



DRINKING WATER INSPECTORATE

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Assistant Director
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Dear Sarah

Ofwat PR19 Price Determinations: CMA Redetermination for Four Water Companies

Following our telephone conversation on 29 April 2020, I write concerning the four references submitted by Ofwat to the CMA for redetermination following its 2019 price review. This letter aims to provide a brief overview of the following: an introduction to the Drinking Water Inspectorate and our regulatory functions; the Inspectorate's role in the price review process; and summary information on submissions supported by the Inspectorate as part of the price review process for each of the four water companies, together with any observations appropriate on references to these improvement schemes in the published 'Statement of Case' from the four water companies concerned.

1 Introduction

- 1.1 The Drinking Water Inspectorate was formed in 1990 to provide independent reassurance that public water supplies in England and Wales are safe, wholesome, and acceptable to consumers.
- 1.2 The Inspectorate regulates the water industry under powers conferred by the Secretary of State for Environment, Food and Rural Affairs and by Welsh Ministers under section 86 of the Water Industry Act 1991 (as amended), which designates the 'Chief Inspector of Drinking Water'. The Inspectorate ensures that water companies meet the requirements of the Water Supply (Water Quality) Regulations 2016 (as amended) (England), and the Water

Supply (Water Quality) Regulations 2018 (Wales). The Inspectorate also publishes information about drinking water quality, and provides technical advice to the Secretary of State and Welsh Ministers.

- 1.3 The Inspectorate participated in the 2019 price review process by providing guidance to Ministers, fellow Regulators, water companies, and other stakeholders on drinking water quality issues. This guidance took account of specific drinking water legislative requirements; Ministerial expectations for the PR19 process as summarised in "[The government's strategic priorities and objectives for Ofwat](#) (September 2017)"; fellow Regulators' guidance on PR19 process matters; as well as the Inspectorate's own guidance on matters relating to drinking water quality and supply.

2 The Drinking Water Inspectorate's Role in the PR19 Price Review Process

- 2.1 On 12 September 2017, the Inspectorate [wrote](#) to all water companies in England and Wales to advise them of a consolidation of our [guidance](#) on long term planning. This document, "Guidance Note: Long term planning for the quality of drinking water supplies", provided advice to water companies on their planning and investment decisions for their PR19 business plans, and also set out how the Inspectorate might assist companies in the PR19 process. The guidance made no new policy initiatives and set no new legal obligations. It set out the Inspectorate's views of the context within which water companies were expected to plan for the long term security of drinking water quality, and the sufficiency and resilience of water supplies.
- 2.2 The guidance set the expectation that water companies should be able to demonstrate that their business plans made provision to meet all of their statutory obligations under the Act and the Regulations, including the need for public water supplies to be safe, wholesome and acceptable to consumers, within a regulatory regime that requires water companies to take a proactive, risk management approach to water supply from source to tap. To achieve these objectives, it expected provision to be made for a sustainable level of asset maintenance to maintain public confidence in drinking water quality and water supply sufficiency in the long-term. These expectations are the fundamental duties of a competent water supplier, and are consistent with legislative requirements; guidance from Ministers; the views of the National Infrastructure Commission on planning within the water sector; and national and international good practice in water supply.
- 2.3 In addition, the guidance included specific advice to companies on the Inspectorate's role in the PR19 process and how companies might seek support for specific improvement proposals. The Inspectorate's remit includes enforcement duties that are relevant to a periodic review process, as schemes supported by the Inspectorate become statutory obligations for water companies. Water companies seeking technical support from the Inspectorate for improvement schemes within the PR19 process were required to demonstrate the need for each proposal. The case for justification required

evidence of the company's need for mitigation of new or partially managed risks, and an options appraisal process to identify the most robust, sustainable and cost-effective solution. Evidence was also required to demonstrate that the preferred solution was capable of delivering the improvements required, and of delivering the required outcome to the best practicable timescale for the benefit of consumers.

- 2.4 Where the Inspectorate supported schemes, the scheme details were set into legal instruments (either a Notice under regulation 28(4) of the Regulations, or an Undertaking under section 19 of the Act), using the Inspectorate's enforcement powers. When an improvement scheme is specified in a legal instrument, the company has a legal obligation to deliver the programme of work to the agreed timescales. Where a scheme did not meet assessment criteria, the Inspectorate declined to use its enforcement powers to support it, however, it remained open to the company to retain the scheme within its business plan.
- 2.5 It should be noted that the management by companies of their water supply systems, and the use of enforcement powers by the Inspectorate, is a continuous process conducted routinely outside of a periodic review of prices, and the relatively small number of additional specific improvement schemes supported by the Inspectorate as part of a periodic review make only a limited contribution to enabling the Company to meet its legal obligations in respect of drinking water quality. These obligations are met overwhelmingly by the Company making, and being allowed within price setting mechanisms, sufficient provision for operation and maintenance functions in its business plan, and by its use of those resources. These are matters for the Company to determine and deliver. For its part, the Inspectorate will continue to keep under review, and report on, the performance of the company in meeting its legal obligations.
- 2.6 In some instances, the Inspectorate determined that an improvement proposal by a company during a periodic review should be supported to facilitate maintenance or delivery of water quality, sufficiency or resilience objectives, but that the evidence of need was not sufficient to trigger enforcement action within the remit of the Inspectorate's Enforcement Policy. In these circumstances, the Inspectorate commended the scheme for support, in recognition of the beneficial consequences it would have for consumers. Most commonly, these were schemes associated with improvements to the resilience of the supply system.
- 2.7 Whilst the commentary above provides a brief overview of the Inspectorate's engagement with the PR19 Review process, it doesn't illustrate the detailed context relevant to planning decisions for specific drinking water quality matters, such as resilience and contingency planning; and initiating preparations for significant changes to statutory obligations, such as for the lead standard. We would be happy to brief the CMA on these matters in due course, but the following short commentary may be helpful in the interim.

- 2.8 The Inspectorate's Guidance Note on long term planning for drinking water supplies notes in section 3 on Principles of Approach that the sustainability and resilience of the quality of supplies are important for services to consumers, and need to be an integral part of all planning and delivery functions of a company. The Inspectorate's expectation is that companies will plan for their needs from a stewardship perspective across generations of consumers. In respect of routine operational resilience, it is expected that every company will proactively plan for containment and recovery from potential events that might otherwise impact on consumers, with a view to maintaining levels of drinking water quality protection, confidence, acceptability and service. The guidance notes that the delivery of this approach should be efficient and sustainable, and contribute to a lasting legacy of long term benefit for both the company and its consumers, and to have legitimacy, and to gain the support of the Inspectorate, this approach needs to be transparent about short and long term investment requirements, for current consumers and future generations. These expectations are expanded on in subsequent sections of the Guidance Note.
- 2.9 Advice is also provided in the Guidance Note on making provision for meeting the current lead standard, and expectations on elements of current good practice are set out for inclusion on companies' lead strategies. In addition, whilst it was inappropriate to require companies by using enforcement powers to make provision for actions relating to progression towards minimising lead concentrations at the tap as a public health measure, because of uncertainty about the specific policy to be adopted by Ministers, nevertheless, as a matter of good regulation, the Inspectorate addressed the matter in the Guidance Note. It stated that "...the Inspectorate is aware that some companies are investigating lining techniques for communication pipes and service pipes, and that these techniques may be beneficial when applied to lead pipes by reducing the risk of compliance failures and consumers' exposure to lead. The Inspectorate supports the inclusion of such trials in lead strategies." The Inspectorate's view continues to be that modest provision during AMP7 for preparations to implement a major programme of lead pipe replacement for public health reasons is judicious and timely.

3 Summaries of Submissions made to the Drinking Water Inspectorate by the Appellant Companies

- 3.1 Details of the improvement schemes that were submitted by the four appellant companies are provided in the attached annexes to this letter. A brief summary for each company is as follows, together with a comment on whether the schemes feature within the Statements of Case made by each company to the CMA.

Anglian Water

- 3.2 Anglian Water submitted six proposals for drinking water quality improvement schemes to the Inspectorate (one for an updated lead strategy; four for

nitrate; and a proposal relating to water in buildings). The Inspectorate supported all of the Company's proposals, and legal instruments are in place specifying delivery obligations for all except the lead scheme. The Company also submitted a proposal for dealing with the pesticide Metaldehyde, which was accepted as a revision to an existing Undertaking. See annex A for additional details.

- 3.3 The Company's Statement of Case does not highlight any specific issue with completion of schemes supported by the Inspectorate.
- 3.4 The Company's Statement of Case outlines a number of consequential impacts on water quality as a result of the funding gap (between the Company's plan and Ofwat's Final Determination). An example given by the Company relates to costed replacement of lead service pipes following an exceedance of the standard in the Regulations.

Bristol Water

- 3.5 Bristol Water submitted four proposals for drinking water quality improvement schemes to the Inspectorate (one for treatment process improvements for lead mitigation; one for treatment process improvements for taste and odour; one for catchment management proposals for the pesticide Metaldehyde; and one for an updated lead strategy). The Inspectorate supported all of the Company's proposals, and legal instruments are in place specifying delivery obligations for all except the lead strategy proposal. See annex B for additional details.
- 3.6 The Company's Statement of Case does not highlight any specific issue with completion of schemes supported by the Inspectorate.

Northumbrian Water

- 3.7 Northumbrian Water (including its Essex and Suffolk area) submitted four proposals for drinking water quality improvement schemes to the Inspectorate (two for network improvements for discolouration; one for service reservoir resilience improvements; and one for an updated lead strategy). The Inspectorate supported all of the Company's proposals, and legal instruments are in place specifying delivery obligations for both network improvement schemes. The service reservoir resilience scheme was commended to Ofwat for support. See annex C for additional details.
- 3.8 The Company's Statement of Case does not highlight any specific issue with completion of schemes supported by the Inspectorate.
- 3.9 The Company's Statement of Case does outline a number of consequential impacts on water quality as a result of the funding gap (between the Company's plan and Ofwat's Final Determination). An example given by the Company relates to the Abberton to Hanningfield water transfer scheme (Essex Resilience Scheme), which would improve raw water quality, and

hence mitigate contamination risks. The Company argues that this scheme would provide supply resilience for future generations, in addition to the raw water quality improvements. This scheme was not submitted to the Inspectorate for PR19 review and therefore a technical evaluation of the scheme has not been completed.

Yorkshire Water

- 3.10 Yorkshire Water submitted seven proposals for drinking water quality improvement schemes to the Inspectorate (six for treatment process improvements for risk mitigation; and one for an updated lead strategy). The Inspectorate supported all of the Company's proposals, and legal instruments are in place specifying delivery obligations for all except the lead strategy proposal. See annex B for additional details.
- 3.11 We note that the Company's Statement of Case states that the complexity of the six treatment process improvement schemes supported by the Inspectorate has not been taken into account in the Final Determination by Ofwat.
- 3.12 The Company's Statement of Case outlines a number of consequential impacts on water quality as a result of the funding gap (between the Company's plan and Ofwat's Final Determination). Examples given by the Company relate to provision for pipe rehabilitation rather than replacement, and consequences for its supply resilience in not being able to deliver a number of intended base-load abstraction maintenance schemes.

4 Other matters

- 4.1 The Inspectorate would be happy to liaise with the CMA on any other matters relating to its inquiry.
- 4.2 As noted above, there is some concern about potential, consequential impacts on drinking water quality. However, regardless of the detailed outcome of the periodic review process, the regulatory position in relation to water quality remains unchanged. Companies have a non-delegable duty, under the Water Industry Act 1991 (as amended) and the Water Supply (Water Quality) Regulations 2016 (as amended) (England), to provide sufficient and wholesome water to their consumers at all times. The Inspectorate's use of various performance measures, including its compliance risk index (CRI) and the event risk index (ERI), will continue as an important means of holding companies to account, and to reassure consumers about the on-going quality of their supplies.
- 4.3 We look forward to taking part in more detailed discussions during the third party hearings and confirm our availability to take part in these. If you require any further information in the meantime, please do not hesitate to contact us.

4.4 I am copying this letter to our board level contacts at the four water companies and to Ofwat.

Yours sincerely

A handwritten signature in black ink that reads "Milo Purcell". The signature is written in a cursive style.

Milo Purcell
Deputy Chief Inspector

Annex A – Anglian Water Services Ltd

Anglian Water Services Ltd submitted six improvement proposals for drinking water quality to the Inspectorate, listed in the table below.

The Inspectorate supported all of the Company's proposals and legal instruments were put in place where appropriate, to make the proposals legally binding programmes of work. Our final decision letter was sent to the Company on 30 May 2018.

Four of the Company's proposals relate to facilitating compliance with increasing nitrate levels in raw water. Ion exchange plants will be installed at four groundwater sites, together with catchment management actions.

The Inspectorate also supported the Company's proposals to facilitate compliance with the lead standard. The Inspectorate expects that the Company will have a strategy in place for managing lead in drinking water that should form part of a risk-based programme of work that includes a range of measures to address lead in identified high risk areas, and target high risk properties and vulnerable consumers. During AMP7 the Company proposes an extensive programme of lead pipe replacement / refurbishment in high risk areas with a view to reducing or removing orthophosphate treatment in the long term.

Additionally, the Inspectorate supported the Company's proposal to widen the scope of their current programme of sampling and inspection of water fittings to raise awareness of plumbing issues and facilitate compliance at customer's taps.

Drinking Water quality schemes and DWI decisions (Anglian Water Services Ltd)

| PR19 DWI ref | Scheme Name | Quality parameter | Scheme type | Preferred option | DWI final decision |
|--------------|-------------------------|---------------------|--------------------------|----------------------------------|--------------------|
| ANG 1 | Gayton WTW | Nitrate | Treatment | Ion exchange | Support - Notice |
| ANG 2 | Irby reservoir | Nitrate | Treatment | Ion exchange | Support - Notice |
| ANG 3 | Lead strategy | Lead | Treatment / Distribution | Implement lead strategy | Support |
| ANG 4 | Little Saxham reservoir | Nitrate | Treatment | Ion exchange | Support - Notice |
| ANG 5 | Water in buildings | Multiple parameters | Distribution | Various water fittings solutions | Support - Notice |
| ANG 6 | Wighton WTW | Nitrate | Treatment | Ion exchange | Support - Notice |

Annex B – Bristol Water plc

Bristol Water plc submitted four improvement proposals for drinking water quality to the Inspectorate, listed in the table below.

The Inspectorate supported all of the Company's proposals and put legal instruments in place where appropriate to make the proposals legally binding programmes of work. Our final decision letter was sent to the Company on 30 May 2018.

Two of the Company's proposals relate to facilitating compliance with the lead standard. The Inspectorate expects that the Company will have a strategy in place for managing lead in drinking water that should form part of a risk-based programme of work that includes a range of measures to address lead in identified high risk areas, and target high risk properties and vulnerable consumers. During AMP7 the Company proposes to install phosphate dosing equipment at its Alderley works and to continue to implement their lead strategy with an extensive programme of lead pipe replacement/refurbishment targeting vulnerable groups and engagement with stakeholders.

The Inspectorate also supported a programme of treatment modifications at the Cheddar works to improve customer acceptability and reduce taste and odour complaints in the area, and the Company's proposals to further develop current catchment management options to facilitate compliance with Metaldehyde.

Drinking Water quality schemes and DWI decisions (Bristol Water plc)

| PR19 DWI ref | Scheme Name | Quality parameter | Scheme type | Preferred option | DWI final decision |
|--------------|--------------------------|--------------------------|--------------------------|---|---|
| BRL 1 | Alderley WTW | Lead | Treatment | Phosphate dosing | Support - notice |
| BRL 2 | Cheddar WTW | Taste and Odour | Treatment | Treatment modifications | Support - notice |
| BRL 3 | Lead strategy | Lead | Treatment / Distribution | Implement lead strategy | Support |
| BRL 4 | Purton and Littleton WTW | Pesticides (Metaldehyde) | Catchment | Various catchment management activities | Support - current undertaking to be revised |

Annex C – Northumbrian Water (including the Essex and Suffolk area)

Northumbrian Water Ltd submitted four improvement proposals for drinking water quality to the Inspectorate, listed in the table below.

The Inspectorate supported three of the Company's proposals and put legal instruments in place where appropriate to make the proposals legally binding programmes of work. The remaining proposal has been commended to OFWAT for support. Our final decision letter was sent to the Company on 30 May 2018.

Regarding facilitating compliance with the lead standard, the Inspectorate expects that the Company will have a strategy in place for managing lead in drinking water that should form part of a risk-based programme of work that includes a range of measures to address lead in identified high risk areas, and target high risk properties and vulnerable consumers. During AMP7 the Company proposes continuation of the existing strategy with an extensive programme of lead pipe replacement and refurbishment targeted to vulnerable groups and some rural areas with a view to reducing or removing orthophosphate treatment in this area as a pilot for the Company's long term lead strategy.

The Inspectorate also supported two proposals to mitigate discolouration problems in distribution involving various network management option.

Additionally, the provision of a new reservoir at Springwell service reservoir was commended to Ofwat for support for resilience related reasons.

Drinking Water quality schemes and DWI decisions (Northumbrian Water (including Essex and Suffolk area))

| PR19 DWI ref | Scheme Name | Quality parameter | Scheme type | Preferred option | DWI final decision |
|--------------|----------------------|-------------------|--------------------------|-------------------------|--|
| NNE_E SK 1 | Lead strategy | Lead | Treatment / Distribution | Implement lead strategy | Support |
| NNE_E SK 2 | Distribution network | Discolouration | Distribution | Network management | Support - notice |
| NNE_E SK 3 | Springwell SR | Resilience | Distribution | New service reservoir | Commend to support - no legal instrument |
| NNE_E SK 4 | Tees area | Discolouration | Distribution | Network management | Support - notice |

Annex D – Yorkshire Water Services Ltd.

Yorkshire Water Services Limited submitted seven improvement proposals for drinking water quality to the Inspectorate, listed in the table below.

The Inspectorate has supported all of the Company's proposals and put legal instruments in place where appropriate to make the proposals legally binding programmes of work. Our final decision letter was sent to the Company on 30 May 2018.

Regarding facilitating compliance with the lead standard, the Inspectorate expects that the Company will have a strategy in place for managing lead in drinking water that should form part of a risk-based programme of work that includes a range of measures to address lead in identified high risk areas, and target high risk properties and vulnerable consumers. During AMP7 the Company proposes an extensive programme of lead pipe replacement/refurbishment targeted to vulnerable customers.

The Company proposes a programme of ion exchange installation to manage disinfection by-products in supply from four sites and additional treatment at a further two sites to improve taste and odour and other parameters, and to improve protection from *Cryptosporidium*.

Drinking Water quality schemes and DWI decisions (Yorkshire Water Services Ltd)

| PR19 DWI ref | Scheme Name | Quality parameter | Scheme type | Preferred option | DWI final decision |
|--------------|---------------------|--|------------------------|--|--------------------|
| YKS 1 | Chellow Heights WTW | Disinfection byproducts | Treatment | Ion exchange | Support - notice |
| YKS 2 | Embsay WTW | Manganese, Disinfection byproducts, <i>Cryptosporidium</i> | Treatment | Secondary filtration and other modifications | Support - notice |
| YKS 3 | Fixby WTW | Disinfection byproducts | Treatment | Ion exchange | Support - notice |
| YKS 4 | Oldfield WTW | Disinfection byproducts | Treatment | Ion exchange | Support - notice |
| YKS 5 | Sladen Valley WTW | Disinfection byproducts | Treatment | Ion exchange | Support - notice |
| YKS 6 | Tophill Low WTW | Taste and odour, <i>Cryptosporidium</i> | Treatment | GAC and other modifications | Support - notice |
| YKS 7 | Lead strategy | Lead | Treatment/Distribution | Implement lead strategy | Support |