



DRINKING WATER INSPECTORATE

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Information Letter 04/2020

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

Dear Sir/Madam

Guidance on Drinking Water Supply Operations in Response to Coronavirus (CoViD-19)

Purpose

1. The purpose of this letter is to update the advice provided to water suppliers in Information Letter 01/2020 about statutory compliance sampling, in particular compliance sampling in water supply zones.
2. Suppliers' responsibilities for sampling in zones and at water treatment works and service reservoirs are set out in the Water Supply (Water Quality) Regulations 2016¹, as regards England, and the Water Supply (Water Quality) Regulations 2018, as regards Wales.
3. The sets of Regulations in paragraph 2 above are referred to throughout this letter as "the Regulations", or, where applicable, the "English" and the "Welsh" Regulations.

Introduction

4. Information Letter 1/2020 on 6 March 2020 recognised the challenges which would likely be presented to water companies by CoViD-19, in particular the impacts on sampling, laboratory operations and increased absence. Subsequently the introduction of social distancing and absence levels unavoidably required water companies to change sampling practices and the operation of laboratory services. Companies applied for a Notice under

¹ Relevant amendments made by the Water Supply (Water Quality) (Amendment) Regulations 2018 and the Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019.

Regulation 7 to be issued as, in particular, water companies have been unable to continue to obtain statutory samples from randomly-selected consumers' properties in water supply zones.

5. Information Letter 1/2020 emphasised the expectation that water companies must take all possible reasonable steps to continue to supply wholesome water during any outbreak relating to the coronavirus. This applied to all aspects of operational delivery from source to tap.
6. The Inspectorate acknowledges and welcomes that companies have been continuing to take all statutory samples from water treatment works and service reservoirs. Furthermore, sampling for zonal parameters has continued, in the large part, using a combination of zonal points, reservoirs or shared data between suppliers and as a result have maintained assurance in the supply in which consumers can be confident. Companies are to be commended on the continuance of the water supply and the water quality assurance to date as it is with this purpose that maintaining and continuing a wholesome supply is considered the highest priority.
7. Further to the necessary changes to companies' water supply zone sampling programmes through the issue of regulation 7 Notices, an information request on the sampling and analysis practices was made on 7 May 2020 to clarify the approach companies have taken in expectation of changes to the Government advice on social distancing.
8. Welsh Government issued regulations and guidance in April 2020 (Health Protection (Coronavirus Restrictions)(Wales) Regulations 2020 and <https://gov.wales/taking-all-reasonable-measures-maintain-physical-distancing-workplace>) regarding social distancing within workplaces and homes. On 10 May 2020 in England the Government advice moved to "Stay Alert", introducing a change of emphasis on businesses and work. On the 29 May 2020 Welsh Government advice moved to 'Stay Local'. It is in this context that this Information Letter seeks to collaboratively set the pathway for the expectations of future sampling and analysis.

Current Position

9. Regulation 7 of the Regulations requires that, 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), must be selected at random unless, by notice in writing to a water undertaker, the Secretary of State or the Welsh Ministers otherwise determine. In effect this permits the suspension of taking all zonal samples from randomly selected properties. A notice under regulation 7 does not, however, permit a reduction in the number of samples that companies should take to comply fully with the requirements of regulation 9.
10. All companies made an application under Regulation 7 by 20 March 2020 in response to the developing crisis and concurrent Government advice. All

applications were accepted and processed within 24 hours to aid company response planning.

11. It was advised in IL 01/2020 that where it proves impossible for reasons relating to CoViD-19 to take required samples and there is a resulting shortfall, companies should follow the current procedure and report the reason for the shortfall as CoViD-19. As with normal reporting requirements the expectation remains to report shortfalls in line with the Information Direction.
12. Further to this, on 7 May 2020, all water companies were requested to provide information on their sampling and analysis practices since the issuing of the Regulation 7 Notices on 20 March. All companies responded and confirmed the cessation of sampling in properties. This is primarily to socially distance to minimise infection by a respiratory disease in an enclosed environment, in this case consumers' properties. In taking this action staff and consumers remain protected as well as consequently reducing pressure on company absence rates and analysts in laboratories.

Approximately two out of three companies took an innovative approach to maintain zonal sampling by sampling at water company staff or company properties with some substitute sampling at service reservoirs where this was not available. This approach is to be commended.

Half of all companies took the complete regulatory scheduled number of samples including chemical samples. There were some exceptions such as plumbing metals which would not be relevant at a fixed point or service reservoir. Where the supply was a bulk supply then most companies accepted the analytical results from the supplying company. Equally, where companies had no assets at all, information was accepted from the bulk supplier except in one case where hydrant sampling was undertaken.

For a quarter of the companies, sampling was taken from upstream assets including chemical parameters. In one single case a significantly reduced parameter range was taken at upstream assets only and this company is considered as an outlier and has been separately notified.

13. In view of the provided information, this letter sets out to advise water suppliers on the Inspectorate's future expectations on actions that water companies should be taking to ensure that their statutory sampling programmes comply with the requirements of regulations 9, 13 and 14 (regulations 9, 12 and 13 in Wales) as far as possible during the CoViD-19 emergency, based upon the advice of "Stay Alert" (in England) and "Stay Local" (in Wales), in as far as normal operations can resume.
14. The Inspectorate recognises that the health and safety of company personnel and members of the public are paramount, and all of the advice and requirements set out in this letter should, therefore, be subject to rigorous and dynamic health and safety risk assessments and meet standing and changing advice of their respective Governments.

Monitoring Requirements

Sampling from Water Treatment Works and Service Reservoirs:

15. The advice given in IL 01/2020 remains: in all circumstances companies should prioritise the operation of treatment works and continue to monitor critical control points, particularly disinfection and turbidity at water treatment works and any critical control points at service reservoirs. On-line telemetry should always remain in operation to ensure the proper operation is running at all times. Sampling priority should be treatment works, service reservoirs and zonal samples in that order
16. **Additionally**, on-site analysis for residual disinfectant and qualitative taste and odour should be performed on every sample taken from a treatment works final water sampling point and service reservoir outlet, along with other field analyses that may be appropriate.
17. Water suppliers have been keeping the Inspectorate and other stakeholders informed of issues relating to the national emergency and Government restrictions with regard to the impact of the situation on companies' statutory duties to maintain supplies of wholesome water and to comply with the requirements of the Regulations.

Companies have informed the Inspectorate that reductions in manpower are now easing as personnel who have been absent because of illness or self-isolation are returning to work. Together with the changed Government advice, companies are now expected to make every effort to identify zonal points where samples can be taken safely to continue the assurance of water throughout the network to meet regulatory obligations as outlined in Paragraph 13.

The Regulation 7 Notices which have been issued recognise that random sampling may not be feasible at this stage. Companies should, if they are not already doing so, consider the use of fixed sampling points which must be a tap in a building that is connected to the domestic water supply for the premises. Companies are reminded that analysis must not differ in any material respect from what would be expected at consumer's taps.

A number of companies are to be commended for having established these sampling points already, using employees' homes as fixed sampling points. Additionally, any water company or contractor's premises with a canteen or kitchen facilities for employees' use is likely to be suitable, since employees will be using the water supply for drinking and food preparation. They can be used to take samples without breaching social distancing rules, e.g. water company staff homes using similar principles as published by BEIS regarding working in people's homes (<https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19/homes> and Welsh Government (<https://gov.wales/taking-all-reasonable-measures-maintain-physical-distancing-workplace>)). For most

companies this will not require a change in their current strategy.

18. As has been demonstrated by the majority of companies who are able to take zonal samples, any remaining difficulties would be isolated circumstances and certainly not companywide. Where exceptional circumstances remain and samples still cannot be taken in an isolated water supply zone, companies should carry out the required sampling at upstream service reservoirs for non-supply point parameters listed in Schedules 1 and 2 to the Regulations as a short term solution. Results should be submitted to the Inspectorate in lieu of zonal sample results. However, dialogue should be provided as to why zonal sampling still remains unavailable.
19. Companies should also review their operational sampling, which is not reported to the Inspectorate, for parameters that are important indicators of drinking water quality. Operational sampling programmes should be based on a risk assessment, depending on the likelihood of that parameter exceeding a regulatory limit in the final treated water or in the water supply zone. This risk-based monitoring should include parameters such as iron, manganese, aluminium, pH, nitrate, phosphate where plumbosolvency control is in place and parameters used for measurement of corrosion, such as Langelier Index (e.g. sulphate, chloride and alkalinity).
20. The Inspectorate is not expecting any shortfalls in treatment works and service reservoir sampling as a consequence of the CoViD-19 situation.

Use of Fixed Sampling Points

21. Currently the Regulations require zonal compliance samples to be taken from randomly chosen properties, but the Regulation 7 Notices allow this to be altered, and during these exceptional circumstances they should be changed to fixed sampling points in water supply zones. Whilst social distancing restrictions remain in place in response to the challenges provided by CoViD-19, the use of suitable fixed sampling points for statutory monitoring in water supply zones is considered a pragmatic and acceptable solution at this stage.
22. Outdoor taps are generally not considered suitable for use as fixed sampling points because they are not used for domestic purposes. Unless they have been intentionally installed by the company solely for the purpose of sampling and are of suitable quality and adequately protected from the elements, outdoor taps should not be routinely used.
23. Outdoor taps and standpipes may also be used where no other alternative exists for investigational sampling carried out under the requirements of regulations 18 and 19 to determine the cause and extent of a failure, or likely failure for example following a discolouration event. They may also provide additional useful information for investigating the presence of lead in the drinking water supply to a single property. Companies should

exercise judgement when deciding to use an outdoor tap for drinking water sampling because they are more likely to be unrepresentative of the drinking water supply due to external contamination. One inset company is using hydrant standpipes because of the lack of other assets or potential fixed sampling points. Whilst this is not ideal, provided the appropriate practices and procedures for sampling are observed such as that found in the [SCA Blue Book](#), this may be used for zonal compliance monitoring where there is no alternative.

Monitoring Public Buildings and Drinking Water Quality in Premises

24. The Inspectorate's guidance to water suppliers on compliance with the Regulations includes guidance on the requirement to take a proportion of randomly-selected consumers' tap samples from premises where the drinking water supply is made available to members of the public. The number of samples taken from public buildings in a water supply zone should normally be in approximate proportion to the number of public buildings in the zone.
25. Whilst CoViD-19 restrictions are in place, the Inspectorate recognises that some buildings may not be open to sample from. This is likely to change as relaxations are introduced by the Government and the expectation is such that sampling will resume where appropriate, observing the guidelines on social distancing.
26. The letter sent by the Inspectorate to companies on 9 April 2020 reminded companies of their powers and duties under section 75 of the Water Industry Act 1991 (as amended) (the Act), and companies' and the Inspectorate's duties under regulation 21 to ensure that the water supply in public buildings remains wholesome, and that risks to wholesomeness are addressed. Where a serious risk of contamination exists because of a defect in the private domestic system of any premises, the water supplier has the power under the Act, depending on the circumstances, to carry out any necessary remedial work, and to recover the cost of that work (subject to the statutory provisions).
27. The Inspectorate considers that it is inappropriate for consumers to be subject to long-term advice not to drink their tap water, or to boil it before consumption, because of a risk of contamination caused by the private system. Defects that present a risk of contamination that is serious enough for do not drink advice to be issued must be addressed within a suitably short timescale. Companies should work with property owners, local authorities and other responsible persons to ensure that risks to drinking water quality are addressed.
28. Information Letter 01/2020 reminded companies that in all circumstances consumer complaints, including discolouration and taste and odour, should be investigated and remedied. Investigations should include taking appropriate samples. This should be possible in most situations using

current company health and safety risk assessments to protect the worker and the customer.

Laboratory and Analytical Requirements

29. The Inspectorate expects all companies' laboratories and/or those of their contract laboratories to maintain facilities to carry out all analysis as required by the Regulations. Companies should consider any reasonable adjustments that may be needed to fulfil the requirements of the regulations without compromising the integrity of the analysis.
30. Where a company is unable to fulfil this requirement with their usual arrangements, due to CoViD-19, it is expected that either a suitable alternative contracting laboratory is used or reasons for why this presents an unsolvable issue should be discussed with the company Liaison Inspector.
31. In all cases, should companies still be unable to fulfil their obligations under the Regulations, the Inspectorate should be notified in accordance with the requirements of the Information Direction.

Sampling Data Submissions to the Inspectorate

32. Where additional compliance samples are taken from service reservoirs or treatment works as surrogates for a water supply zone (WSZ), these data records should be reported using the site reference of the WSZ that the sample represents. The actual site reference where the sample was collected (e.g. 'R001 service reservoir name') should appear in the 'Comments Field' of that record in the data table.
33. Where a reservoir or works supplies multiple WSZs, the data records will need to be duplicated and reported against the different WSZ site references.
34. If a breach of the standard occurs in one of these samples, the breach report reference should be placed in square brackets in the 'Comments' field of the data record (as current practice), but prior to the duplication of this record if required for multiple WSZ site references. Only a single breach report document will be required. The DWI system will reference this for all occurrences of the filename. Some companies already provide a joint breach report document for Taste and Odour exceedances, and this follows the same principle.
35. Compliance breaches that are the result of duplication in this way will only count singularly towards companies' compliance risk index scores.
36. Potential shortfalls of monitoring for the year 2020 will be treated in a similar way to previous exceptional occurrences, for example during the 'Beast from the East' weather event in 2018 and other occurrences of extreme flooding where companies were unable to collect samples from

consumers taps.

37. The Inspectorate's advice to companies during the CoViD-19 emergency will be continually reviewed, and updated in response to official Government advice and changes to water suppliers' collective and individual circumstances.

As business begin to reopen, companies should plan to return to random sampling. However, it is recognised that random sampling may not mean a random appearance at a householder's property but by pre-arrangement to ensure an appropriate safety risk assessment is made to ensure public health rules are applied.

The earliest point at which this may be reasonably expected would be at the point when food services reopen. Conversely, the latest point at which companies will be permitted not to sample randomly would be when the Regulation 7 Notices expires. It is recognised that local circumstances may change in response to public health advice and this may be in the form of a local "lockdown" and in which case specific Regulation 7 notices may be applied or revoked as this advice changes.

38. As part of forward planning, engagement with companies is encouraged including a review of actions taken to manage company operations during the CoViD-19 crisis.
39. Water suppliers are reminded that they remain responsible under the Act and the Regulations to provide sufficient and wholesome water at all times. This guidance does not relieve suppliers from this obligation, nor does it extend to departures from best practice.
40. Water companies should inform their liaison Inspector of material changes to their circumstances that might affect their ability to fulfil their statutory duties.

Enquiries

41. Any enquiries regarding this letter should be made to Martin Bird by email to martin.bird@defra.gov.uk

This letter is being sent electronically to Board Level and day to day contacts. Please acknowledge receipt by email to dwi.enquiries@defra.gov.uk. Hard copies are not being sent but the letter may be freely copied.

Copies of this letter are being sent to Christine McGourty, Chief Executive, Water UK; Jan Dixon and Kirstin Green, Deputy Directors Water Quality, Department for Environment, Food and Rural Affairs; Eifiona Williams, Water Management Team, Welsh Government; Sue Petch, Drinking Water Quality Regulator for Scotland; Catriona Davis, Drinking Water Inspectorate for

Northern Ireland; Tony Smith and Chairs of the Regional Consumer Council for Water; Alison Cullen, Ofwat; Simon Moody, Environment Agency; Benedict Duncan, Food Standards Agency; and Stephen Robjohns at Public Health England.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Marcus Rink', written in a cursive style.

Marcus Rink
Chief Inspector