#### EXPLANATORY MEMORANDUM TO

# Water Supply (Water Quality) (Amendment) Regulations (Northern Ireland) 2009

#### S.R. 2009 No. 246

#### 1. Introduction

- 1.1. This Explanatory Memorandum has been prepared by the Department for Regional Development to accompany the Statutory Rule (details above) which is laid before the Northern Ireland Assembly.
- 1.2. The Statutory Rule is made under section 2(2) of the European Communities Act 1972 and by Articles 107(1), and (3), 109 and 300(2) of the Water and Sewerage Services (Northern Ireland) Order 2006 and is subject to the negative resolution procedure.

### 2. Purpose

- 2.1. The amendment Regulations are primarily concerned with the quality of water supplied in Northern Ireland for drinking, washing, cooking, food preparation, and for food production, and with arrangements for the publication of information about water quality. They amend the main Water Supply (Water Quality) Regulations (Northern Ireland) 2007.
- 2.2. Regulation 2 defines terms that are used in the regulations. The proposed amendment to regulation 2 simplifies the definition of disinfection to bring it into line with current scientific understanding, and define the reformed meaning of a health and social services trust.
- 2.3. Regulation 3 requires the water undertaker to identify annually the areas ("water supply zones") that are to be relevant for a particular year for the purposes of the application of provisions of the Regulations. The proposed amendment to regulation 3 makes it clear that the quality of water within the whole zone should be approximately uniform. This requirement derives from the Drinking Water Directive and reflects existing practice in the designation of water supply zones by the water undertaker in accordance with Guidance.
- 2.4. Regulation 4 prescribes standards of wholesomeness in respect of water that is supplied by the water undertaker for cooking, drinking, food preparation, washing, and other domestic purposes and to premises for food production purposes. The proposed amendment widens the scope of this regulation so that it also covers water provided by the water undertaker in bottles and containers. This aligns the 2007 Regulations with current water industry best practice where water in bottles and containers is supplied in preference to the use of tankers when there is an interruption to normal piped water supplies.
- 2.5. Regulation 8 authorises the taking of samples from points ("supply points") other than consumers' taps and allows the Department to authorise other supply points. It is proposed to amend regulation 8 so that automatic supply point authorisations are limited to certain circumstances.

- The proposed amendment will permit existing supply point monitoring to continue under the authorisation granted by regulation 8(1) provided that no additional input has been made into the water supply zone in question and provided there has been no other material change of circumstances.
- 2.6. Regulation 15 requires samples to be taken before water is supplied from new sources and from sources which have not recently been used. The amendments to regulation 15 will prevent the water undertaker from supplying water from any new source until the Department has served a notice confirming the completion of a satisfactory audit in relation to the samples taken under regulation 15(1). Supply from any new source will also be forbidden until three months have passed following submission of the risk assessment to the Department. The amendments to regulation 15 also provides for the exceptional circumstances of a civil emergency which may necessitate the supply of water with little or no treatment but in conjunction with other precautionary measures.
- 2.7. A new Part VA is proposed Drinking Water Protected Areas.
- 2.8. This inserts a new Regulation 16A which introduces a formal requirement for the water undertaker to collect and analyse samples of water at the point of abstraction. The intention of new regulation 16A is to reinforce the importance to public health protection of raw water quality monitoring in terms of risk assessment and management.
- 2.9. Regulation 16A(1) requires the water undertaker to identify every abstraction point from which water is drawn for Regulation 4(1) purposes. As part of the risk assessments required under new regulations 26 to 28, every licensed abstraction point should be documented irrespective of whether a source is used continuously, intermittently or as standby and emergency sources.
- 2.10. Under regulation 16A(2), the water undertaker would be required to undertake a raw water monitoring programme to enable compliance with the proposed water treatment and risk assessment provisions in regulations 26 to 28. This reflects water industry best practice where samples of raw water are collected and analysed to inform risk assessments and management plans, and determine the appropriate water treatment.
- 2.11. Proposed regulations 16A(3) and (4) give the Department the power to specify the number of raw water samples to be taken and the nature of the analysis to be carried out and to change these requirements. The Department will form a view as to the need for such notices after assessment of the water undertaker's risk assessment reports and the raw water monitoring data. However, this general position does not preclude the Department from issuing such a notice sooner as a consequence of audit findings or after an assessment of a notified event.
- 2.12. Proposed regulation 16B sets minimum sampling frequencies for surface water based on the requirements of Annex X of the Water Framework Directive. However, in practice the water undertaker may exceed these frequencies in certain cases when considering what sampling frequency is necessary to demonstrate compliance with new Regulation 26 and to support Regulation 27 risk assessments. Regulation 16B provides for

- some implementation of the methodological and quality control requirements for the Water Framework Directive drinking water protected area monitoring arrangements.
- 2.13. Regulation 19 provides for the Department to direct the water undertaker to seek an authorised departure following a non-trivial failure of Schedule 1 parameters. The proposed amendment to this regulation corrects a minor typographical error in the current 2007 Regulations.
- 2.14. Regulation 23 is amended to add a requirement for the water undertaker to publish this information about an affected water supply zone on its website for at least 14 days in addition to the current requirement of publishing in a local newspaper.
- 2.15. Regulation 25 provides definitions for the purposes of Part VII. Minor amendments to interpretations for Part VII are proposed, to reflect the proposed risk assessment parameters.
- 2.16. Following the repealing of the Surface Water Abstraction Directive, it is necessary to revoke regulation 26 and replace it with new provisions. Overall the intention of new regulation 26 is to provide updated and simplified water treatment requirements for public health protection based on water industry best practice by requiring that all water is disinfected and adequately treated before it is supplied.
- 2.17. Regulation 26(1) requires that disinfection continues to be practiced effectively in respect of all public water supplies. It also requires that preliminary treatment is carried out where necessary. Regulation 26(7) provides the Department with the necessary enforcement powers to take action against the water undertaker under Article 30 of the 2006 Order if the water undertaker does not provide appropriate treatment.
- 2.18. The term "potential danger to human health" (in regulation 26(2)) derives from Article 4 of the Drinking Water Directive. In the case of a serious breach of regulation 26, it is envisaged that the Department would initiate criminal proceedings. Ultimately it will be for the Courts to decide what constitutes a "potential danger to human health" in any particular case.
- Regulation 27 currently states that it is the duty of the water undertaker to 2.19. carry out risk assessments for Cryptosporidium at all water treatment works and submit a report of the risk assessments to the Department and, where necessary, to take measures to reduce the risk. The Drinking Water Inspectorate (England and Wales) and the Drinking Water Inspectorate (NI) have noted that an unintended consequence of solely specifying Cryptosporidium has been a focus by water undertakers on treatment and end point monitoring at the expense of source water monitoring and protection. In line with the World Health Organisation water safety plan framework and the UK National Strategy for a more risk based approach to regulation, it is proposed that regulation 27 is replaced to extend the requirement for risk assessment at each water treatment works to cover all potential dangers to human health, not just Cryptosporidium. This approach also provides a mechanism for the water undertaker to implement the risk based aspect to raw water monitoring as set out in proposed new Regulation 16A and as required by the Water Framework

- Directive. The new provision would require risk assessments for existing treatment works within a specified period and new treatment works before they are used. NIW would also be required to keep the risk assessments under review.
- 2.20. Regulation 28 provides that where the Department considers that a risk assessment has not been carried out satisfactorily it will require the water undertaker to carry out a new risk assessment.
- 2.21. New regulation 28 proposes that a report of the risk assessment or review should be sent to the Department and lists report requirements. It is proposed that the Department should be able to serve enforcement notices in respect of treatment works identified to be at significant risk. Under the proposed procedure the Drinking Water Inspectorate will be able to direct the water undertaker to maintain, review, audit, or revise its risk mitigation measures. Also included is the power to issue a prohibition notice to prevent the supply of water from a specified treatment works completely, or to prevent supply unless certain conditions are met.
- 2.22. Regulation 30 specifies the circumstances in which the water undertaker may apply or introduce substances or products for treatment into water supplied for drinking, washing or cooking. It is proposed that existing definitions are amended and that the Department should be able to charge for costs incurred in dealing with any application for approval.
- 2.23. Regulation 31A inserts an offence to comply with Council Directive 2008/99/EC (the "Environmental Crime Directive"), which requires contamination of the water supply by a water undertaker to become a criminal offence.
- 2.24. Regulation 32 sets out the information the water undertaker must prepare and maintain in relation to each water supply zone. It is proposed to amend this regulation slightly to reflect new references to other amended regulations.
- 2.25. Regulation 33 is amended to remove the requirement for the water undertaker to keep a public record at its offices. The information in these records will be provided by the water undertaker in accordance with its standards of service agreement of 10 days. The amendment also sets out the bodies the water undertaker must inform in the instance of an event which gives rise or is likely to give rise to a significant public health risk.
- 2.26. Regulation 34 sets out the information the water undertaker must provide in its annual report, as well as laying provision for any other information it deems appropriate for every district council to which it provides water.
- 2.27. SCHEDULE 1 PRESCRIBED CONCENTRATIONS AND VALUE Table B Chemical parameters
- 2.28. In Part II of Table B (national requirements), it is proposed to delete line 3 pertaining to hydrogen ion. This amendment will have the benefit of simplifying this aspect of the 2007 Regulations. It is confusing for some stakeholders as to why there are two maximum pH values.

- 2.29. It is proposed to amend the lines containing items 6 (odour) and 8 (taste) to bring the standard for these parameters in line with the Drinking Water Directive.
- 2.30. It is proposed that the numerical standard currently in place of no higher than a dilution number of 3 at 25oC, is removed and replaced with the requirement that the water is acceptable to consumers and has no abnormal change.
- 2.31. SCHEDULE 2 INDICATOR PARAMETERS. A correction is proposed by including the Drinking Water Directive specification for a minimum pH value of 6.5 in line 7 in the 2007 Regulations.
- 2.32. SCHEDULE 3 MONITORING. It is proposed to insert the parameter Clostridium perfringens (including spores) into Table 2 (annual sampling frequencies: water supply zones) and Table 3 (annual sampling frequencies: treatment works or supply points) under the heading "Subject to audit monitoring". This clarifies that audit monitoring for this parameter is required where the water does not originate from, or is not influenced by, surface water.

# 3. Background

3.1. The amendment Regulations are primarily concerned with the quality of water supplied in Northern Ireland for drinking, washing, cooking, food preparation, and for food production, and with arrangements for the publication of information about water quality. They amend the main Water Supply (Water Quality) Regulations (Northern Ireland) 2007.

#### 4. Consultation

- 4.1. The consultation document was issued to over 300 organisations, groups and individuals and 14 organisational responses were received. Of these, two made no specific comment on the policy proposals but used the opportunity to inform the Department of the work that they undertake.
- 4.2. The responses received were very helpful and highlighted some areas that needed changed in the regulations. Where relevant and appropriate, the Department has adopted the amendments suggested in order to clarify the proposals.
- 4.3. In summary, the responses received highlighted a small number of areas where the proposals could be clarified. Some comments related to the operational side of the regulations and these have been passed to the water undertaker to consider as the enforcement authority. Some of the respondents also sought more explanation in how the regulations would be applied which was dealt with in the Department's response.

## 5. Equality Impact

5.1. Consideration was given to Section 75 of the Northern Ireland Act 1998. The need for an Equality Impact Assessment has been screened out.

## 6. Regulatory Impact

6.1. A partial Regulatory Impact Assessment was carried out which showed that the Regulations will not burden small businesses and that the benefits

of the Regulations outweigh any additional costs. The public consultation did not establish the need for a full Regulatory Impact Assessment.

## 7. Financial Implications

7.1. There are no foreseen financial implications for the Department.

## 8. Section 24 of the Northern Ireland Act 1998

8.1. The proposed legislation is considered compatible with section 24 of the Northern Ireland Act 1998.

## 9. EU Implications

9.1. Council Directive 2000/60/EC (the Water Framework Directive) is transposed by the Department of the Environment's 'The Water Environment (Water Framework Directive) Regulations (NI) 2003'. Transposition of this Directive is not needed for these amendment Regulations. Council Directive 2008/99/EC on the protection of the environment through criminal law is transposed through the Water Supply (Water Quality) (Amendment) Regulations (NI) 2009. A Transposition Note has been prepared and is laid along with the Amendment Regulations and this Explanatory Memeorandum.

# 10. Parity or Replicatory Measure

10.1. Not applicable.

## 11. Additional Information

11.1. Not applicable.