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MEDITERRANEAN ACTION PLAN

MEDPOL

Meeting of MED POL Focal Points

Rhodes (Greece), 25-27 May 2011

**CRITERIA AND STANDARDS FOR BATHING WATERS
QUALITY IN THE MEDITERRANEAN**

In cooperation with



WHO

Preface

The Contracting Parties to the Barcelona Convention adopted in 1985 an interim common criteria and standards for coastal recreational waters, with a view to update them when more evidence would be provided. A new proposal was prepared ten years later but, as at the same time a proposal of a European Council Directive was tabled on the same subject, it was decided to postpone any decision and wait until the new Directive would be operational to avoid any duplication of efforts regarding microbiological analyses and elaboration of data. In the meantime, WHO developed the "Guidelines for Safe Recreational-water Environments" launched in 2003 and the EU abandoned their old proposal and started a new one linked to the WHO Guidelines. Finally, a new EC Directive was adopted by the European Parliament in 2006, and the Mediterranean countries have proposed criteria and standards that comply with both the WHO guidelines and the EC Directive.

Background

The Mediterranean guidelines for bathing waters were formulated in 2007 based on the WHO guidelines for "Safe Recreational Water Environments" and on the EC Directive for "Bathing Waters". The proposal was made in an effort to provide updated criteria and standards that can be used in the Mediterranean countries and to harmonize their legislation in order to provide homogenous data. In addition, in 2009, the guidelines were coupled with the instructions for the preparation of water quality profiles that were used by several countries. As a result, national water quality profiles were presented during the "Consultation meeting for the finalization and approval of criteria and standards for bathing waters along with beach profiles", held in Athens from 8-9 November 2010. The meeting recommended to approve the criteria and standards as well as the methodology used and to present them at the MED POL Focal Points meeting in 2011 with the view at their transmission for approval and adoption at the meetings of the MAP Focal Points and the Contracting Parties to the Barcelona Convention. It is to be noted that all countries in the Mediterranean undertook pilot studies for the preparation of bathing waters quality profiles, with the assistance of WHO/MED POL.

CRITERIA AND STANDARDS FOR BATHING WATERS IN MEDITERRANEAN COUNTRIES

Microbial Water Quality Assessment Category (based on Intestinal enterococci (cfu/100 mL))

Category	A	B	C	D
Limit values	<100*	101-200*	185**	>185**(1)
Water quality	Excellent quality	Good quality	Sufficient	Poor quality/ Immediate Action

Minimum sampling frequency: at least one per month and not less than four in a bathing period including an initial one prior to the start of the bathing period.

* 95th percentile intestinal enterococci/100 mL (applying the formula 95th Percentile = antilog ($\mu + 1,65 \sigma$))

** 90th percentile intestinal enterococci/100 mL (90th Percentile=antilog ($\mu + 1,282 \sigma$), μ =calculated arithmetic mean of the log10 values; σ = calculated standard deviation of the log10 values.

- (1) For single sample immediate action is recommended to be carried out once the count for IE exceeds 500 cfu/100 mL
- For classification purposes at least 12 sample results are needed spread over 3-4 bathing seasons
 - Reference method of analysis: ISO 7899-1 based on membrane filtration technique or any other approved technique
 - Transitional period 4 years (starting by 1st January 2012)

PREPARATION OF BEACH PROFILES (BATHING WATER PROFILES)

Beach profiles should be prepared following a standardized format similar to that provided here below, a copy of which should be displayed for public information on the beach.

In addition, a map has to be included with the sampling points, sources of pollution, facilities and any other relevant information. The classification of the beach as described in the table above should also be included.

Standardized format: GENERAL BATHING WATER PROFILE

General Information

Name of beach and bathing area:.....

Location:.....Location on the map (grid reference):.....

Latitude:..... Longitude:.....

Length.....m wide..m depth...m gradient.....cm

Type of bathing area:

- open confined natural lake estuarine marine

Type of bathing area: sand rocky pebble grass other.....

Public facilities: No. of: Toilets..... Showers..... Litter bins.....

Is there in place any information system indicating water quality? Yes No

Are methods in place to warn the people of danger? No

Yes: Flags megaphones Digital panels other.....

Accessibility: Road Path No access. Is there an adequate parking area? Yes No

Beach usage: swimming sailing motor sports other.....

Number of bathers at peak usage (e.g. Sunday).....

Are dogs or other animals present at the beach? Yes Type..... Number..... No

Water colour: Transparent Not transparent brown green reddish

Are there any algae present? Yes Type..... Amount..... No

Does the beach look clean? Yes No Specify type of dirt.....

Characteristics of surrounding area: (more than one category can be used)

urban residential industrial agricultural dunes

river mouth hills & mountains grassland other.....

Potential sources of contamination to be specified

Wastewater discharges River or stream discharge Other discharges

Other sources

Average water temperature: (during season) max/min.....

Prevailing wind (N/S/E/W):.....

Prevailing current (N/S/E/W):.....

Distance between mean high and low water:.....

Beach manager or contact in case of pollution incident:

Phone: Mobile phone: Fax:

e-mail:

Address:.....

Organisation:.....

Management team at the bathing area

-.....

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