000
- IAEA Maintenance Engineer, P-3	12m/m 62,000	12m/m 63,000
Sub-total 1(a)	204,000	207,000
(b) <u>Consultants</u>	15,000	35,000
Sub-total 1(b)	15,000	35,000
(c) <u>Administrative Support</u>		
- FAO Secretary, Athens, Local, G-4	12m/m 14,000	12m/m 15,000
- WHO Secretary, Athens, Local, G-4	12m/m 15,000	12m/m 16,000
- WHO Secretary, Copenh. Local, G-4	6m/m 9,000	6m/m 10,000
- IAEA Lab. Assist., Monaco Local, G-4	12m/m 27,000	12m/m 28,000
Sub-total 1(c)	65,000	69,000
Component total	284,000	311,000
2. TRAVEL <u>B/</u>		
- FAO	11,000	12,000
- UNESCO/IOC	5,500	6,000
- WHO	11,000	12,000
- WMO	7,500	8,000
- IAEA	22,000	24,000
Component Total	57,000	62,000

A/ The cost of UNEP staff involved in MED POL is covered through Chapter I (Co-ordination) of MAP budget.

B/ The cost of travel of UNEP staff related to MED POL is covered through Chapter I (Co-ordination) of MAP budget.

	1988	1989
3. SUBCONTRACTS		
<u>Land-based Sources Protocol implementation:</u>		
- Pilot project on monitoring of organo-phosphorus compounds, including selection of method and preparation of assessment and proposed measures	35,000	-
- Pilot project on monitoring of organotin compounds, including selection of method and preparation of assessment and proposed measures	35,000	-
- Pilot project on monitoring of persistent synthetic materials, including selection of method and preparation of assessment and proposed measures	35,000	-
- Pilot project on monitoring of carcinogenic, teratogenic or mutagenic substances, including selection of method and preparation of assessment and proposed measures	5,000	35,000
- Pilot project on monitoring of submarine outfalls and evaluation of their technical efficiency	20,000	-
- Preparation of draft annex IV to LBS Protocol on pollutants transported through the atmosphere	7,500	-
- Compilation of use of alternative products and processes	-	10,000
- Survey of products and installations causing pollution	-	10,000
- Assistance to countries for the implementation of LBS protocol (experts, training, etc.)	45,000	105,000

	1988	1989
<u>Data quality assurance:</u>		
- Intercalibration and training course on determination of microbiological pollution	15,000	15,000
- Intercalibration and training course on determination of chlorinated hydrocarbons	15,000	-
- Intercalibration and training course on determination of organic mercury	-	15,000
- Training course on treatment and interpretation of biological effects data	15,000	-
- Training course on analysis of physical oceanographic data and time-series	-	15,000
- Purchase of standards and reference materials to be distributed to laboratories	20,000	25,000
- Joint exercises on monitoring and intercomparison of results including sampling and analysis of split samples, expert assistance to laboratories for sampling, analysis, presentation and evaluation of results and improved arrangement for dissemination of relevant scientific material	110,000	140,000
<u>Monitoring:</u>		
- Assistance through agreements for monitoring programmes	580,000	620,000
<u>Other activities:</u>		
- Printing of IX ICSEM/IOC/UNEP Workshop proceedings	10,000	-
Component total	947,500	990,000

	1988	1989
4. MEETINGS/TRAINING/WORKSHOPS/FELLOWSHIPS		
MEETINGS:		
- Working Group for Scientific and Technical Co-operation	50,000	55,000
<u>Land-based Sources Protocol implementation:</u>		
- <u>Ad hoc</u> meeting for the preparation of annex IV of LBS	7,500	-
<u>Data quality assurance:</u>		
- <u>Ad hoc</u> consultation meeting on data processing	7,500	7,500
<u>Monitoring:</u>		
- Meeting of responsible investigators of monitoring programmes	40,000	-
- <u>Ad hoc</u> consultation meeting on monitoring	7,500	7,500
TRAINING:		
- On-job training (through the secretariat)	80,000	80,000
FELLOWSHIPS:		
- Attendance at IX ICSEM/IOC/UNEP Workshop and other meetings	60,000	35,000
Component total	252,500	185,000
5. EQUIPMENT		
<u>Expendable:</u>		
- Spare parts for common maintenance service (through IAEA)	30,000	35,000
<u>Non-expendable:</u>		
- Laboratory equipment (to ILMR), purchase and maintenance	20,000	20,000
Component total	50,000	55,000
CHAPTER 3 - GRAND TOTAL	1,591,000	1,603,000

CHAPTER 4 - MED POL - RESEARCH

	1988	1989
<b>A. SUBCONTRACTS</b>		
Activities A-L	320,000	350,000
Component Total	320,000	350,000
<b>B. MEETINGS</b>		
Activity C	<u>1/</u>	-
D	-	25,000
E	-	25,000
F	25,000	-
G	25,000	-
L	-	25,000
Component Total	50,000	75,000
CHAPTER 4 - GRAND TOTAL	370,000	425,000
MED POL - GRAND TOTAL	1,961,000	2,028,000

1/ Meeting will be funded by WHO/EURO at no cost to MTF.

MED POL BUDGET - SUMMARY TABLE

	1988	1989
CHAPTER 3 - MONITORING		
1. PERSONNEL	284,000	311,000
2. TRAVEL	57,000	62,000
3. SUBCONTRACTS		
- Land-based Sources Protocol implementation	182,500	160,000
- Data quality assurance	175,000	210,000
- Monitoring	580,000	620,000
- Other	10,000	-
4. MEETINGS/TRAINING/FELLOWSHIPS	252,500	185,000
5. EQUIPMENT	50,000	55,000
CHAPTER 3 - TOTAL	1,591,000	1,603,000
CHAPTER 4 - RESEARCH		
A. SUBCONTRACTS	320,000	350,000
B. MEETINGS	50,000	75,000
CHAPTER 4 - TOTAL	370,000	425,000
GRAND TOTAL	1,961,000	2,028,000



Annex VI

Recommendations to the Contracting Parties regarding  
measures to prevent mercury pollution

On the basis of the assessment, prepared by FAO/WHO/UNEP (UNEP/WG.160/8) and in conformity with paragraph 3(e) of the Interim Environmental Quality criteria for mercury approved by the Contracting Parties at their Fourth Ordinary Meeting, the following recommendations for limitations on mercury discharges are approved by the Working Group with a view to their transmission by the secretariat to the Fifth Meeting of the Contracting Parties for adoption, with an effective implementation date of 1 July 1989.

The Contracting Parties:

- (a) adopt a maximum concentration (to be calculated as a monthly average) of 50 ug mercury per litre (expressed as total mercury) for all effluent discharges before dilution into the Mediterranean sea, in terms of Article 5 and Annex I of the Protocol for the Protection of the Mediterranean sea against pollution from Land-based Sources.
- (b) agree to enforce such measure, for those effluents so demanding, through compulsory monitoring requirements and procedures, including, where appropriate (a) the taking each day of a sample representative of the discharge over 24 hours and the measurement of the mercury concentration of that sample, and (b) the measurement of the total flow of the discharge during this period.
- (c) agree to ensure that outfalls for new discharges of mercury into the sea would be designed and constructed in such a way as to achieve a suitable effluent dilution in the mixing zone so that the increase of mercury concentrations in biota and sediments at a distance of 5 km from the outfall structures will not be more than 50% above background levels. Existing discharges of mercury into the sea would be also adjusted as to progressively achieve, within a period of 10 years, the above mentioned objective. Appropriate monitoring should be implemented, for both existing and new discharges, for the verification of above.
- (d) provide the secretariat to the Convention with the fullest information possible on:
  - legislation and administrative measures on existing national standards and criteria on mercury emissions into the marine environment and water quality regarding mercury;
  - measures taken relevant to (a), (b) and (c) above;
  - relevant monitoring data on (b) and (c) above.

## Annex VII

Recommendations to the Contracting Parties regarding  
Environmental Quality Criteria for shellfish watersThe Contracting Parties

- (a) take into account the provisions of Article 7.1(c) of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources, regarding the quality of seawater used for specific purposes that is necessary for the protection of human health, living resources and ecosystems;
- (b) adopt as a minimum common requirement for the quality of shellfish waters, the proposed WHO/UNEP interim environmental quality criteria, as detailed in (c) and (d) below and in the accompanying table;
- (c) for the purposes of such criteria, consider the term "shellfish waters" to mean those coastal and brackish waters in which shellfish (bivalve and gastropod molluscs) live and harvesting is authorized;
- (d) utilise the following in the application of such criteria:
- for the assessment of the microbiological quality of shellfish waters, the shellfish themselves shall be taken into account;
  - for the determination of microbiological parameters, preference shall be given to analysis of shellfish flesh and intervalvular fluid, rather than flesh alone;
  - the results of analysis of microbiological quality shall be expressed by the number of faecal coliforms recorded in 100 ml (FC/100 ml);
  - the method of analysis utilised shall be incubation at  $37 \pm 0.5$  °C with fermentation on a liquid substrate for a period of 24 to 48 hours, followed by a confirmation test at  $44 \pm 0.2$  °C for 24 hours. Enumeration shall be effected according to the Most Probable Number (MPN) method;
  - the concentration of faecal coliforms should be less than 300 per 100 ml of shellfish flesh and intervalvular fluid or of flesh alone, in at least 75% of the samples, based on a minimum sampling frequency of once every three months.
- (e) take any other complementary measures, such as increasing sampling frequency, including further parameters, and monitoring of the quality of the water itself in shellfish areas, as may be demanded by national or local circumstances for ensuring satisfactory quality of shellfish waters.

- (f) include, to the extent possible, all shellfish waters in their National Monitoring Programmes within the framework of MED POL Phase II;
- (g) provide the secretariat to the Convention with the fullest information possible on:
  - legislation and administrative measures on existing national criteria for shellfish waters;
  - measures taken on (b) and (e) above;
  - relevant monitoring data from (f) above.
- (h) continue to provide full support to the research and monitoring component of MED POL Phase II relevant to the assessment of the environmental quality of shellfish waters, in particular to studies on the comparability of faecal coliforms and E. coli determinations, as well as on the usefulness of other indicator organisms.

Proposed interim criteria for shellfish waters in the Mediterranean

<u>Matrix</u>	<u>Parameter</u>	<u>Concentration</u>	<u>Minimum sampling frequency</u>	<u>Analytical method</u>	<u>Interpretation method</u>
Shellfish	Faecal coliforms	<300 per 100 ml flesh + intervalvular fluid or flesh, in at least 75% of the samples.	every 3 months (more frequently whenever local circumstances so demand).	Multiple tube fermentation and counting according to MPN (most probable number) method.  Incubation period: 37 ± 0.5 °C for 24 h or 48 h, followed by 44 ± 0.2 °C for 24 h.	By individual results, histograms or graphical adjustment of a lognormal-probability distribution.

Annex VIII

Recommendations to the Contracting Parties regarding the future status of organosilicon compounds in the Dumping and Land-based Sources Protocols

(a) Recommendations regarding the future status of organosilicon compounds in the Protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft

The Contracting Parties:

- considering recent scientific evidence regarding the toxicity and persistence of organosilicon compounds, and their status as actual or potential marine pollutants;
- further considering that any future control measures becoming necessary can be adequately covered by the provisions of Annex I, item 5 and annex II, item 1(iv) to the above-mentioned protocol;
- amend annex I to the protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft, by deleting item 2 thereof - "Organosilicon compounds and compounds which may form such substances in the marine environment, excluding those which are non-toxic or which are rapidly converted in the sea into substances which are biologically harmless, provided that they do not make edible marine organisms unpalatable".

(b) Recommendations regarding the future status of organosilicon compounds in the protocol for the protection of the Mediterranean Sea against pollution from Land-based Sources

The Contracting Parties:

- considering recent scientific evidence regarding the toxicity, persistence and bioaccumulation of organosilicon compounds, and their status as actual or potential marine pollutants;
- further considering that any future control measures becoming necessary can be adequately covered by annex I, item 7, annex II, item 10 and annex II, item 13 to the above-mentioned protocol;
- amend annex II to the Protocol for the protection of the Mediterranean Sea against pollution from Land-based Sources by deleting item 3 thereof - "Organosilicon compounds and substances which may form such compounds in the marine environment, excluding those which are biologically harmless or are rapidly converted into biologically harmless substances".