



DRINKING WATER INSPECTORATE

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Information Letter 04/2014

To: Board Level and Day to Day contacts of Water and Sewerage Companies and Water Companies in England and Wales

Dear Sir/Madam

***Cryptosporidium* monitoring in water supplies**

1. Purpose

The purpose of this letter is to inform companies of the Inspectorate's updated requirements for the monitoring of *Cryptosporidium* oocysts in drinking water supplies.

The requirements set out in Information Letter (IL) 09/2007 paragraphs 12 to 16, and IL 03/2008 are withdrawn.

These changes apply to samples taken from **1 January 2015** onwards (i.e. companies' data submissions due to be received by the Inspectorate on or by **21 March 2015** and thereafter).

2. Background

DWI IL 09/2007 set out requirements for the inclusion of *Cryptosporidium* monitoring data in the Monthly Data Tables submitted to the Inspectorate for assessment of compliance with the Water Supply (Water Quality) Regulations 2000, as amended (referred to throughout as the Regulations). The Water Supply (Water Quality) Regulations 2010 apply to companies operating wholly or mainly in Wales, and where a specific regulation from the English regulations is referred to in this letter, the equivalent Welsh regulation is footnoted.

IL 03/2008 changed this requirement, such that companies only needed to include positive test detections of oocysts in the treated water data submission.

The Inspectorate has reviewed these requirements in the context of regulation 27¹ of the Regulations, which covers the requirement to carry out risk assessments of drinking water supply systems, and regulation 16A², which requires companies to monitor water at abstraction points for any substance, organism or parameter considered necessary to inform companies' regulation 27 risk assessments.

3. Revised guidance

The changes to the data reporting requirements for *Cryptosporidium* monitoring are as follows:

- 3.1 As required under regulation 16(A)(2), routine monitoring for *Cryptosporidium*, and other pathogenic protozoa and organisms that are indicative of a potential risk to public health in water supplied to consumers should be concentrated on abstraction points (raw waters), in order to inform companies' risk assessment carried out under the requirements of regulation 27.
- 3.2 Results from companies' abstraction point (raw water) monitoring should be reported to the Inspectorate in the monthly raw water data returns submitted in accordance with section 7 of the of the Water Industry (Suppliers' Information) Direction 2012.
- 3.3 In accordance with the Inspectorate's published Guidance, surrogate sampling points may be used for samples taken for abstraction point monitoring, provided that the concentration of oocysts at that point is representative of the water on entry to the treatment works.
- 3.4 Results of *Cryptosporidium* tests in treated water do not need to be reported to the Inspectorate in the monthly treated water compliance data returns, with the following exception:
- 3.5 If the treated water sampling point is used as a surrogate for the abstraction point, the data must be included in the raw water data return, assigned to the relevant abstraction or raw water sampling point.
- 3.6 Notwithstanding 3.4 above, companies must comply with the requirements of regulation 4³ at all times.

¹ Regulation 28 in The Water Supply (Water Quality) regulations 2010 SI No.994 (W.99) – the Welsh Regulations

² Regulation 17 in the Welsh Regulations

³ Regulation 4 in the Welsh Regulations

3.7 Companies are expected to continue to take operational samples from treated waters at appropriate frequencies, and in response to levels detected in raw water, where there is a risk that oocysts could be present in the treated water and indicate a potential risk to public health.

3.8 In accordance with section 9 of the Water Industry (Suppliers' Information) Direction 2012, companies should be reporting to the Inspectorate any event likely to present a risk to public health. Events indicative of a potential risk to health from the presence of *Cryptosporidium* might include, but are not limited to:

- An increase in the level of *Cryptosporidium* oocysts detected in a raw water that is indicative of an increased risk of breakthrough into the final treated water, or where there is evidence that breakthrough may have occurred.
- Any event potentially involving the compromise or failure of a treatment process designed to remove particulate material.
- Any event potentially involving the compromise or failure of a UV treatment process installed to inactivate *Cryptosporidium* oocysts.
- The failure of an automated shutdown process triggered by turbidity, where the treatment works failed to shut down.
- Any event that is indicative of the potential failure or compromise of a treatment process, for example elevated turbidity in treated water.
- The detection in treated water of a concentration of oocysts that is inconsistent with information and data used to inform the risk assessment for the treatment works or supply system.
- Detection in treated water of any oocysts of a type known to be pathogenic to humans, e.g. *C.hominis*.
- Any event causing actual or potential ingress of contaminated surface water, or animal life, into a collecting chamber, final water tank, service reservoir or other tank or structure used for containment or storage of drinking water.
- Any report of an increase in the number of cases of cryptosporidiosis in the community that has been notified to the company by a health agency.
- An increased level of consumer complaints of gastric illness in any part of a company's supply system.

The above list is not exhaustive. Companies should exercise judgement.

3.9 Companies should ensure that their risk assessment reports submitted to the Inspectorate in accordance with regulation 28⁴, and associated methodology, accurately reflect the risks to public health from *Cryptosporidium* in all parts of the supply system (catchments, treatment processes and distribution system integrity).

⁴ Regulation 29 in the Welsh Regulations

- 3.10 Where a risk to wholesomeness is identified in a regulation 28 report, the Inspectorate may issue a Notice under the provisions of regulation 28(4)⁵ to ensure that the company has taken and continues to take appropriate action to sufficiently mitigate the risk to consumers.
- 3.11 IL 03/2008 included in Annex 3 a proforma for companies to complete and submit with all positive detections of oocysts in treated water. Companies are not required to submit this proforma to the Inspectorate.
- 3.12 The timing and content of event notifications and reports made to the Inspectorate must comply fully with the requirements of the Water Industry (Suppliers' Information) Direction 2012 subparagraphs 9(2), 9(3) and 9(4).

4. Enquiries

- 4.1 Copies of this letter are being sent to Pamela Taylor, Chief Executive, Water UK; Carol Skilling, Department for Environment, Food and Rural Affairs; Paul Harrison, Water Management Team, Welsh Government; Susan Petch, Drinking Water Quality Regulator for Scotland; Margaret Herron, Drinking Water Inspectorate for Northern Ireland; Tony Smith and Regional Chairs of the Consumer Council for Water; Laurie MacFarlane, Ofwat; Ian Barker, Environment Agency; Frances Pollitt, Public Health England; and Shifra Sheik, Department for Environment, Food and Rural Affairs.
- 4.2 Enquiries about this letter should be addressed to Jacqueline Atkinson (0300 068 6402 or jacqueline.atkinson@defra.gsi.gov.uk).
- 4.3 This letter is being sent electronically to Day-to-Day contacts. Please acknowledge receipt by e-mail to DWI.enquiries@defra.gsi.gov.uk. Hard copies are not being sent. This letter may be freely copied.

Yours sincerely



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Deputy Chief Inspector (Operations)

⁵ Regulation 29(4) in the Welsh Regulations