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DRAFT RECOMMENDATIONS FOR THE FORMULATION

OF COMMON GUIDELINES, STANDARDS AND CRITERIA IN TERMS OF

ARTICLE 7 OF THE PROTOCOL

In collaboration with:



WORLD HEALTH ORGANIZATION

INTRODUCTION

- 1. Under the terms of Article 7 of the Protocol for the Protection of the Mediterranean Sea against pollution from Land-based Sources, the Contracting Parties have undertaken to progressively formulate and adopt, in cooperation with the competent international organizations, common guidelines and, as appropriate, standards and criteria dealing in particular with:
 - (a) the length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pretreatment of effluents;
 - (b) special requirements for effluents necessitating separate treatment;
 - (c) the quality of sea water used for specific purposes that is necessary for the protection of human health, living resources and ecosystems;
 - (d) the control and progressive replacement of products, installations and industrial and other processes causing significant pollution of the marine environment;
 - (e) specific requirements concerning the quantities of the substances listed in Annexes I and II discharged, their concentration in effluents and methods of discharging them.

2. The same article also states that:

- (a) without prejudice to the provisions of article 5 of the protocol (which specifies the undertaking of the Contracting Parties to eliminate pollution by substances in Annex I to the Protocol), such common guidelines, standards and criteria shall take into account local ecological, geographical and physical characteristics, the economic capacity of the Parties and their need for development, the level of existing pollution, and the real absorptive capacity of the marine environment;
- (b) the programmes and measures referred to in articles 5 and 6 of the Protocol (the latter article binding Contracting Parties to strictly limit pollution by substances or sources listed in Annex II to the Protocol) shall be adopted by taking into account, for their progressive implementation, the capacity to adapt and reconvert existing installations, the economic capacity of the Parties, and their need for development.
- 3. The specific items listed in Article 7, as quoted in para. 1 above, can therefore be seen as measures designed to enable compliance with the standards and criteria to be eventually adopted in terms of Articles 5 and 6 of the Protocol.

GENERAL PRINCIPLES

4. The development and elaboration of the programmes and measures covered by Article 7 of the Protocol are interlinked:-

- (a) between themselves and
- (b) with the standards and other measures covered by Articles 5 and 6 of the Protocol.

The approach must therefore be properly coordinated.

- 5. The following general factors have to be taken into account:
 - (a) the present incomplete state of knowledge regarding the level of existing pollution in the Mediterranean as well as the sea's real absorptive capacity, both as a whole and in its various parts
 - (b) the wide degree of variation between the coastal zones of the different parts of the Mediterranean Sea, not only from the socio-economic, but also from the geographic, oceanographic and ecological viewpoints
- 6. Any common guidelines adopted would therefore:-
 - (a) have to be preceded by relevant studies on conditions prevailing in the Mediterranean region;
 - (b) have to be designed in such a way as to enable each individual state to apply them according to its own specific circumstances.

SPECIFIC PRINCIPLES

- A. Length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pre-treatment of effluents (Article 7(la) of the Protocol)
- 7. The target year for the preparation of common guidelines as required by Article 7(la) of the Protocol is 1989. In order to achieve this aim a step-by-step approach is proposed and a detailed workplan and timetable is presented in the Annex to this document.
- B. Special requirements for effluents necessitating separate treatment (Article 7(1b) of the Protocol)
- 8. Compliance with the terms of the protocol will involve the <u>ad hoc</u> treatment of certain effluents prior to discharge. This will apply particularly to Annex I substances and also, depending on amount and other considerations, to Annex II substances.
- 9. The guidelines eventually developed and adopted are envisaged to cover the following:
 - (a) lists of harmful substances which would be continuously updated;
 - (b) standards of effluent composition in terms of amounts and/or concentrations of harmful substances at different stages in the pathway of the effluent, including the final standard to be met by the effluent prior to discharge;

- (c) analytical and other methods for monitoring effluent quality in relation to specific pollutants, and for evaluating the local environmental conditions influencing the fate of the effluent after discharge, including the assessment of the quality of the receiving waters;
- (d) lists of proposed unit operations (including sequences of operations where necessary) for treatment of effluents, including;
 - potential pretreatment prior to discharge into a sewerage system with or without a sewage treatment plant;
 - complete treatment prior to discharge into any part of the environment;
- (e) reference lists of industrial and related activities to be subject to special surveillance because of the character and composition of their effluents.
- 10. The target year for the preparation of common guidelines as required by Article 7(1b) of the Protocol is 1988. In order to achieve this goal a step-by-step approach is proposed and a detailed workplan and timetable is presented in the Annex to this document.
- C. Quality of sea-water used for specific purposes that is necessary for the protection of human health, living resources and ecosystems (Article 7(lc) of the Protocol)
- 11. As an initial step towards implementation of this aspect of Article 7 of the protocol, interim environmental quality criteria for coastal recreational waters, shellfish-growing waters and shellfish were prepared by WHO and UNEP (document UNEP/WG.118/6). Following revision, they were further discussed during the Third Meeting of the Working Group on Scientific and Technical Co-operation for MED POL held in Athens from 27 to 31 May 1985 (document UNEP/WG.118/9).
- 12. The recommendations of the Working Group concerning bathing waters were submitted to the Fourth Ordinary Meeting of the Contracting Parties (Genoa, Sept. 1985). New revised recommendations on environmental quality criteria for shellfish-growing waters and shellfish are being prepared for consideration at the Fourth Meeting of the Working Group (1986).
- 13. Interim environmental quality criteria for mercury in seafood, prepared by FAO, WHO and UNEP (document UNEP/WG.118/5) were submitted to the same meeting, and the relevant recommendations were submitted to the Fourth Ordinary Meeting of the Contracting Parties (Genoa, Sept. 1985).
- 14. The current environmental quality criteria proposed for microbiological parameters in coastal recreational waters, shellfish and shellfish-growing waters, are only of an interim nature, as the necessary epidemiological and related studies correlating water and/or seafood quality with health effects have only recently commenced. They are therefore submitted in this category, as interim criteria to be recommended for adoption by the Contracting Parties as a temporary measure pending the elaboration of final definitive criteria.

- 15. Apart from the above (para 14) and the studies already ongoing as part of the long-term phase of MED POL, the following activities are recommended:
 - (a) studies towards the assessment of the state of pollution of the Mediterranean Sea by other selected Annex I and Annex II substances;
 - (b) Collection and utilisation of the information supplied by countries since, through Article 8 of the Protocol, the Contracting Parties have committed themselves to systematically assess the level of pollution along their coasts in regard to substances listed in Annexes I and II to the Protocol, and to inform one another through the Secretariat of data resulting from such monitoring.
 - (c) the development of interim environmental quality criteria for these substances.
- 16. A detailed workplan and timetable for the preparation of assessments, with proposed measures, for substances listed in Annex I to the Protocol is presented in the Annex of the document "Programmes and measures for the elimination of pollution from land-based sources by substances listed in Annex I to the Protocol" (UNEP/WG.125/4) and for substances listed in Annex II to the Protocol is presented in the Annex of the document "Programmes and measures for limiting pollution from land-based sources by substances or sources listed in Annex II to the Protocol" (UNEP/WG.125/5).
- D. Control and progressive replacement of products, installations and industrial and other processes causing significant pollution of the marine environment (Article 7(ld) of the Protocol)
- 17. Activities under this heading should be initially devoted to the identification of problem areas and, wherever possible, their categorization from the solution viewpoint into short, medium and long term.
- 18. The guidelines eventually developed should essentially deal with the following:
 - (a) control of products, installations and processes causing significant pollution;
 - (b) the progressive replacement of such products, installations and processes by other, more innocuous, ones.
- 19. The guidelines should cover, inter alia, the following:
 - (a) identification of products, processes and installations in relation to the presence therein of harmful substances included in Annexes I and II to the protocol;
 - (b) regulation, by means of appropriate control measures, of the use and production of products, of the employment of processes, and of the operation of installations resulting in effluents containing harmful substances in concentrations above prescribed limits;
 - (c) selection of products, processes and installations which could be efficiently and economically replaced;

- (d) selection of modifications in manufacturing systems and of types of treatment for waste effluents.
- 20. The quidelines would also have to include:
 - (a) lists of harmful substances, which would have to be constantly updated;
 - (b) common criteria governing the control of products, processes and installations, and the discharge of effluents from installations involved;
 - (c) common criteria regarding the recommended replacement of products, processes and installations;
 - (d) successive lists of substitute products, processes and unit operations, taking due account of the availability of low and non-waste technology;
 - (e) reference lists of industrial and other activities requiring special surveillance.
- 21. In order to implement the principles presented above, a step-by-step approach is proposed and a detailed workplan and timetable is presented in the Annex to this document.
- E. Specific requirements concerning the quantities of the substances listed in Annexes I and II discharged, their concentration in effluents and methods of discharging them (Article 7(le) of the Protocol)
- 22. The above problem will be dealt with for each of the groups of substances listed in Annexes I and II to the Protocol within the preparation of respective assessments and proposed measures. Consequently, workplans and timetables appearing in documents UNEP/WG.125/4 and UNEP/WG.125/5 apply for the implementation of Article 7(le) of the Protocol.

ACTIONS PROPOSED

- 23. On the basis of the requirements of Article 7 of the Protocol, on the general principles presented in paras 4 6 and specific principles presented in paras. 7 22 above, a proposed workplan and timetable is attached as an Annex to this document. The actions proposed will be undertaken in close collaboration with relevant national authorities and with the co-operation of the relevant UN Agencies.
- 24. Documents prepared as a result of actions listed in the Annex to this document will be presented (target date) to Meetings of Experts on the Technical Implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources, with a view to their submission to the Contracting Parties for adoption of measures proposed.

ANNEX

WORKPLAN AND TIME-TABLE FOR THE FORMULATION OF COMMON GUIDELINES, STANDARDS AND CRITERIA IN TERMS OF ARTICLE 7 OF THE PROTOCOL

A. Length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pre-treatment of effluents.

ACTIONS	RESP. AGENCY	TARGET DATE
 Draft guidelines for the computa- tions concerning marine outfall systems for liquid effluents 	UNEP/MEDU, WHO	Dec. 1985
2. A critical review of existing literature on the role of pipe- lines/outfalls in the sanitation system, including experimental evidence on benefits and limita- tions, and evaluation of applica- bility or otherwise to the diffe- rent parts of the Mediterranean area	UNEP/MEDU, WHO	Dec. 1986
3. Compilation of detailed information on existing legislative measures regarding the discharge of wastes through submarine outfalls in Mediterranean countries, together with similar information from selected countries outside the region, to enable comparison and evaluation of applicability	UNEP/MEDU, WHO	Dec. 1987
4. Recording the main types of sani- tation systems existing in the Mediterranean area, together with their reported efficiency, with particular reference to submarine outfalls	UNEP/MEDU, WHO	Dec. 1987
5. Organisation of in situ investigations on selected submarine outfalls (in co-operation with local authorities) to determine their technical efficiency and costeffectiveness (1986 - 1988)	UNEP/MEDU, WHO	Dec. 1990

ACTIONS	RESP. AGENCY	TARGET DATE
6. Common guidelines for the determination of the length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pre-treatment of effluents	UNEP/MEDU, WHO	Dec. 1991
Special requirements for effluents nec	essitating separate	treatment
 Identification and categorization of effluents requiring special and/or separate treatment 	UNEP/MEDU, WHO, UNIDO	Dec. 1987
 Listing of the special treatment and/or other requirements normally associated with or advisable for such effluents 	UNEP/MEDU, WHO, UNIDO	Dec. 1987
3. Compilation of a Mediterranean inventory of effluents requiring special and/or separate treatment including type, category, amount, locality and existing treatment, if any, together with, wherever possible, those local characteristics influencing the effects of such effluents on the marine environment, and the feasibility of separate and/or special treatment	UNEP/MEDU, WHO UNIDO	Dec. 1991
4. Formulation of draft common guide- lines, standards and criteria for special requirements for effluents necessitating separate treatment	UNEP/MEDU, WHO, UNIDO	Dec. 1991

C. Quality of sea-water used for specific purposes that is necessary for the protection of human health, living resources and ecosystems.

For the workplan and time-table see documents UNEP/WG.125/4 and UNEP/WG.125/5.

D. Control and progressive replacement of products, installations and industrial and other processes causing significant pollution of the marine environment.

ACTIONS	RESP. AGENCY	TARGET DATE
 Identification and categorisation of those products, installations and other processes within the region actually or potentially causing sig- nificant pollution of the marine environment 	UNEP/MED, WHO, UNIDO	Dec. 1988
2. Compilation and evaluation of already existing international experience of available control measures, includ- ing the use of alternative products and processes wherever possible involving waste recycling and re-use and adjustment of installations, taking into account the conditions prevailing in the Mediterranean	UNEP/MEDU, WHO, UNIDO	Dec. 1989
3. Comprehensive survey of the situation currently existing in the Mediterranean region with regard to products, installations and other processes within the region actually or potentially causing significant pollution of the marine environment	UNEP/MEDU, WHO, UNIDO	Dec. 1990
 Selection of products, processes and installations which could be efficiently and economically modi- fied or replaced 	UNEP/MEDU, WHO, UNIDO	Dec. 1993

E. Specific requirements concerning the quantities of the substances listed in Annexes I and II discharged, their concentration in effluents and methods of discharging them.

For the workplan and time-table see documents UNEP/WG.125/4 and UNEP/WG.125/5