### SCHEDULE 3

Regulation 10

### **STANDARDS**

1. SEPA must use the following standards for classification—

# Standards for inland waters

Parameter	"Excellent"	"Good"	"Sufficient"
Intestinal enterococci <sup>(1)</sup>	200(2)	400(2)	330 <sup>(3)</sup>
Escherichia coli <sup>(1)</sup>	500(2)	$1,000^{(2)}$	900 <sup>(3)</sup>

- (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

Parameter	"Excellent"	"Good"	"Sufficient"	_
Intestinal enterococci <sup>(1)</sup>	$100^{(2)}$	$200^{(2)}$	185 <sup>(3)</sup>	
Escherichia coli <sup>(1)</sup>	250 <sup>(2)</sup>	500(2)	500 <sup>(3)</sup>	

- (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  $\log_{10}$  normal probability density function of microbiological data used for the assessment under regulation 9.
  - (2) SEPA must derive a percentile value as follows-
    - (a) take the log<sub>10</sub> value of all bacterial concentrations in the data sequence to be evaluated or, if a zero value is obtained, take the log<sub>10</sub> value of the minimum detection limit of the analytical method used;
    - (b) calculate the arithmetic mean (" $\mu$ ") of the  $\log_{10}$  values taken under paragraph (a);
    - (c) calculate the standard deviation (" $\sigma$ ") of the  $\log_{10}$  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 ( $\mu + 1.282 \sigma$ ); and
    - (e) derive the upper 95-percentile point of the data probability density function from the following equation: upper 95-percentile = antilog ( $\mu$  + 1.645  $\sigma$ ).

# Classification

- **3.**—(1) At the end of every bathing season, SEPA must classify a bathing water as "poor" if, in the set of bathing water quality data, the percentile values for microbiological enumerations are higher than the "sufficient" standards set out in paragraph 1.
  - (2) At the end of every bathing season, SEPA must classify a bathing water as "sufficient" if-

- (a) in the set of bathing water quality data, the percentile values for microbiological enumerations 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, SEPA must classify a bathing water as "good" if-
  - (a) in the set of bathing water quality data, the percentile values for microbiological enumerations 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, SEPA must classify a bathing water as "excellent" if, in the set of bathing water quality data, the percentile values for microbiological enumerations are equal to or lower than the "excellent" standards set out in paragraph 1.

#### **Short-term Pollution**

**4.** Where a bathing water is subject to incidents of short-term pollution, it may only be classified under paragraph 3 as "sufficient", "good" or "excellent" if the number of samples disregarded is in accordance with paragraph 4 of Schedule 2 and the required information has been provided and management measures are in place in accordance with regulations 8 and 12.