SCHEDULE 3

Sampling and analysis

PART 1

General

Samples: general

- 1.—(1) The local authority must ensure that each sample is—
 - (d) taken by a competent person using suitable equipment;
 - (e) representative of the water at the sampling point at the time of sampling;
 - (f) not contaminated in the course of being taken;
 - (g) kept at such temperature and in such conditions as will secure that there is no material change in what is to be measured; and
 - (h) analysed without delay by a competent person using suitable equipment.
- (2) It must ensure that the sample is analysed using a system of analytical quality control.
- (3) The system must be subjected to checking by a person who is—
 - (a) not under the control of either the analyst or the local authority; and
 - (b) approved by the Welsh Ministers for that purpose.

Analysing samples

- **2.**—(1) The local authority must ensure that each sample is analysed in accordance with this paragraph.
- (2) For each parameter specified in the first column of Table 1 in Part 2 of this Schedule the method of analysis is specified in the second column of that table.
- (3) For each parameter specified in the first column of Table 2 in Part 2 of this Schedule the method is one that is capable of—
 - (a) measuring concentrations and values with the trueness and precision specified in the second and third columns of that table, and
 - (b) detecting the parameter at the limit of detection specified in the fourth column of that table.
- (4) For hydrogen ion, the method of analysis must be capable of measuring a value with a trueness of 0.2 pH unit and a precision of 0.2 pH unit.
- (5) The method of analysis used for odour and taste parameters must be capable of measuring values equal to the parametric value with a precision of 1 dilution number at 25°C.
 - (5) For these purposes—

"limit of detection" is —

- (a) three times the relative within-batch standard deviation of a natural sample containing a low concentration of the parameter; or
- (b) five times the relative within-batch standard deviation of a blank sample;

"precision" (the random error) is twice the standard deviation (within a batch and between batches) of the spread of results about the mean;

"trueness" (the systematic error) is the difference between the mean value of the large number of repeated measurements and the true value.

Authorisation of alternative methods of analysis

- **3.**—(1) The Welsh Ministers may authorise a method different from that set out in paragraph 2(2) if satisfied that it is at least as reliable.
 - (2) An authorisation may be time-limited and may be revoked at any time.

Sampling and analysis by persons other than local authorities

- **4.**—(1) A local authority may enter into an arrangement for any person to take and analyse samples on its behalf.
 - (2) A local authority must not enter into an arrangement under paragraph (1) unless—
 - (a) it is satisfied that the task will be carried out promptly by a person competent to perform it, and
 - (b) it has made arrangements that ensure that any breach of these Regulations is communicated to it immediately, and any other result is communicated to it within 28 days.