

SCHEDULE 4

Regulation 11

CLASSIFICATION

Standards

1. The Agency must use the following standards for classification—

Standards for inland waters

<i>Parameter</i>	<i>“Excellent”</i>	<i>“Good”</i>	<i>“Sufficient”</i>
Intestinal enterococci ⁽¹⁾	200 ⁽²⁾	400 ⁽²⁾	330 ⁽³⁾
<i>Escherichia coli</i> ⁽¹⁾	500 ⁽²⁾	1,000 ⁽²⁾	900 ⁽³⁾

(1) Colony forming units per 100 millilitres (“cfu/100 ml”).

(2) Based upon a 95-percentile evaluation – see paragraph 2.

(3) Based upon a 90-percentile evaluation – see paragraph 2.

Standards for coastal and transitional waters

<i>Parameter</i>	<i>“Excellent”</i>	<i>“Good”</i>	<i>“Sufficient”</i>
Intestinal enterococci ⁽¹⁾	100 ⁽²⁾	200 ⁽²⁾	185 ⁽³⁾
<i>Escherichia coli</i> ⁽¹⁾	250 ⁽²⁾	500 ⁽²⁾	500 ⁽³⁾

(1) Colony forming units per 100 millilitres (“cfu/100 ml”).

(2) Based upon a 95-percentile evaluation – see paragraph 2.

(3) Based upon a 90-percentile evaluation – see paragraph 2.

Methodology

2.—(1) In this Schedule, “percentile value” is based on a percentile evaluation of the log₁₀ normal probability density function of microbiological data used for the assessment under regulation 10.

(2) The Agency must derive a percentile value as follows—

- (a) take the log₁₀ value of all bacterial concentrations in the data sequence to be evaluated or, if a zero value is obtained, take the log₁₀ value of the minimum detection limit of the analytical method used;
- (b) calculate the arithmetic mean (“μ”) of the log₁₀ values taken under paragraph (a);
- (c) calculate the standard deviation (“σ”) of the log₁₀ values taken under paragraph (a);
- (d) derive the upper 90-percentile point of the data probability density function from the following equation: upper 90-percentile = antilog (μ + 1.282 σ); and
- (e) derive the upper 95-percentile point of the data probability density function from the following equation: upper 95-percentile = antilog (μ + 1.65 σ).

Classification

3.—(1) At the end of every bathing season, the Agency must classify a bathing water as “poor” if, in the set of bathing water quality data used, the percentile values for microbiological concentrations are higher than the “sufficient” standards set out in paragraph 1.

Status: This is the original version (as it was originally made).

- (2) At the end of every bathing season, the Agency must classify a bathing water as “sufficient” if—
 - (a) in the set of bathing water quality data, the percentile values for microbiological concentrations are equal to or lower than the “sufficient” standards set out in paragraph 1; and
 - (b) the bathing water is not classifiable as “good” or “excellent”.
- (3) At the end of every bathing season, the Agency must classify a bathing water as “good” if—
 - (a) in the set of bathing water quality data, the percentile values for microbiological concentrations are equal to or lower than the “good” standards set out in paragraph 1; and
 - (b) the bathing water is not classifiable as “excellent”.
- (4) At the end of every bathing season, the Agency must classify a bathing water as “excellent” if, in the set of bathing water quality data used, the percentile values for microbiological concentrations are equal to or lower than the “excellent” standards set out in paragraph 1.