
WELSH STATUTORY INSTRUMENTS

2018 No. 647

The Water Supply (Water Quality) Regulations 2018

PART 5

Monitoring – Additional Provisions

Collection and analysis of samples: transitional provision

16.—(1) Before 23:59 on 31 December 2019 a water undertaker or supplementary licensee may, in respect of any parameter specified in column 1 of Table A2 in Schedule 5, apply the method of analysis in paragraph (2) in place of the method of analysis in regulation 15(6)(b).

(2) For the purpose of establishing, within acceptable limits of deviation and detection, whether the sample contains concentrations or values which contravene the prescribed concentrations or values, or exceed the specifications for indicator parameters the method of analysis used for a parameter specified in column 1 of Table A2 in Schedule 5 must be capable, at the time of use—

- (a) of measuring concentrations and values equal to the parametric value with the trueness and precision specified in relation to that parameter in columns 2 and 3 of that Table; and
- (b) of detecting the parameter at the limit of detection specified in relation to that parameter in column 4 of that Table.

(3) For the purposes of paragraph (3)—

limit of detection” is to be calculated as—

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

“precision” is to be calculated as a measure of random error and may be expressed as the standard deviation (within and between batches) of the spread of results from the mean. A precision measurement of twice the relative standard deviation is acceptable. The term “precision” is further specified in international standard ISO 5725 entitled “Accuracy (trueness and precision) of measurement methods and results”(1) as amended by the technical corrigendum entitled “Accuracy (trueness and precision) of measurement methods and results - Part 1: General Principles and Definitions TECHNICAL CORRIGENDUM 1”(2);

“trueness” is to be calculated as a measure of systematic error, which is the difference between the mean value of the large number of repeated measurements and the true value. The term “trueness” is further specified in international standard ISO 5725 entitled “Accuracy (trueness and precision) of measurement methods and results”, as amended by the technical corrigendum entitled “Accuracy (trueness and precision) of measurement methods and results - Part 1: General Principles and Definitions TECHNICAL CORRIGENDUM 1” .

(1) This standard has been approved by the International Organization for Standardization (ISO). Under reference BS ISO 5725-1 to BS ISO 5725-6, these are published as UK standards by the British Standards Institution.

(2) ISO 5725-1:1994/Cor 1:1998 published on 2 May 1998.

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