SCHEDULE 1

Regulation 6

BATHING WATER PROFILES

Contents

1.—(1) Every bathing water profile must-

- (a) contain a description of the physical, geographical and hydrological characteristics of-
 - (i) the bathing water; and
 - (ii) any other surface water in the catchment area of the bathing water where the surface water could be a source of pollution for the bathing water;
- (b) identify and assess the causes of pollution that might affect bathing water quality and pose a risk to bathers' health;
- (c) assess the potential for cyanobacterial proliferation;
- (d) assess the potential for the proliferation of macro-algae or phytoplankton;
- (e) identify the location of the monitoring point;
- (f) contain (if the assessment under head (b) indicates that there is a risk of short-term pollution)-
 - (i) information as to the anticipated nature, frequency and duration of short-term pollution;
 - (ii) details of the expected causes of short-term pollution;
 - (iii) details of the management measures taken and the time schedule for the elimination of the causes;
 - (iv) details of the management measures taken during a short-term pollution incident; and
 - (v) the identity and contact details of any person responsible for taking the management measures during the incident.

(2) The information in sub-paragraph (1)(a) and (b) must be detailed on a map whenever practicable.

Review

2.—(1) Where a bathing water is classified as "poor", "sufficient" or "good" under regulation 10, SEPA must review the bathing water profile–

- (a) at the following minimum frequency–
 - (i) for a "poor" classification, every 2 years;
 - (ii) for a "sufficient" classification, every 3 years; and
 - (iii) for a "good" classification, every 4 years; and
- (b) taking into account the nature and severity of the pollution which affects the bathing water.

(2) Where there are significant construction works or infrastructure changes in or around a bathing water, SEPA must review the bathing water profile before the start of the next bathing season.

SCHEDULE 2

Regulation 7

MONITORING

PART 1

INTESTINAL ENTEROCOCCI AND ESCHERICHIA COLI

Location of monitoring point

1.—(1) Subject to sub-paragraph (3), where SEPA take samples in compliance with this Part they must do so from the monitoring point situated at each bathing water.

(2) SEPA must-

- (a) locate the monitoring point at every bathing water where most bathers are expected: and,
- (b) where possible, take samples 30 centimetres below the water's surface and in water that is at least one metre deep.

(3) Where for whatever reason the taking of samples from the monitoring point is not possible or would pose a danger to any person, SEPA must take samples from the next best site where it is possible to take samples in accordance with sub-paragraph (2)(b) and it is safe to do so.

Monitoring calendar

2.—(1) SEPA must–

- (a) establish a calendar which specifies dates for sampling for every bathing water before the start of every bathing season ("a monitoring calendar"); and
- (b) take samples at every bathing water no later than 4 days after the date specified in the monitoring calendar.
- (2) SEPA may suspend the monitoring calendar for the duration of an abnormal situation.
- (3) As soon as possible after the end of an abnormal situation SEPA must-
 - (a) take one additional sample in order to verify that the situation has ended;
 - (b) take sufficient additional samples to ensure that it has the minimum number required for the bathing water for the bathing season; and
 - (c) notify the Scottish Ministers of the suspension and provide them with the reasons for it.

(4) SEPA must not include a sample taken under sub-paragraph (3)(a) in the set of bathing water quality data for a bathing water.

(5) Where an abnormal situation continues beyond the end of a bathing season, SEPA need not take a sample in terms of sub-paragraph (3)(a).

Monitoring

3.—(1) SEPA must–

- (a) take and analyse at least 4 samples from every bathing water for every bathing season except where subparagraph (2) or (3) applies;
- (b) take the first such sample for every bathing season shortly before the start of that season; and

(c) take samples from every bathing water throughout the bathing season at regular intervals and, except where the bathing water is situated in a region subject to special geographical constraints, such intervals must not exceed one month.

(2) Where the bathing season for a particular bathing water does not exceed 8 weeks, SEPA needs to take and analyse only 3 samples.

(3) Where a bathing water is situated in a region subject to special geographical constraints, SEPA needs to take and analyse only 3 samples.

Short-term pollution

4.—(1) This paragraph applies where the appropriate signage and management measures for short-term pollution are in place in accordance with regulations 8 and 12 and a short-term pollution incident is occurring or is predicted to occur.

(2) SEPA may decide not to include samples taken during a short-term pollution incident in the set of bathing water quality data for a bathing water.

(3) As soon as possible after the end of the short-term pollution incident, SEPA must take one additional sample in order to verify that the incident has ended.

(4) SEPA must not include the sample taken under sub-paragraph (3) in the set of bathing water quality data for a bathing water.

(5) 7 days after the end of the short-term pollution incident, SEPA must, if necessary, take an additional sample to ensure that it has the minimum number required for the bathing water for the bathing season.

(6) The number of samples disregarded under sub-paragraph (2) by SEPA must represent no more than the greater of -

- (a) 15 percent of the total number of samples provided for in the monitoring calendars for the relevant assessment period and that bathing season; or
- (b) one sample per bathing season.

PART 2

CYANOBACTERIA

5. Where any bathing water profile indicates a potential for cyanobacterial proliferation, SEPA must monitor that bathing water at the frequency necessary to allow adequate management measures to be put in place in accordance with regulation 14.

PART 3

OTHER POLLUTION

6. SEPA and the relevant local authority must each establish a visual monitoring programme at every bathing water at the frequency necessary to allow adequate management measures to be put in place in accordance with regulation 16.

PART 4

MACRO-ALGAE AND MARINE PHYTOPLANKTON

7. Where any bathing water profile indicates a tendency for proliferation of macro-algae or marine phytoplankton, SEPA must carry out such investigations at that bathing water as are necessary to-

(a) determine whether such proliferation constitutes a health risk to bathers; and

(b) allow adequate management measures to be put in place in accordance with regulation 15.

SCHEDULE 3

Regulation 10

STANDARDS

1. SEPA must use the following standards for classification-

Standards for inland waters

Parameter	"Excellent"	"Good"	"Sufficient"	
Intestinal enterococci ⁽¹⁾	200 ⁽²⁾	400 ⁽²⁾	330 ⁽³⁾	
Escherichia coli ⁽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

Parameter	"Excellent"	"Good"	"Sufficient"		
Intestinal enterococci ⁽¹	⁾ 100 ⁽²⁾	200 ⁽²⁾	185 ⁽³⁾		
Escherichia coli ⁽¹⁾	250 ⁽²⁾	500 ⁽²⁾	500 ⁽³⁾		
(1) Colony forming units per 100 millilitres ("cfu/100 ml").					
(2) Based upon a 95-percen) Based upon a 95-percentile evaluation – see paragraph 2.				
(3) Based upon a 90-percen	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_{10} value of all bacterial concentrations in the data sequence to be evaluated or, if a zero value is obtained, take the \log_{10} 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 + 1.645 σ).

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.