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STATUTORY INSTRUMENTS

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**2016 No. 614**

**The Water Supply (Water Quality) Regulations 2016**

**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 (15) applies, the parameters listed in Tables A and B in Schedule 1 and the indicator parameters must be subject—

- (a) as regards a parameter listed in column 2 of Table 1 in Schedule 3 and in relation to which there is no entry in column 3 of that Table, to check monitoring;
- (b) as regards a parameter so listed in relation to which there is an entry in column 3 of that Table, to check monitoring in the circumstances specified in that column;
- (c) in any other case, to audit monitoring.

(4) In the application of paragraph (3)(b) to the aluminium, *Clostridium perfringens*, iron and manganese parameters (items 1, 3, 10 and 11 in Table 1 in Schedule 3), a supply which consists of both groundwater and surface water is deemed to be a supply which consists only of surface water.

(5) The copper, lead and nickel parameters (items 10, 15 and 17 in Table B in Schedule 1) must be monitored in such a manner as the Secretary of State determines from time to time and specifies by notice in writing given to each water undertaker.

(6) Paragraphs (7) to (15) apply to the radioactive parameters.

(7) 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 Secretary of State 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 Secretary of State 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.
- (8) As regards the radon parameter—
- (a) a water undertaker must ensure that a representative survey is carried out in accordance with paragraph (9) to determine the likelihood of a supply failing the parametric value for radon specified in Schedule 2;
  - (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.
- (9) A representative survey must be designed in such a way—
- (i) 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;
  - (ii) 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.
- (10) 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;
  - (b) if the concentration of tritium exceeds its parametric value, an investigation of the presence of other artificial radionuclides must be carried out.
- (11) Where a parametric value is exceeded in a particular sample, the Secretary of State 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.
- (12) The Secretary of State may notify a water undertaker which supplies water to a water supply zone that a radioactive parameter need not be monitored if the Secretary of State is 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.
- (13) Where paragraph (12) applies, the Secretary of State 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).
- (14) The Secretary of State must by notice in writing withdraw a notice under paragraph (12)—
- (a) given in relation to the indicative dose parameter, if the Secretary of State believes 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 Secretary of State believes 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 Secretary of State believes 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.

(15) A water undertaker which receives a notice under paragraph (14) 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 2 and 3 in Schedule 3.

(16) 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) 48 hours after the commencement of the distribution from that tanker, and
- (b) every 48 hours thereafter until the distribution is discontinued.

(17) The first sample taken in relation to each distribution must be analysed for compliance with the following parameters—

- (a) *E. coli* (item 2 in Part II of Table A in Schedule 1), and
- (b) conductivity (item 6 in Schedule 2).

(18) The second and any subsequent samples must be analysed for compliance with those and every other parameter.

(19) On the coming into force of these Regulations, a notification under regulation 6(7) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notification under paragraph (12) of this regulation.