

SCHEDULE 9 **N.I.**

Regulation 24 (2)(b)

Monitoring for radioactive substances in water bottled and labelled as “spring water” and bottled drinking water

PART 1 **N.I.**

General

General **N.I.**

1. Each district council must monitor water bottled and labelled as “spring water” and bottled drinking water for radon, tritium and indicative dose in accordance with this Part.

Radon **N.I.**

2. Each district council must undertake representative surveys to determine the scale and nature of likely exposure to radon originating from different types of ground water sources and wells in different geological areas.

3. The representative surveys must be designed in such a way that underlying parameters, including 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.

4. Each district council must monitor for radon if 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 specified in Part 4 of Schedule 7 might be exceeded.

Tritium **N.I.**

5. Each district council must monitor for tritium if an anthropogenic source of tritium or other artificial radionuclide 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 Part 4 of Schedule 7.

6. Sampling must be carried out at the frequencies specified in the Table in Part 2.

7. If the concentration of tritium exceeds the parametric value specified in Part 4 of Schedule 7, the district council must investigate the presence of other artificial radionuclides.

Indicative dose **N.I.**

8. Each district council must monitor for indicative dose if a source of artificial or elevated natural radioactivity is present and it cannot be shown on the basis of representative monitoring programmes or other investigations that the level of indicative dose is below the parametric value specified in Part 4 of Schedule 7.

9. Sampling must be carried out at the frequencies specified in the Table in Part 2.

10. The district council may use various reliable screening strategies to monitor for the parametric indicator value for indicative dose.

11. If the district council screens for an individual radionuclide or certain radionuclides and—

- (a) one of the activity concentrations exceeds 20% of the corresponding derived value specified in [Table 1 in Part 2 of Schedule 11]; or

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Changes to legislation: There are currently no known outstanding effects for the The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations (Northern Ireland) 2015, SCHEDULE 9. (See end of Document for details)

- (b) where applicable, the concentration of tritium exceeds the parametric value specified in Part 4 of Schedule 7,

the district council must investigate the presence of other radionuclides, as determined by the district council, taking into account all relevant information about likely sources of radioactivity.

- 12.—(1) If the district council screens for gross alpha activity and gross beta activity and—
- (a) the screening level for gross alpha activity exceeds 0.1 Bq/l; or
 - (b) the screening level for gross beta activity exceeds 1.0 Bq/l,

the district council must investigate the presence of other radionuclides as determined by the food authority, taking into account all relevant information about likely sources of radioactivity.

(2) The district council may set alternative screening levels for gross alpha activity and gross beta activity if it can demonstrate that the alternative levels are in compliance with an indicative dose of 0.1mSv.

(3) If elevated levels of tritium are detected which indicate the presence of other artificial radionuclides, tritium, gross alpha activity and gross beta activity must be measured in the same sample.

(4) If the gross alpha activity and gross beta activity are less than 0.1 Bq/l and 1.0 Bq/l respectively, the district council may assume that the indicative dose is less than the parametric value of 0.1 mSv in which case further radiological investigation is not required unless it is known from other sources of information that specific radionuclides are present in the water that are liable to cause an indicative dose in excess of 0.1 mSv.

Exemption from monitoring N.I.

13. A district council is not required to monitor water bottled and labelled as “spring water” or bottled drinking water for radon, tritium or indicative dose if it—

- (a) is satisfied on the basis of representative surveys, monitoring data or other reliable information that, for a minimum period of 5 years, the parameter in question will remain below the respective parametric value specified in Part 4 of Schedule 7; and
- (b) it notifies the Agency of that decision and provides the Agency with a copy of the representative surveys, monitoring data or other reliable information referred to in paragraph (a).

Treatment of bottled drinking water N.I.

14. Where bottled drinking water has been treated to reduce the level of radionuclides, the district council must carry out monitoring at the frequencies indicated in the Table in Part 2 to ensure the continued efficacy of that treatment.

Averaging N.I.

15. If a parametric value specified in Part 4 of Schedule 7 is exceeded in a sample of water, the district council must *[take further samples, as appropriate, having regard to any guidance issued by the Agency]* to ensure that the measured values are representative of an average activity concentration for a full year.

PART 2 **N.I.**

Minimum sampling and analysis frequencies

| <i>Volume of water produced each day within a supply zone¹²m³</i> | <i>Number of samples per year³</i> |
|---|---|
| volume ≤ 100 | 1 |
| 100 < volume ≤ 100 | 1 |
| 1,000 < volume ≤ 10,000 | 1 |
| | +1 for each 3,300m ³ /d and part thereof of the total volume |
| 10, 000 < volume ≤ 100,000 | 3 |
| | +1 for each 10,000 m ³ /d and part thereof of the total volume |
| volume > 100,000 | 10 |
| | +1 for each 25,000 m ³ /d and part thereof of the total volume |

¹ A supply zone is a geographically defined area within which water intended for human consumption comes from one or more sources and within which water quality may be considered as being approximately uniform.

² The volumes are calculated as averages taken over a calendar year.

³ As far as possible, the number of samples should be distributed equally in time and location.

Status:

Point in time view as at 28/11/2015.

Changes to legislation:

There are currently no known outstanding effects for the The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations (Northern Ireland) 2015, SCHEDULE 9.