
WELSH STATUTORY INSTRUMENTS

2018 No. 647

The Water Supply (Water Quality) Regulations 2018

PART 4

Monitoring of Water Supplies

Monitoring: general provisions

6.—(1) Paragraph (2) applies for the purpose of determining whether water to which this Part applies satisfies the provisions of Part 3 or, if a departure has been authorised under Part 7 in relation to that supply, those provisions as read with the terms of that authorisation.

(2) A water undertaker must take or cause to be taken, and analyse or cause to be analysed, not less than the number of samples of the water within each of the water supply zones which it supplies specified in, or in accordance with the provisions of, this Part and Schedule 3.

(3) Except in a case to which paragraph (4) applies, the parameters listed in Tables A and B in Schedule 1 and the indicator parameters must be subject to—

- (a) monitoring of a Group A parameter if the parameter is one listed in column 2 of Table 1 in Schedule 3, and the circumstances specified in column 3 of that Table apply; and
- (b) monitoring of a Group B parameter in any other case.

(4) Where the distribution of water in any part of a water supply zone is by tanker and is (or is likely to be) an intermittent short-term supply, samples of water from each tanker from which the water is distributed must be taken—

- (a) at the commencement of the distribution from that tanker; and
- (b) every 48 hours thereafter until the distribution is discontinued.

(5) Of the samples taken in accordance with paragraph (3) in relation to each distribution—

- (a) the first sample must be analysed for compliance with the following parameters—
 - (i) *E. coli* (item 2 in Part 2 of Table A in Schedule 1); and
 - (ii) conductivity (item 6 in Schedule 2); and
- (b) the second and any subsequent samples must be analysed for compliance with those and every other parameter.

(6) For the purposes of the application of paragraph (3)(b) to the aluminium, iron and manganese parameters (items 1, 9 and 10 in Table 1 in Schedule 3, a supply which consists of both groundwater and surface water will be deemed to be a supply which consists only of surface water.

(7) Compliance samples for chemical parameters, including copper, lead and nickel must take the form of a random daytime sample of one litre volume taken at a consumer's tap without prior flushing.

(8) A water undertaker must monitor each water supply zone within its area of supply for the radioactive parameters contained in Schedule 2 in accordance with paragraphs (9) to (16).

(9) As regards the indicative dose parameter—

- (a) monitoring must be carried out where an artificial source of radionuclides or elevated natural radioactivity is present and it cannot be shown on the basis of other representative monitoring programmes or other investigations that the level of indicative dose is below the value specified in Schedule 2;
 - (b) where monitoring for natural radionuclide levels is required, the Welsh Ministers must define the frequency of the monitoring of either gross alpha activity, gross beta activity or individual natural radionuclides, depending on the screening strategy adopted in accordance with Schedule 4;
 - (c) where the monitoring frequency defined in accordance with sub-paragraph (b) requires one sample per year for naturally occurring radioactivity, a further sample must be taken where any change occurs in relation to the supply that is likely to influence the concentrations of radionuclides in water supplied for regulation 4(1) purposes;
 - (d) in the case of naturally occurring radionuclides where the results of the monitoring referred to in sub-paragraph (b) show that the concentration of radionuclides in the supply is stable, the minimum sampling and analysis frequencies are to be decided by the Welsh Ministers and confirmed by notice to the water undertaker, taking into account the risk to human health;
 - (e) a water undertaker may use a screening strategy for gross alpha, gross beta activity or individual radionuclides and, in the event that there is any exceedance of the value specified in Schedule 2, it must carry out an analysis of the specific radionuclides in accordance with Schedule 4.
- (10) As regards the radon parameter—
- (a) a water undertaker must ensure that a representative survey is carried out in accordance with paragraph (11) to determine the likelihood of a supply failing the parametric value for radon specified in Schedule 2; and
 - (b) monitoring must be carried out where there is reason to believe, on the basis of the results of the representative surveys or other reliable information, that the parametric value for radon might be exceeded.
- (11) A representative survey must be designed in such a way—
- (a) as to be capable of determining the scale and nature of likely exposures to radon in water intended for human consumption originating from different types of groundwater sources and wells in different geological areas; and
 - (b) that the underlying parameters, in particular the geology and hydrology of the area, radioactivity of rock or soil, and well type, can be identified and used to direct further action to areas of likely high exposure.
- (12) As regards the tritium parameter—
- (a) monitoring must be carried out where an anthropogenic source of tritium or other artificial radionuclides is present within the catchment area and it cannot be shown on the basis of other surveillance programmes or investigations that the level of tritium is below the parametric value specified in Schedule 2; and
 - (b) if the concentration of tritium exceeds its parametric value, an investigation of the presence of other artificial radionuclides must be carried out.
- (13) Where a parametric value is exceeded in a particular sample, the Welsh Ministers must define the extent of re-sampling necessary to ensure that the measured values are representative of an average activity concentration for a full year.
- (14) The Welsh Ministers may notify a water undertaker which supplies water to a water supply zone that a radioactive parameter need not be monitored if the Welsh Ministers are satisfied that, for the period specified in the notice, the water supplied to that zone for regulation 4(1) purposes—

- (a) gives rise to a calculated indicative dose that is below the parametric value specified in Schedule 2;
- (b) contains levels of radon that are below the parametric value specified in Schedule 2;
- (c) contains levels of tritium that are below the parametric value specified in Schedule 2.

(15) Where paragraph (14) applies, the Welsh Ministers must communicate the grounds for the notification to the European Commission with the necessary documentation supporting the decision (including the findings of any surveys, monitoring or investigations carried out).

(16) The Welsh Ministers must by notice in writing withdraw a notice under paragraph (14)—

- (a) given in relation to the indicative dose parameter, if the Welsh Ministers believe that water supplied to the zone in question for regulation 4(1) purposes gives rise to a calculated indicative dose that is likely to exceed the parametric value specified in Schedule 2;
- (b) given in relation to the radon parameter, if the Welsh Ministers believe that water supplied to the zone in question for regulation 4(1) purposes contains levels of radon that are likely to exceed the parametric value specified in Schedule 2;
- (c) given in relation to the tritium parameter, if the Welsh Ministers believe that water supplied to the zone in question for regulation 4(1) purposes contains levels of tritium that are likely to exceed the parametric value specified in Schedule 2.

(17) A water undertaker which receives a notice under paragraph (16) must monitor or cause to be monitored the indicative dose parameter or, as the case may be, the radon or tritium parameter, in accordance with Tables 8 to 13 (as applicable) in Schedule 3.