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**MEDITERRANEAN ACTION PLAN**

Consultation meeting on marine and coastal wastes  
in the Mediterranean

Athens, Greece, 20-21 December 1999

**SUMMARY BACKGROUND PAPER  
BY THE SECRETARIAT**

The following short document was prepared by the Secretariat and could be considered as the basis for discussion aiming at the preparation of the terms of reference of a project on solid wastes in the Mediterranean to be implemented as part of MED POL.

## 1. Introduction

Harmful effects of solid waste on the Mediterranean marine environment are widely recognized. The presence of these materials in the sea ,on beaches and coastal areas affects the marine fauna and flora in their environment and their food chains, it causes aesthetic damage to the sea water and the coastal zone, and finally it can cause damages to the free navigation by entangling ships' propellants or by clogging cooling intake pipes.

The negative economic effects deriving from the presence of litter in the Mediterranean area are also important, considering the possible reduction of the touristic activities in the areas damaged by the presence of the solid waste on beaches and swimming areas.

Solid waste reaches the marine environment through different ways:

- direct dumping of solid waste to the sea
- effects of the wind on the urban solid waste open dump sites or defective solid waste management(SWM) systems in the coastal cities
- runoff from land
- discard from ships
- leftover by people who come to the beach for recreation.

The solid waste found in the Mediterranean marine environment are mostly composed of:

- degradable organic materials that float or sink on the sea bottom
- nondegradable plastics and rubber materials that tend to sink on the sea bottom
- partly degradable metals, glass, cloth and other materials that float or sink.

### Previous MED POL activities on solid wastes:

MAP technical report No: 50(1991)

This report is a compilation of 440 references dealing with the sources, fates and impacts of solid waste in marine environment.

MAP technical report seriesNo:56(1991)

The report is a review of activities that have been achieved in the Mediterranean region and dealing with litter in coastal areas.The report shows that the damages to the marine environment, fauna and flora, to the navigation and to the economy of the coastal cities are already occurring and will intensify in the future due to the increase of the population of the coastal areas and the high investments that are made to attract tourists to the coastline.It is ,in fact, estimated that the touristic activities in the developing Mediterranean countries will increase by 40% by 2010.

## **2. Legal aspects**

### The Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (LBS)

Article 5 of the revised LBS protocol stipulates that parties "undertake to eliminate pollution from LBS and shall elaborate and implement jointly or individually, as appropriate, the necessary programs and measures".

These programs and measures are listed in annex I of the protocol and concern 30 activities. Municipal Solid Waste Management is included.

### The Strategic Action Program to address pollution from land-based activities (SAP)

The SAP was developed and adopted by the Mediterranean countries as part of the provisions of the revised LBS protocol (art. 5 and 15).

The SAP is based on the preliminary findings of the regionally prepared transboundary diagnostic analysis that represents a regional synthesis of actions regarding the protection of the marine environment from LBS activities.

The SAP has adopted two related targets:

- by the year 2025 at latest, to base urban solid waste management on reduction at source, separate collection, recycling, composting and environmentally sound disposal
- by the year 2005 at latest, to base urban solid waste management on reduction at source, separate collection, recycling, composting and environmentally sound disposal in all cities and urban agglomerations exceeding 100,000 inhabitants and areas of concern.

Finally to achieve the targets, the SAP has proposed activities at the regional and national levels (regional and national action plans).

## **3. Objective of the meeting**

The objective of the meeting is to identify the elements (needs, gaps, data available, etc..) of a project aiming at assisting the Mediterranean countries to improve the management of solid waste and minimize their effects on the marine environment. The long-term output of the project will be to assist countries to formulate regional and national action plans.

### Preparation of terms of reference for an assessment (short-term activity)

The objective would be achieved through the preparation of an assessment of the actual situation of the solid waste management prevailing in :

- coastal cities(>100,000 inh.)
- coastal settlements(40,000-100,000 inh.)
- Commercial and touristic ships.

The assessment will include an estimation of the quantities and types of waste generated and found at sea and on the coastal areas, the legal and the institutional aspects and finally the technical aspects such as the collection, transport and disposal of the solid waste in coastal cities and other coastal human settlements, ships, touristic sites and beach .

The assessment would emphasize the need for an integrated approach of solid waste management systems and should be guided by the fact that any failure in the implementation procedures of the SWM system will affect the marine environment in the concerned sites.

The final goal of the assessment will be to create the basis of information needed to formulate a regional action plan with a view at the preparation of national action plans to improve the implementation procedures of the SWM systems and to reduce the negative effects of solid waste on the marine environment.

Preparation of preliminary terms of reference for the implementation of the SAP SWM activities related to solid waste management (medium-term activities)

On the medium-term, the project should take into account the following activities:

- Set up guidelines for environmentally sound and economically feasible systems of municipal solid waste collection and disposal.
- Identify and validate technologies appropriate for the control of SWM systems.
- Prepare a Mediterranean strategy for the management of hazardous waste.