## SCOTTISH STATUTORY INSTRUMENTS

# 2006 No. 209

## The Private Water Supplies (Scotland) Regulations 2006

## PART IX

## PRIVATE WATER SUPPLIES: SAMPLING, ANALYSIS AND CHARGING

#### **Collection and analysis of samples**

**31.**—(1) A monitoring local authority shall secure, so far as is reasonably practicable, that in taking, handling, transporting, storing and analysing any sample taken for the purposes of these Regulations, or causing any such sample to be taken, handled, transported, stored and analysed, the appropriate requirements are satisfied.

(2) In paragraph (1), "the appropriate requirements" means such of the following requirements as are applicable—

- (a) that the sample is representative of the quality of the water intended for human consumption purposes at the point of compliance specified in regulation 7(4) or (5) at the time of sampling;
- (b) that the sample is not contaminated when being taken or subsequently;
- (c) that the sample is kept at such temperature and in such conditions as will secure that there is no material alteration of the concentration or value or specification for the measurement or observation of which the sample is intended;
- (d) that the sample is analysed as soon as may be after the time it has been taken—
  - (i) by, or under the supervision of, a person who is competent to perform that task; and
  - (ii) with the use of such equipment as is suitable for the purpose;
- (e) that any laboratory at which samples are analysed has a system of analytical quality control that is subject from time to the to checking by a person who is-
  - (i) not under the control of either the laboratory or the monitoring local authority; and
  - (ii) approved by the Scottish Ministers for that purpose.

(3) A monitoring local authority shall maintain such records as are sufficient to enable it to establish, in relation to each sample taken for the purposes of these Regulations that such of the appropriate requirements as are applicable to that sample have been satisfied.

(4) Subject to paragraph (6), for the purpose of establishing, within acceptable limits of deviation and detection, whether the sample contains concentrations or values or specifications which contravene the prescribed concentrations or values or specifications, or exceed the specifications for indicator parameters—

- (a) the method of analysis specified in column (2) of Table A in Schedule 5 shall be used for determining compliance with the parameter specified in relation to that method in column (1);
- (b) the method of analysis used for determining compliance with a parameter specified in column (2) of Table B in Schedule 5 must be capable, at the time of use—

- (i) of measuring concentrations or values or specifications equal to the parametric value with the trueness and precision specified in relation to that parameter in columns (3) and (4) of that Table; and
- (ii) of detecting the parameter at the limit of detection specified in relation to that parameter in column (5) of that Table;
- (c) the method of analysis used for determining compliance with hydrogen ion parameter must be capable, at the time of use, of measuring concentrations equal to the parametric value with a trueness of 0.2 pH units and a precision of 0.2 pH units; and
- (d) the method of analysis used for odour and taste parameters must be capable, at the time of use, of measuring values equal to the parametric value with a precision of 1 dilution number at 25°C.
- (5) For the purposes of paragraph (4)—

"limit of detection" is to be calculated as—

- (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; and

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

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

(6) Subject to paragraph (8), the Scottish Ministers may, on the application of any person, authorise a method of analysis other than that specified in paragraph (4)(a) ("the prescribed method").

(7) An application for the purpose of paragraph (6) shall be made in writing and shall be accompanied by-

- (a) a description of the method of proposed analysis; and
- (b) the results of the tests carried out to demonstrate the reliability of that method and its equivalence to the prescribed method.

(8) The Scottish Ministers shall not authorise the use of the method proposed in an application under paragraph (6) unless they are satisfied that the results obtained by the use of that proposed method are at least as reliable as those produced by the use of the prescribed method.

(9) An authorisation under paragraph (6) may be subject to such conditions as the Scottish Ministers think fit.

(10) The Scottish Ministers may at any time by notice in writing to the person to whom an authorisation under paragraph (6) has been given, revoke the authorisation; and no such notice shall be served later than 3 months before the date on which the revocation is stated to take effect.

(11) Within 28 days of the results of analysis of any sample of a private water supply taken from any premises being available to the monitoring local authority which took the sample, or caused it to be taken, the monitoring local authority shall notify the relevant person of the results of that analysis, and any other person who is to be charged under regulation 33 for the taking and analysis of the sample from those premises.