

Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC

DIRECTIVE 2006/7/EC OF THE EUROPEAN  
PARLIAMENT AND OF THE COUNCIL

of 15 February 2006

concerning the management of bathing water  
quality and repealing Directive 76/160/EEC

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission<sup>(1)</sup>,

Having regard to the opinion of the European Economic and Social Committee<sup>(2)</sup>,

Having regard to the opinion of the Committee of the Regions<sup>(3)</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>(4)</sup>, in the light of the joint text approved by the Conciliation Committee on 8 December 2005,

Whereas:

- (1) Building on the Commission's Communication on sustainable development, the European Council has singled out objectives as general guidance for future development in priority areas such as natural resources and public health.
- (2) Water is a scarce natural resource, the quality of which should be protected, defended, managed and treated as such. Surface waters in particular are renewable resources with a limited capacity to recover from adverse impacts from human activities.
- (3) Community policy on the environment should aim at a high level of protection, and contribute to pursuing the objectives of preserving, protecting and improving the quality of the environment and of protecting human health.
- (4) In December 2000, the Commission adopted a Communication to the European Parliament and the Council on the development of a new bathing water policy and initiated a large-scale consultation of all interested and involved parties. The main outcome of this consultation was general support for the development of a new Directive based on the latest scientific evidence and paying particular attention to wider public participation.
- (5) Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme<sup>(5)</sup> contains a commitment to ensuring a high level of protection of bathing water, including by

revising Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water<sup>(6)</sup>.

- (6) Pursuant to the Treaty, in preparing policy on the environment the Community is, *inter alia*, to take account of available scientific and technical data. This Directive should use scientific evidence in implementing the most reliable indicator parameters for predicting microbiological health risk and to achieve a high level of protection. Further epidemiological studies should be undertaken urgently concerning the health risks associated with bathing, particularly in fresh water.
- (7) In order to increase efficiency and wise use of resources, this Directive needs to be closely coordinated with other Community legislation on water, such as Council Directives 91/271/EEC of 21 May 1991 concerning urban waste-water treatment<sup>(7)</sup>, 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources<sup>(8)</sup> and Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy<sup>(9)</sup>.
- (8) Appropriate information on planned measures and progress on implementation should be disseminated to stakeholders. The public should receive appropriate and timely information on the results of the monitoring of bathing water quality and risk management measures in order to prevent health hazards, especially in the context of predictable short-term pollution or abnormal situations. New technology that allows the public to be informed in an efficient and comparable way on bathing waters across the Community should be applied.
- (9) For the purpose of monitoring, harmonised methods and practices of analysis need to be applied. Observation and quality assessment over an extended period are necessary in order to achieve a realistic bathing water classification.
- (10) Compliance should be a matter of appropriate management measures and quality assurance, not merely of measuring and calculation. A system of bathing water profiles is therefore appropriate to provide a better understanding of risks as a basis for management measures. In parallel, particular attention should be attached to adherence to quality standards and coherent transition from Directive 76/160/EEC.
- (11) On 17 February 2005 the Community ratified the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Århus Convention). It is therefore appropriate for this Directive to include provisions on public access to information and to provide for public participation in its implementation to supplement Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information<sup>(10)</sup> and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment<sup>(11)</sup>.
- (12) Since the objectives of this Directive, namely the attainment by the Member States, on the basis of common standards, of a good bathing water quality and a high level of protection throughout the Community, cannot be sufficiently achieved by the Member

States and can be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

- (13) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>(12)</sup>.
- (14) The continued importance of a Community bathing water policy is evident each bathing season as it protects the public from accidental and chronic pollution discharged in or near Community bathing areas. The overall quality of bathing waters has improved considerably since Directive 76/160/EEC came into force. However, that Directive reflects the state of knowledge and experience of the early 1970. Patterns of bathing water use have since changed, as has the state of scientific and technical knowledge. Therefore, that Directive should be repealed,

HAVE ADOPTED THIS DIRECTIVE:

## CHAPTER I

### GENERAL PROVISIONS

#### *Article 1*

##### **Purpose and scope**

- 1 This Directive lays down provisions for:
- the monitoring and classification of bathing water quality;
  - the management of bathing water quality; and
  - the provision of information to the public on bathing water quality.
- 2 The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC.
- 3 This Directive shall apply to any element of surface water where the competent authority expects a large number of people to bathe and has not imposed a permanent bathing prohibition, or issued permanent advice against bathing (hereinafter bathing water). It shall not apply to:
- swimming pools and spa pools;
  - confined waters subject to treatment or used for therapeutic purposes;
  - artificially created confined waters separated from surface water and groundwater.

#### *Article 2*

##### **Definitions**

For the purposes of this Directive, the following definitions shall apply:

1. the terms ‘surface water’, ‘groundwater’, ‘inland water’, ‘transitional waters’, ‘coastal water’ and ‘river basin’ have the same meaning as in Directive 2000/60/EC;
2. ‘competent authority’ means the authority or authorities that a Member State has designated to ensure compliance with the requirements of this Directive or any other authority or body to which that role has been delegated;
3. ‘permanent’ means, in relation to a bathing prohibition or advice against bathing, lasting for at least one whole bathing season;
4. ‘large number’ means, in relation to bathers, a number that the competent authority considers to be large having regard, in particular, to past trends or to any infrastructure or facilities provided, or other measures taken, to promote bathing;
5. ‘pollution’ means the presence of microbiological contamination or other organisms or waste affecting bathing water quality and presenting a risk to bathers' health as referred to in Articles 8 and 9 and Annex I, column A;
6. ‘bathing season’ means the period during which large numbers of bathers can be expected.
7. ‘management measures’ means the following measures undertaken with respect to bathing water:
  - (a) establishing and maintaining a bathing water profile;
  - (b) establishing a monitoring calendar;
  - (c) monitoring bathing water;
  - (d) assessing bathing water quality;
  - (e) classifying bathing water;
  - (f) identifying and assessing causes of pollution that might affect bathing waters and impair bathers' health;
  - (g) giving information to the public;
  - (h) taking action to prevent bathers' exposure to pollution;
  - (i) taking action to reduce the risk of pollution;
8. ‘short-term pollution’ means microbiological contamination as referred to in Annex I, column A, that has clearly identifiable causes, is not normally expected to affect bathing water quality for more than approximately 72 hours after the bathing water quality is first affected and for which the competent authority has established procedures to predict and deal with as set out in Annex II;
9. ‘abnormal situation’ means an event or combination of events impacting on bathing water quality at the location concerned and not expected to occur on average more than once every four years;
10. ‘set of bathing water quality data’ means data obtained in accordance with Article 3;
11. ‘bathing water quality assessment’ means the process of evaluating bathing water quality, using the assessment method defined in Annex II;

12. 'cyanobacterial proliferation' means an accumulation of cyanobacteria in the form of a bloom, mat or scum;
13. the term 'public concerned' has the same meaning as in Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment<sup>(13)</sup>.

## CHAPTER II

### QUALITY AND MANAGEMENT OF BATHING WATER

#### *Article 3*

#### **Monitoring**

- 1 Member States shall annually identify all bathing waters and define the length of the bathing season. They shall do so for the first time before the start of the first bathing season after 24 March 2008.
- 2 Member States shall ensure that monitoring of the parameters set out in Annex I, column A, takes place in accordance with Annex IV.
- 3 The monitoring point shall be the location within the bathing water where:
  - a most bathers are expected; or
  - b the greatest risk of pollution is expected, according to the bathing water profile.
- 4 A monitoring calendar for each bathing water shall be established before the start of each bathing season and for the first time before the start of the third full bathing season after the entry into force of this Directive. Monitoring shall take place no later than four days after the date specified in the monitoring calendar.
- 5 Member States may introduce monitoring of the parameters set out in Annex I, column A, during the first full bathing season following the entry into force of this Directive. In that case, monitoring shall take place with the frequency specified in Annex IV. The results of such monitoring may be used to build up the sets of bathing water quality data referred to in Article 4. As soon as Member States introduce monitoring under this Directive, monitoring of the parameters set out in the Annex to Directive 76/160/EEC may cease.
- 6 Samples taken during short-term pollution may be disregarded. They shall be replaced by samples taken in accordance with Annex IV.
- 7 During abnormal situations, the monitoring calendar referred to in paragraph 4 may be suspended. It shall be resumed as soon as possible after the end of the abnormal situation. New samples shall be taken as soon as possible after the end of the abnormal situation to replace samples that are missing due to the abnormal situation.
- 8 Member States shall report any suspension of the monitoring calendar to the Commission, giving the reasons for the suspension. They shall provide such reports on the occasion of the next annual report provided for in Article 13 at the latest.
- 9 Member States shall ensure that the analysis of bathing water quality takes place in accordance with the reference methods specified in Annex I and the rules set out in Annex V. However, Member States may permit the use of other methods or rules if they can demonstrate that the results obtained are equivalent to those obtained using the methods specified in Annex I

and the rules set out in Annex V. Member States that permit the use of such equivalent methods or rules shall provide the Commission with all relevant information about the methods or rules used and their equivalence.

#### Article 4

### **Bathing water quality assessment**

1 Member States shall ensure that sets of bathing water quality data are compiled through the monitoring of the parameters set out in Annex I, column A.

2 Bathing water quality assessments shall be carried out:

- a in relation to each bathing water;
- b after the end of each bathing season;
- c on the basis of the set of bathing water quality data compiled in relation to that bathing season and the three preceding bathing seasons; and
- d in accordance with the procedure set out in Annex II.

However, a Member State may decide to carry out bathing water quality assessments on the basis of the set of bathing water quality data compiled in relation to the preceding three bathing seasons only. If it so decides, it shall notify the Commission beforehand. It shall also notify the Commission if it subsequently decides to revert to carrying out assessments on the basis of four bathing seasons. Member States may not change the applicable assessment period more than once every five years.

3 Sets of bathing water data used to carry out bathing water quality assessments shall always comprise at least 16 samples or, in the special circumstances referred to in Annex IV, paragraph 2, 12 samples.

4 However, provided that either:

- the requirement of paragraph 3 is satisfied, or
- the set of bathing water data used to carry out the assessment comprises at least eight samples, in the case of bathing waters with a bathing season not exceeding eight weeks,

a bathing water quality assessment may be carried out on the basis of a set of bathing water quality data relating to fewer than four bathing seasons if:

- (a) the bathing water is newly identified;
- (b) any changes have occurred that are likely to affect the classification of the bathing water in accordance with Article 5, in which case the assessment shall be carried out on the basis of a set of bathing water quality data consisting solely of the results for samples collected since the changes occurred; or
- (c) the bathing water had already been assessed in accordance with Directive 76/160/EEC, in which case equivalent data gathered under that Directive shall be used and, for this purpose, parameters 2 and 3 of the Annex to Directive 76/160/EEC shall be deemed to be equivalent to parameters 2 and 1 of column A of Annex I to this Directive.

5 Member States may subdivide or group together existing bathing waters in the light of bathing water quality assessments. They may group existing bathing waters together only if these waters:

- a are contiguous;

- b received similar assessments for the preceding four years in accordance with paragraphs 2, 3 and 4(c); and
- c have bathing water profiles all of which identify common risk factors or the absence thereof.

### *Article 5*

#### **Classification and quality status of bathing waters**

1 As a result of the bathing water quality assessment carried out in accordance with Article 4, Member States shall, in accordance with the criteria set out in Annex II, classify bathing water as:

- a 'poor';
- b 'sufficient';
- c 'good'; or
- d 'excellent'.

2 The first classification according to the requirements of this Directive shall be completed by the end of the 2015 bathing season.

3 Member States shall ensure that, by the end of the 2015 bathing season, all bathing waters are at least 'sufficient'. They shall take such realistic and proportionate measures as they consider appropriate with a view to increasing the number of bathing waters classified as 'excellent' or 'good'.

4 However, notwithstanding the general requirement of paragraph 3, bathing waters may temporarily be classified as 'poor' and still remain in compliance with this Directive. In such cases, Member States shall ensure that the following conditions are satisfied:

- a in respect of each bathing water classified as 'poor', the following measures shall be taken with effect from the bathing season that follows its classification:
  - (i) adequate management measures, including a bathing prohibition or advice against bathing, with a view to preventing bathers' exposure to pollution;
  - (ii) identification of the causes and reasons for the failure to achieve 'sufficient' quality status;
  - (iii) adequate measures to prevent, reduce or eliminate the causes of pollution; and
  - (iv) in accordance with Article 12, alerting the public by a clear and simple warning sign and informing them of the causes of the pollution and measures taken, on the basis of the bathing water profile.
- b If a bathing water is classified as 'poor' for five consecutive years, a permanent bathing prohibition or permanent advice against bathing shall be introduced. However, a Member State may introduce a permanent bathing prohibition or permanent advice against bathing before the end of the five#year period if it considers that the achievement of 'sufficient' quality would be infeasible or disproportionately expensive.

### *Article 6*

#### **Bathing water profiles**

1 Member States shall ensure that bathing water profiles are established in accordance with Annex III. Each bathing water profile may cover a single bathing water or more than one contiguous bathing waters. Bathing water profiles shall be established for the first time by 24 March 2011.

2 Bathing water profiles shall be reviewed and updated as provided for in Annex III.

3 When establishing, reviewing and updating bathing water profiles, adequate use shall be made of data obtained from monitoring and assessments carried out pursuant to Directive 2000/60/EC that are relevant for this Directive.

### *Article 7*

#### **Management measures in exceptional circumstances**

Member States shall ensure that timely and adequate management measures are taken when they are aware of unexpected situations that have, or could reasonably be expected to have, an adverse impact on bathing water quality and on bathers' health. Such measures shall include information to the public and, if necessary, a temporary bathing prohibition.

### *Article 8*

#### **Cyanobacterial risks**

1 When the bathing water profile indicates a potential for cyanobacterial proliferation, appropriate monitoring shall be carried out to enable timely identification of health risks.

2 When cyanobacterial proliferation occurs and a health risk has been identified or presumed, adequate management measures shall be taken immediately to prevent exposure, including information to the public.

### *Article 9*

#### **Other parameters**

1 When the bathing water profile indicates a tendency for proliferation of macro-algae and/or marine phytoplankton, investigations shall be undertaken to determine their acceptability and health risks and adequate management measures shall be taken, including information to the public.

2 Bathing waters shall be inspected visually for pollution such as tarry residues, glass, plastic, rubber or any other waste. When such pollution is found, adequate management measures shall be taken, including, if necessary, information to the public.



*Article 10***Cooperation on transboundary waters**

Wherever a river basin gives rise to transboundary impacts on bathing water quality, the Member States involved shall cooperate as appropriate in implementing this Directive, including through the appropriate exchange of information and joint action to control those impacts.

## CHAPTER III

**EXCHANGE OF INFORMATION***Article 11***Public participation**

Member States shall encourage public participation in the implementation of this Directive and shall ensure the provision of opportunities for the public concerned:

- to find out how to participate, and
- to formulate suggestions, remarks or complaints.

This shall relate, in particular, to the establishment, review and updating of lists of bathing waters in accordance with Article 3(1). Competent authorities shall take due account of any information obtained.

*Article 12***Information to the public**

1 Member States shall ensure that the following information is actively disseminated and promptly made available during the bathing season in an easily accessible place in the near vicinity of each bathing water:

- a the current bathing water classification and any bathing prohibition or advice against bathing referred to in this Article by means of a clear and simple sign or symbol;
- b a general description of the bathing water, in non-technical language, based on the bathing water profile established in accordance with Annex III;
- c in the case of bathing waters subject to short-term pollution:
  - notification that the bathing water is subject to short-term pollution,
  - an indication of the number of days on which bathing was prohibited or advised against during the preceding bathing season because of such pollution, and
  - a warning whenever such pollution is predicted or present,
- d information on the nature and expected duration of abnormal situations during such events;
- e whenever bathing is prohibited or advised against, a notice advising the public and giving reasons;

- f whenever a permanent bathing prohibition or permanent advice against bathing is introduced, the fact that the area concerned is no longer a bathing water and the reasons for its declassification; and
  - g an indication of sources of more complete information in accordance with paragraph 2.
- 2 Member States shall use appropriate media and technologies, including the Internet, to disseminate actively and promptly the information concerning bathing waters referred to in paragraph 1 and also the following information in several languages, when appropriate:
- a a list of bathing waters;
  - b the classification of each bathing water over the last three years and its bathing water profile, including the results of monitoring carried out in accordance with this Directive since the last classification;
  - c in the case of bathing waters classified as being 'poor', information on the causes of pollution and measures taken with a view to preventing bathers' exposure to pollution and to tackle its causes as referred to in Article 5(4); and
  - d in the case of bathing waters subject to short-term pollution, general information on:
    - conditions likely to lead to short-term pollution,
    - the likelihood of such pollution and its likely duration,
    - the causes of the pollution and measures taken with a view to preventing bathers' exposure to pollution and to tackle its causes.

The list referred to in point (a) shall be available each year before the start of the bathing season. The results of the monitoring referred to in point (b) shall be made available on the Internet upon completion of the analysis.

3 The information referred to in paragraphs 1 and 2 shall be disseminated as soon as it is available and with effect from the start of the fifth bathing season after 24 March 2008.

4 Member States and the Commission shall, wherever possible, provide information to the public using geo-referenced technology and present it in a clear and coherent manner, in particular through the use of signs and symbols.

### *Article 13*

#### **Reports**

1 Member States shall provide the Commission with the results of the monitoring and with the bathing water quality assessment for each bathing water, as well as with a description of significant management measures taken. Member States shall provide this information annually by 31 December in relation to the preceding bathing season. They shall begin providing it once the first bathing water quality assessment has been carried out in accordance with Article 4.

2 Member States shall notify the Commission annually before the start of the bathing season of all waters identified as bathing waters, including the reason for any change compared to the preceding year. They shall do so for the first time before the start of the first bathing season after 24 March 2008.

3 When monitoring of bathing water has started under this Directive, annual reporting to the Commission in accordance with paragraph 1 shall continue to take place pursuant to Directive 76/160/EEC until a first assessment can be made under this Directive. During that period, parameter 1 of the Annex to Directive 76/160/EEC shall not be taken into account in the annual report, and parameters 2 and 3 of the Annex to Directive 76/160/EEC shall be assumed to be equivalent to parameters 2 and 1 of column A of Annex I to this Directive.

4 The Commission shall publish an annual summary report on bathing water quality in the Community, including bathing water classifications, conformity with this Directive and significant management measures undertaken. The Commission shall publish this report by 30 April every year, including via the Internet. When establishing the report the Commission shall, wherever possible, make best use of data collection, assessment and presentation systems under related Community legislation, in particular Directive 2000/60/EC.

## CHAPTER IV

### FINAL PROVISIONS

#### *Article 14*

##### **Report and review**

1 The Commission shall, by 2008, submit a report to the European Parliament and to the Council. The report shall have particular regard to:

- a the results of an appropriate European epidemiological study conducted by the Commission in collaboration with Member States;
- b other scientific, analytical and epidemiological developments relevant to the parameters for bathing water quality, including in relation to viruses; and
- c World Health Organisation recommendations.

2 Member States shall, by the end of 2014, submit written observations to the Commission on that report including on the need for any further research or assessments which may be required to assist the Commission in its review of this Directive under paragraph 3.

3 In the light of the report, the Member States' written observations and an extended impact assessment and bearing in mind experience gained from implementing this Directive, the Commission shall, no later than 2020, review this Directive with particular regard to the parameters for bathing water quality, including whether it would be appropriate to phase out the 'sufficient' classification or modify the applicable standards, and shall present if necessary appropriate legislative proposals in accordance with Article 251 of the Treaty.

#### *Article 15*

##### **Technical adaptations and implementing measures**

1 It shall be decided in accordance with the procedure referred to in Article 16(2):

- a to specify the EN/ISO standard on the equivalence of microbiological methods for the purposes of Article 3(9);
- b to lay down detailed rules for the implementation of Articles 8(1), 12(1)(a) and 12(4);
- c to adapt the methods of analysis for the parameters set out in Annex I in the light of scientific and technical progress;
- d to adapt Annex V in the light of scientific and technical progress;
- e to lay down guidelines for a common method for the assessment of single samples.

2 The Commission shall present a draft of the measures to be taken in accordance with paragraph 1(b) with respect to Article 12(1)(a) by 24 March 2010. Before doing so, it shall consult representatives of Member States, regional and local authorities, relevant tourist and

consumer organisations and other interested parties. After the adoption of relevant rules, it shall publicise them via the Internet.

#### *Article 16*

##### **Committee procedure**

- 1 The Commission shall be assisted by a committee.
- 2 Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

- 3 The Committee shall adopt its rules of procedure.

#### *Article 17*

##### **Repeal**

- 1 Directive 76/160/EEC is hereby repealed with effect from 31 December 2014. Subject to paragraph 2, this repeal shall be without prejudice to Member States' obligations concerning the time limits for transposition and application set out in the repealed Directive.
- 2 As soon as a Member State has taken all necessary legal, administrative and practical measures to comply with this Directive, this Directive will be applicable, replacing Directive 76/160/EEC.
- 3 References to the repealed Directive 76/160/EEC shall be construed as being made to this Directive.

#### *Article 18*

##### **Implementation**

- 1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 24 March 2008. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

- 2 Member States shall communicate to the Commission the texts of the main provisions of national law that they adopt in the field covered by this Directive.

*Article 19*

**Entry into force**

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

*Article 20*

**Addressees**

This Directive is addressed to Member States.

Done at Strasbourg, 15 February 2006.

*For the European Parliament*

*The President*

J. BORRELL FONTELLES

*For the Council*

*The President*

H. WINKLER

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*Status: This is the original version (as it was originally adopted).*

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## ANNEX I

For inland waters

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	<b>Parameter</b>	<b>Excellent quality</b>	<b>Good quality</b>	<b>Sufficient</b>	<b>Reference methods of analysis</b>
1	Intestinal enterococci (cfu/100 ml)	200 <sup>a</sup>	400 <sup>a</sup>	330 <sup>b</sup>	ISO 7899-1 or ISO 7899-2
2	Escherichia coli (cfu/100 ml)	500 <sup>a</sup>	1 000 <sup>a</sup>	900 <sup>b</sup>	ISO 9308-3 or ISO 9308-1

**a** Based upon a 95#percentile evaluation. See Annex II.

**b** Based upon a 90#percentile evaluation. See Annex II.

For coastal waters and transitional waters

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	<b>Parameter</b>	<b>Excellent quality</b>	<b>Good quality</b>	<b>Sufficient</b>	<b>Reference methods of analysis</b>
1	Intestinal enterococci (cfu/100 ml)	100 <sup>a</sup>	200 <sup>a</sup>	185 <sup>b</sup>	ISO 7899-1 or ISO 7899-2
2	Escherichia coli (cfu/100 ml)	250 <sup>a</sup>	500 <sup>a</sup>	500 <sup>b</sup>	ISO 9308-3 or ISO 9308-1

**a** Based upon a 95#percentile evaluation. See Annex II.

**b** Based upon a 90#percentile evaluation. See Annex II.

## ANNEX II

## Bathing water assessment and classification

## 1. Poor quality

Bathing waters are to be classified as ‘poor’ if, in the set of bathing water quality data for the last assessment period<sup>(14)</sup>, the percentile values<sup>(15)</sup> for microbiological enumerations are worse<sup>(16)</sup> than the ‘sufficient’ values set out in Annex I, column D.

## 2. Sufficient quality

Bathing waters are to be classified as ‘sufficient’:

1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better<sup>(17)</sup> than the ‘sufficient’ values set out in Annex I, column D; and
2. if the bathing water is subject to short-term pollution, on condition that:
  - (i) adequate management measures are being taken, including surveillance, early warning systems and monitoring, with a view to preventing bathers' exposure by means of a warning or, where necessary, a bathing prohibition;
  - (ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and
  - (iii) the number of samples disregarded in accordance with Article 3(6) because of short-term pollution during the last assessment period represented no more than 15 % of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.

### 3. Good quality

Bathing waters are to be classified as ‘good’:

1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better<sup>(17)</sup> than the ‘good quality’ values set out in Annex I, column C; and
2. if the bathing water is subject to short-term pollution, on condition that:
  - (i) adequate management measures are being taken, including surveillance, early warning systems and monitoring, with a view to preventing bathers' exposure, by means of a warning or, where necessary, a bathing prohibition;
  - (ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and
  - (iii) the number of samples disregarded in accordance with Article 3(6) because of short-term pollution during the last assessment period represented no more than 15 % of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.

### 4. Excellent quality

Bathing waters are to be classified as ‘excellent’:

1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better than the ‘excellent quality’ values set out in Annex I, column B; and
2. if the bathing water is subject to short-term pollution, on condition that:
  - (i) adequate management measures are being taken, including surveillance, early warning systems and monitoring, with a view to preventing bathers' exposure, by means of a warning or, where necessary, a bathing prohibition;
  - (ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and

- (iii) the number of samples disregarded in accordance with Article 3(6) because of short-term pollution during the last assessment period represented no more than 15 % of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.

## NOTES

## ANNEX III

## The bathing water profile

1. The bathing water profile referred to in Article 6 is to consist of:
  - (a) a description of the physical, geographical and hydrological characteristics of the bathing water, and of other surface waters in the catchment area of the bathing water concerned, that could be a source of pollution, which are relevant to the purpose of this Directive and as provided for in Directive 2000/60/EC;
  - (b) an identification and assessment of causes of pollution that might affect bathing waters and impair bathers' health;
  - (c) an assessment of the potential for proliferation of cyanobacteria;
  - (d) an assessment of the potential for proliferation of macro-algae and/or phytoplankton;
  - (e) if the assessment under point (b) shows that there is a risk of short-term pollution, the following information:
    - the anticipated nature, frequency and duration of expected short-term pollution,
    - details of any remaining causes of pollution, including management measures taken and the time schedule for their elimination,
    - management measures taken during short-term pollution and the identity and contact details of bodies responsible for taking such action,
  - (f) the location of the monitoring point.
2. In the case of bathing waters classified as 'good', 'sufficient' or 'poor', the bathing water profile is to be reviewed regularly to assess whether any of the aspects listed in paragraph 1 have changed. If necessary, it is to be updated. The frequency and scope of reviews is to be determined on the basis of the nature and severity of the pollution. However, they are to comply with at least the provisions and to take place with at least the frequency specified in the following table.

Bathing water classification	'Good'	'Sufficient'	'Poor'
Reviews are to take place at least every	four years	three years	two years
Aspects to be reviewed (points of paragraph 1)	(a) to (f)	(a) to (f)	(a) to (f)



In the case of bathing waters previously classified as ‘excellent’, the bathing water profiles need be reviewed and, if necessary, updated only if the classification changes to ‘good’, ‘sufficient’ or ‘poor’. The review is to cover all aspects mentioned in paragraph 1.

3. In the event of significant construction works or significant changes in the infrastructure in or in the vicinity of the bathing water, the bathing water profile is to be updated before the start of the next bathing season.
4. The information referred to in paragraph 1(a) and (b) is to be provided on a detailed map whenever practicable.
5. Other relevant information may be attached or included if the competent authority considers it appropriate.

## ANNEX IV

### Bathing water monitoring

1. One sample is to be taken shortly before the start of each bathing season. Taking account of this extra sample and subject to paragraph 2, no fewer than four samples are to be taken and analysed per bathing season.
2. However, only three samples need be taken and analysed per bathing season in the case of a bathing water that either:
  - (a) has a bathing season not exceeding eight weeks; or
  - (b) is situated in a region subject to special geographical constraints.
3. Sampling dates are to be distributed throughout the bathing season, with the interval between sampling dates never exceeding one month.
4. In the event of short-term pollution, one additional sample is to be taken to confirm that the incident has ended. This sample is not to be part of the set of bathing water quality data. If necessary to replace a disregarded sample, an additional sample is to be taken seven days after the end of the short-term pollution.

## ANNEX V

### Rules on the handling of samples for microbiological analyses

#### 1. Sampling point

Where possible, samples are to be taken 30 centimetres below the water's surface and in water that is at least one metre deep.

#### 2. Sterilisation of sample bottles

Sample bottles are:

- to undergo sterilisation in an autoclave for at least 15 minutes at 121 °C, or
- to undergo dry sterilisation at between 160 °C and 170 °C for at least one hour, or
- to be irradiated sample containers obtained directly from manufacturer.

### 3. Sampling

The volume of the sampling bottle/container is to depend on the quantity of water needed for each parameter to be tested. The minimum content is generally 250 ml.

Sample containers are to be of transparent and non-coloured material (glass, polyethene or polypropylene).

In order to prevent accidental contamination of the sample, the sampler is to employ an aseptic technique to maintain the sterility of the sample bottles. There is no further need for sterile equipment (such as sterile surgical gloves or tongs or sample pole) if this is done properly.

The sample is to be clearly identified in indelible ink on the sample and on the sampling form.

### 4. Storage and transport of samples before analysis

Water samples are to be protected at all stages of transport from exposure to light, in particular direct sunlight.

The sample is to be conserved at a temperature of around 4 °C, in a cool box or refrigerator (depending on climate) until arrival at the laboratory. If the transport to the laboratory is likely to take more than four hours, then transport in a refrigerator is required.

The time between sampling and analysis is to be kept as short as possible. It is recommended that samples be analysed on the same working day. If this is not possible for practical reasons, then the samples shall be processed within no more than 24 hours. In the meantime, they shall be stored in the dark and at a temperature of 4 °C ± 3 °C.

- (1) OJ C 45 E, 25.2.2003, p. 127.
- (2) OJ C 220, 16.9.2003, p. 39.
- (3) OJ C 244, 10.10.2003, p. 31.
- (4) Opinion of the European Parliament of 21 October 2003 (OJ C 82 E, 1.4.2004, p. 115). Council Common Position of 20 December 2004 (OJ C 111 E, 11.5.2005, p. 1) and Position of the European Parliament of 10 May 2005 (not yet published in the Official Journal). European Parliament Legislative Resolution of 18 January 2006 (not yet published in the Official Journal) and Council Decision of 20 December 2005.
- (5) OJ L 242, 10.9.2002, p. 1.
- (6) OJ L 31, 5.2.1976, p. 1. Directive as last amended by Regulation (EC) No 807/2003 (OJ L 122, 16.5.2003, p. 36).
- (7) OJ L 135, 30.5.1991, p. 40. Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).
- (8) OJ L 375, 31.12.1991, p. 1. Directive as amended by Regulation (EC) No 1882/2003.
- (9) OJ L 327, 22.12.2000, p. 1. Directive as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p. 1).
- (10) OJ L 41, 14.2.2003, p. 26.
- (11) OJ L 156, 25.6.2003, p. 17.
- (12) OJ L 184, 17.7.1999, p. 23.
- (13) OJ L 175, 5.7.1985, p. 40. Directive as last amended by Directive 2003/35/EC of the European Parliament and of the Council (OJ L 156, 25.6.2003, p. 17).
- (14) 'Last assessment period' means the last four bathing seasons or, when applicable, the period specified in Article 4(2) or (4).
- (15) Based upon percentile evaluation of the  $\log_{10}$  normal probability density function of microbiological data acquired from the particular bathing water, the percentile value is derived as follows:
  - (i) Take the  $\log_{10}$  value of all bacterial enumerations in the data sequence to be evaluated. (If a zero value is obtained, take the  $\log_{10}$  value of the minimum detection limit of the analytical method used instead.)
  - (ii) Calculate the arithmetic mean of the  $\log_{10}$  values ( $\mu$ ).
  - (iii) Calculate the standard deviation of the  $\log_{10}$  values ( $\sigma$ ).The upper 90#percentile point of the data probability density function is derived from the following equation: upper 90#percentile =  $\text{antilog}(\mu + 1,282 \sigma)$ .  
The upper 95#percentile point of the data probability density function is derived from the following equation: upper 95#percentile =  $\text{antilog}(\mu + 1,65 \sigma)$ .
- (16) 'Worse' means with higher concentration values expressed in cfu/100 ml.
- (17) 'Better' means with lower concentration values expressed in cfu/100 ml.