#### STATUTORY RULES OF NORTHERN IRELAND

## 2007 No. 147

# The Water Supply (Water Quality) Regulations (Northern Ireland) 2007

## **PART IV**

#### MONITORING OF WATER SUPPLIES

## **Interpretation and application of Part IV**

- **5.**—(1) In this Part, "audit monitoring" means monitoring for the purpose of obtaining information from which it may be established—
  - (a) as regards the parameters listed in Tables A and B in Schedule 1, whether water supplied for regulation 4(1) purposes satisfies the provisions of Part III or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that departure; and
  - (b) as regards indicator parameters, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters.
- (2) In this Part, "check monitoring" means monitoring for the purpose of obtaining information at regular intervals—
  - (a) as to the organoleptic and microbiological quality of water; and
  - (b) where relevant, as to the effectiveness of drinking-water treatment (particularly of disinfection),

for the purpose of determining—

- (i) as regards the parameters listed in Tables A and B in Schedule 1, whether water supplied for regulation 4(1) purposes satisfies the provisions of Part III or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that departure; and
- (ii) as regards indicator parameters, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters.

## Monitoring: general provisions

- **6.**—(1) For the purpose of determining whether water to which this Part applies satisfies the provisions of Part III or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that authorisation, a water undertaker shall 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 its water supply zones specified in, or in accordance with provisions of, this Part.
- (2) Except in a case to which paragraph (3) applies, the parameters listed in Tables A and B in Schedule 1 and the indicator parameters shall be subject—

- (a) as regards a parameter listed in column (2) of Table 1 in Schedule 3, 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), check monitoring in the circumstances specified in that column;
- (c) in any other case, audit monitoring.
- (3) Where—
  - (a) the distribution of water in any part of a water supply zone is by tanker; and
  - (b) is or is likely to be an intermittent short-term supply,
  - samples of water from each tanker from which water is distributed shall be taken 48 hours after the commencement of the distribution from that tanker and every 48 hours thereafter until the distribution is discontinued.
- (4) Of the samples taken in accordance with paragraph (3) in relation to each distribution, the first shall be analysed for compliance with the parameters *E. coli*, hydrogen ion and conductivity (item 2 in Table A in Schedule 1, item 3 in Part II of Table B in that Schedule and item 6 in Schedule 2, respectively), and the second and any subsequent samples shall be analysed for compliance with those and every other parameter.
- (5) For the purposes of the application of paragraph (2)(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 shall be deemed to be a supply which consists only of surface water.
- (6) The copper, lead and nickel parameters and, subject to paragraph (7), the parameters relevant to radioactivity (total indicative dose and tritium), shall be monitored in such manner as the Department shall determine and shall specify by notice in writing given to a water undertaker.
- (7) If, in relation to any water supply zone, the Department is satisfied that water supplied to that zone for regulation 4(1) purposes—
  - (a) gives rise to a calculated total indicative dose in respect of radioactivity that is well below the specification; or
  - (b) contains levels of tritium that are well below the specification,
  - the Department shall notify the water undertaker that the total indicative dose parameter (item 9 in Schedule 2) or, as the case may be, the tritium parameter (item 11 in that Schedule), need not be monitored.
  - (8) The Department shall, by notice in writing—
    - (a) withdraw a notice under paragraph (7) given in relation to the total indicative dose parameter if it believes that water supplied to the zone in question for regulation 4(1) purposes gives rise to a calculated total indicative dose in respect of radioactivity that is not well below the specification;
    - (b) withdraw a notice under paragraph (7) given in relation to the tritium parameter if it believes that water supplied to the zone in question for regulation 4(1) purposes contains levels of tritium that are not well below the specification.
- (9) Should a water undertaker receive a notice under paragraph (8) it shall monitor the total indicative dose parameter or, as the case may be, the tritium parameter in accordance with the notice having effect for the time being under paragraph (6).

## Sampling points

7. Except in relation to water supplied from a tanker, sampling points in respect of every parameter, other than a parameter for which samples are taken from a supply point authorised by

or under regulation 8, shall be selected at random unless, by notice in writing to a water undertaker (whether or not on the application of the water undertaker), the Department otherwise determines.

## Authorisation of supply points

- **8.**—(1) The Department, being satisfied that analysis of samples taken from—
  - (a) any blending point;
  - (b) the water leaving any service reservoir which receives water from a treatment works before its supply to any consumer; and
  - (c) the water leaving any treatment works,
  - will produce data in respect of the parameters specified as items 7, 8 and 9 to 25 in column (1) of Table 3 in Schedule 3 which are unlikely to differ in any material respect from the data that would be produced in respect of those parameters from analysis of samples obtained from sampling points, hereby authorises the use for the purposes of regulation 6 of samples in relation to those parameters taken for a water supply zone from a blending point, a service reservoir of that description or a treatment works.
- (2) Subject to paragraph (3), the Department may, in relation to any parameter other than a parameter referred to in paragraph (1), on the written application of a water undertaker, authorise the use for the purposes of regulation 6 of samples taken for a water supply zone otherwise than from a sampling point; and any such authorisation may extend to all samples in relation to that parameter or to such number or proportion of those samples as is specified in the authorisation.
- (3) The Department shall not grant an authorisation under paragraph (2) unless it is satisfied that analysis of samples taken from a point other than a sampling point will produce data in respect of the parameter in question which are unlikely to differ in any material respect from the data that would be produced in respect of that parameter from analysis of samples obtained from sampling points.
- (4) Subject to paragraph (5), the Department may at any time modify or revoke an authorisation under paragraph (2).
- (5) Unless it appears to the Department that the immediate modification or revocation of an authorisation under paragraph (2) is required in the interests of public health, it shall not modify or revoke such an authorisation without giving the water undertaker at least six weeks' notice of the Department's intention to modify or revoke.
- (6) A water undertaker shall notify the Department as soon as it has reasonable grounds for believing that an analysis of samples taken for a water supply zone from a point other than a sampling point would produce data in respect of the parameter in question which would differ in a material respect from the data produced by an analysis of samples taken from any of the sampling points within that zone; and the Department shall thereupon, and without the need for prior notice to the water undertaker, revoke the authorisation.

## Number of samples

- 9.—(1) Subject to paragraph (2), in each year a water undertaker shall take, or cause to be taken—
  - (a) from its sampling points; or
  - (b) to the extent authorised by or under regulation 8, from its supply points,
  - the standard number of samples for analysis as regards residual disinfectant and each parameter listed in column (1) of Table 2 in Schedule 3 or, as the case may be, Table 3 in that Schedule.
- (2) Where, in respect of a parameter subject to check monitoring—
  - (a) a water undertaker is of the opinion that the quality of water supplied by it to a water supply zone is unlikely to deteriorate; and

- (b) in each of two successive years the results of samples taken, subject to paragraph (3), in accordance with these Regulations show no significant variation and—
  - (i) if the parameter is colony counts, have shown no abnormal change;
  - (ii) if the parameter is hydrogen ion (item 9 in Table 1), have established a pH value that is not less than 6.5 and not more than 10.0;
  - (iii) in any other case, have established a concentration or value for that parameter that is significantly lower than the prescribed concentration or value, or specification,

the number of samples to be taken in the following year for that parameter may be the reduced number.

- (3) Samples required to be taken by this regulation shall be taken at regular intervals.
- (4) In this regulation—
  - (a) in relation to sampling points, residual disinfectant or a parameter and the supply of water to an estimated population within one of the ranges shown in column (2) of Table 2 in Schedule 3, "the standard number" and "the reduced number" means the number shown in column (4) and column (3), respectively, of that Table as applicable to that substance or parameter by reference to a population within that range;
  - (b) in relation to supply points, each of the parameters specified as items 7, 8 and 9 to 25 in column (1) of Table 3 in Schedule 3, and the supply of a volume of water within one of the ranges shown in column (3) of that Table, "the standard number" and "the reduced number" means, subject to sub-paragraph (c), the number shown in column (5) and column (4), respectively, of that Table as applicable to that parameter by reference to a volume supplied within that range; and
  - (c) where a particular supply point is in use for part only of a year, "the standard number" and "the reduced number" means the number that bears to the number shown in column (5) and column (4), respectively, of Table 3, the same proportion as the number of days in that year in which the supply point has been in use bears to 365.

## Sampling: further provisions

- **10.** As soon as a water undertaker has reasonable grounds for believing that any element, organism or substance, other than residual disinfectant or a parameter, whether alone or in combination with a parameter or any other element, organism or substance, may cause the supply within any of its water supply zones to be a supply which does not satisfy—
  - (a) the provisions of Part III or,
  - (b) if a departure has been authorised under Part VI, those provisions as read with the terms of that authorisation,

it shall take, or cause to be taken, sufficient samples from water within that zone (whether from a service reservoir, a treatment works or otherwise) in respect of that element, organism or substance, in order to establish whether that water is wholesome.