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[(1)], the percentile values[(2)] for microbiological enumerations are worse[(3)] 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[(4)] 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[(4)] 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

(**1**) 'Last assessment period' means the last four bathing seasons or, when applicable, the period specified in Article 4(2) or (4).

(**2**) 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 (μ).

(iii) Calculate the standard deviation of the $\log_{10}$ values (σ).

The upper 90#percentile point of the data probability density function is derived from the following equation: upper 90#percentile = antilog (μ + 1,282 σ).
The upper 95#percentile point of the data probability density function is derived from the following equation: upper 95#percentile = antilog (μ + 1,65 σ).

(**3**) 'Worse' means with higher concentration values expressed in cfu/100 ml.

(**4**) 'Better' means with lower concentration values expressed in cfu/100 ml.