

Guidance and Information Requirements [Annex A] to Northern Ireland Water on Long-Term Planning for Drinking Water Supplies in PC28 issued by Drinking Water Inspectorate for Northern Ireland

Document Control

The only controlled version of this document can be accessed on the DWI (Northern Ireland) Website:

<https://www.daera-ni.gov.uk/publications/guidance-and-information-requirements-long-term-planning-drinking-water-supplies-pc28>

Printed copies of this document, together with electronic copies held on local computers and other storage devices are uncontrolled.

1. Purpose

- 1.1. The purpose of this Guidance Note is to provide NI Water with guidance on long-term planning for the quality of drinking water supplies. This guidance supersedes previous guidance issued by the Inspectorate in relation to Annex A submissions which were made at the start of PC21 planning process.
- 1.2. This Guidance Note also provides details of arrangements for information submissions to the Inspectorate; the Inspectorate's assessment processes; and a timeline for supporting current expectations of PC28 requirements.
- 1.3. We will update this document as necessary to take account of developments in legislation, policy and industry good practice and future price controls.

2. Principles of approach

- 2.1. The Inspectorate expects NI Water to take a source-to-tap approach to manage its water supplies, to protect the health of its consumers, and maintain consumer confidence in the supply and services provided. Central to achieving these objectives is the use of Drinking Water Safety Plans (DWSPs).
- 2.2. The delivery of this approach should be efficient and sustainable and contribute to long-term benefits for both NI Water and its consumers, and support the economy. The approach needs to be transparent about the identified challenges and risks, risk management, and short and long-term investment requirements, for current consumers and future generations.
- 2.3. For all aspects of planning, whether for event management, drought management, water resource management, maintenance management, or operations management, it is a fundamental requirement that drinking water quality is always central to, and accounted for, in all cost-benefit assessments of options considered. It is expected that NI Water will always plan to meet its statutory obligations for drinking water quality to ensure public health protection.
- 2.4. In relation to routine operational resilience, NI Water is expected to take a proactive approach to planning for, withstanding, responding to and recovering from potential adverse events that could impact consumers, such as extreme weather events and the long-term effects of climate change. This should ensure the continued protection of drinking water quality, while maintaining consumer confidence, water acceptability and the reliable delivery of services.
- 2.5. In support of Water UK's¹ ambition to achieve net zero emissions from water and wastewater operations by 2030, and the wider Climate Change Act (Northern Ireland) 2022² target of net zero across all sectors by 2050, the Inspectorate encourages NI Water to pursue innovative and sustainable solutions wherever feasible. While the provision of a reliable supply of high-quality drinking water

¹ <https://www.water.org.uk/>

² <https://www.legislation.gov.uk/nia/2022/31>

remains the primary objective, the Inspectorate considers net zero a key secondary objective and supports NI Water's efforts to achieve it.

2.6. References in this Guidance Note to the Order and the Regulations are to The Water and Sewerage Services (Northern Ireland) Order 2006³, and The Water Supply (Water Quality) Regulations (Northern Ireland) 2017⁴.

2.7. Although the current regulatory framework is as outlined above, DAERA is considering potential amendments to Northern Ireland's drinking water legislation arising from the recast Drinking Water Directive (Directive (EU) 2020/2184), including revised drinking water quality standards and additional parameters. NI Water should therefore take account of these potential changes in its long-term planning, including preparing for a reduction of the lead standard from 10 µg/L to 5 µg/L and the introduction of any new regulatory standards.

3. Broad considerations in planning for the long term

3.1. Drinking water quality performance

3.1.1. Annual reports published by the Inspectorate, on drinking water quality in Northern Ireland, provide an independent assessment of the quality of drinking water supplied by NI Water. Whilst overall drinking water quality is high, the Inspectorate expects NI Water to maintain a focus on performance through continuous improvement plans. NI Water should prioritise addressing failures within its services and implement appropriate mitigation measures using a risk-based approach to support long-term regulatory compliance.

3.2. Risk assessment

3.2.1. It is mandatory for NI Water to carry out, keep under review, and where necessary update, risk assessments of all of its water supply systems, from source to tap, in adherence with the drinking water safety plan approach. These risk assessments must meet internationally recognised standards such as BS EN 15975-2 as specified in Regulation 30 of the Regulations. Consideration should be given to both known hazards and new emerging risks in the medium to long-term which may impact drinking water supplies. NI Water should ensure that the identified risks are assessed in terms of both the company's ability to provide wholesome drinking water along with any potential impacts on human health. These Drinking Water Safety Plans should be central to NI Water's short, medium, and long-term planning needs.

3.2.2. Where a regulatory risk assessment identifies actual or potentially significant risks, NI Water should take appropriate steps to manage and mitigate those risks in a timely, effective and efficient manner for the benefit of consumers. The Inspectorate will work with NI Water to monitor progress and, where necessary, may consider the use of regulatory mechanisms to support the achievement of the desired outcomes.

³ <https://www.legislation.gov.uk/nisi/2006/3336/contents>

⁴ <https://www.legislation.gov.uk/nisr/2017/212>

4. Long term planning from source to tap

4.1. Catchment management

- 4.1.1. The water environment within the catchment represents the first opportunity to consider the hazards, and changes which may impact the quality of drinking water. Catchment management schemes should therefore be the first consideration of all source-to-tap risk assessments to reduce risks prior to treatment and ultimately mitigate significant risks to public health, wholesomeness and acceptability of water supplies.
- 4.1.2. The Inspectorate supports catchment management approaches and has previously included these as undertakings within legal instruments arising from compliance failures or identified risks.
- 4.1.3. The likelihood of success of catchment management measures varies depending on the nature of the parameter, the size and nature of the catchment, the origin of the pollution and other factors. Therefore, individual proposals will be assessed on their merits.
- 4.1.4. The accumulation of catchment management improvements gained from a multiplicity of proactive integrated solutions (such as stakeholder engagement at both national and local levels; pollution control; raw water management; abstraction control; and raw and/or treated water blending) may in some cases negate or delay the need for, new and/or upgraded treatment processes.
- 4.1.5. Although control of the hazard at source is always the primary objective, we recognise that the full delivery of outcomes through catchment management measures may be uncertain or may prolong the period before benefits accrue to consumers. Consequently, catchment management alone cannot be relied upon to reduce contaminants to acceptable levels in all circumstances, and where this is the case, the Inspectorate considers a dual approach necessary, with appropriate treatment measures implemented alongside catchment management solutions.

4.2. Raw water quality

- 4.2.1. Understanding the quality of water at the point of abstraction remains one of the most important foundations for delivering high quality drinking water to consumers. NI Water must be aware of, and manage, the risks at the point of abstraction.
- 4.2.2. Failure or a likelihood of failure to supply wholesome water because of a deterioration in raw water quality (such as algal blooms, nitrate, pesticides, turbidity, organics, colour, Cryptosporidium and other pathogens) should be identified through raw water monitoring and the risk assessments carried out for each treatment works and its associated supply system. Deterioration in this context means a measured change in raw water quality over time, or demonstrable changes brought about by pollution incidents within the catchment, and most frequently arising from diffuse pollution, but occasionally from changing weather patterns. It does not mean evidence of poor performance of a treatment works within its design parameters.

4.2.3. Most hazards will be known about already within existing risk assessment arrangements. However, localised changes to raw water quality can occur requiring a review of existing risk profiles. Where a deterioration in raw water quality has been identified and presents a risk to consumers (for example, the existing treatment process is not designed to deal with either the type or level of the contaminant), NI Water must investigate the cause of deterioration and take action to protect consumers. This action should primarily focus on investigations in the catchment and, where feasible, specify actions to control the level of pollution entering the supply at source, although a wide range of other operational interventions, including either short-term or permanent treatment solutions, may be necessary.

4.2.4. NI Water has a statutory duty to undertake monitoring of raw water at every abstraction point as part of their risk assessment of each treatment works and associated supply system. Monitoring is particularly important to improve knowledge of new and emerging risks and understanding where specific attention in risk assessments and associated responses should be implemented.

4.3. Resource and supply management

4.3.1. As part of its statutory planning obligations, NI Water published its Water Resource and Supply Resilience Plan⁵ in 2025, setting out how it will manage and develop water resources to ensure sufficient supplies are available to meet future demand. This plan will be kept under review.

4.3.2. Article 108(1)(b) of the Order places the following duty on NI Water which may have implications for the ongoing realisation and periodic review of its water resource plans:

‘so far as reasonably practicable, to ensure, in relation to each source or combination of sources from which that undertaker supplies water to premises for domestic or food production purposes, that there is, in general, no deterioration in the quality of the water which is supplied from time to time from that source or combination of sources.’

4.3.3. Specific matters for consideration when developing proposals should include the following:

- for all water transfers, within different water supply areas, and for new sources, NI Water is expected to have carried out risk assessments of the potential impacts on public health, wholesomeness, and acceptability to consumers, and must meet regulatory requirements for the introduction of new sources⁶;
- NI Water should be satisfied that the risk assessment has considered the potential impact of mixing of different water types within its distribution network, including customer acceptability issues and the operation and maintenance requirements of that particular network (e.g. for event mitigation, water stability and age, and service reservoir turnover);

⁵ <https://www.niwater.com/about-your-water/managing-northern-irelands-water-resources>

⁶ <https://www.daera-ni.gov.uk/publications/guidance-water-supply-water-quality-regulations-ni-2017>

- routine operational matters to be included in these risk assessments should include assessment of the impact on optimisation of orthophosphoric acid dosing, hydrogen ion (pH) for plumbosolvency control; other chemical stabilisation processes; and compliance with disinfection and the minimisation of disinfection by-products;
- commissioning of new sources, or alternating water supply arrangements, that increase the risk of non-compliance - such as by discolouration, objectionable tastes and odours, nitrates or pesticides - should not be permitted until steps to mitigate those risks are in place.

4.3.4. The Inspectorate interprets the statutory requirement for 'no deterioration' by reference to compliance with the requirements of the Regulations, including standards. A marginal change in the concentration or level of a parameter may not be considered as deterioration if the water as supplied remains wholesome and is acceptable to consumers, provided that it can demonstrate it has considered and limited the deterioration as far as is reasonably practical to do so.

4.4. Water treatment

4.4.1. The Inspectorate expects NI Water to use treatment processes that ensure drinking water is safe, wholesome and acceptable to consumers. These processes should proactively mitigate risks to public health, be proportionate to actual and potential hazards, and demonstrate verifiable efficacy of treatment.

4.4.2. An integrated approach to risk management across catchment, abstraction, storage and treatment stages is essential to ensure a reliable supply of safe drinking water. This should include consideration of new and emerging contaminants, changing environmental conditions and treatment performance under stress conditions. NI Water should regularly assess the effectiveness of its treatment systems and plan improvements where necessary to maintain water quality and service for consumers.

4.4.3. Treatment facilities should have the operational flexibility over short, medium, and long-term timescales to support resilience. Appropriate monitoring, control and fail-safe arrangements, including containment and/or flow diversion, should be in place to prevent the supply of inadequately treated water to consumers.

4.4.4. The integration of new or replacement processes and equipment should be subject to rigorous testing, with supplier support and operator training. There remains room for improvement in the operational performance of treatment facilities, through the application of good practice in maintenance of assets, and in particular, for dosing, monitoring, and control systems, where proactive preventative replacement strategies and/or fail-safe back-up facilities are expected as a minimum requirement.

4.4.5. Compliance with Regulation 33 requirements is essential throughout the planning, design and operation of water supply assets. NI Water must ensure that all materials, products and treatment chemicals used in contact with drinking water are approved, suitable for their intended purpose and do not adversely affect water quality. This includes carrying out appropriate due diligence throughout the supply chain and ensuring that the storage,

handling and use of materials and chemicals comply with regulatory requirements and relevant standards to protect public health and drinking water quality.

- 4.4.6. The operation of treatment facilities should include, as a minimum, the control measures necessary to mitigate any impact on the stability and optimisation of pH, colour, and orthophosphoric acid dosing for plumbosolvency control; on disinfection and control of disinfection by-products; and on the acceptability of the supply to consumers, including taste and odour, and discolouration. Operator training should be comprehensive and relevant to all water supply processes.
- 4.4.7. NI Water should continue to evaluate and implement innovative technologies, control systems and online monitoring where appropriate to improve the reliability, responsiveness and performance of treatment processes, strengthen operational control and support the effective management of resilient drinking water treatment.

4.5. Water Storage and Distribution

- 4.5.1. Without any further treatment, drinking water must be stored and distributed in a safe and secure manner to maintain its quality and protect public health. This includes ensuring that service reservoirs and watermains are properly maintained and managed to prevent ingress of contaminated environmental water.
- 4.5.2. A robust programme should be in place for the management, monitoring, inspection, and maintenance of service reservoirs. Where deficiencies or areas of concern are identified, appropriate mitigation measures should be implemented and incorporated into a proactive maintenance and operational regime, underpinned by good asset maintenance practices. Robust processes for the specification and use of approved substances and products in contact with drinking water are also essential.
- 4.5.3. NI Water should be working proactively to reduce the level and frequency of consumer complaints about the aesthetic quality of the supply. Mitigation actions to reduce such complaints must involve operational planning for strategic and recurring cleaning/maintenance, improved treatment processes, and/or permanent solutions to reduce complaints in the long term.
- 4.5.4. The routine acceptance of adverse impacts on water quality arising from the condition of water mains or arising from burst mains is not considered acceptable. In particular, discolouration associated with network flow variations should be treated as a risk to water wholesomeness rather than an inherent operational issue. NI Water should identify and implement appropriate mitigation measures through the risk assessment process, including, where necessary, flushing programmes to control deposit accumulation and the replacement of mains with a history of recurrent failures.

4.6.Asset Management and Asset Health

- 4.6.1. The Inspectorate is aware that NI Water has an increasingly ageing asset base which includes water treatment works and distribution networks. For proposed asset health schemes (where the Inspectorate's support is requested), NI Water will additionally need to demonstrate how a deterioration in the health of the assets concerned, represents a risk to drinking water quality. The Inspectorate also seeks assurance that any assets put forward for these schemes are the priority for protecting drinking water quality and that NI Water has no other drinking water assets which present a greater risk in respect of asset health.

5. Specific Considerations

5.1.Pesticides

- 5.1.1. NI Water have taken significant steps in recent years to comply with Enforcement Notices related to improving compliance with the Total and Individual pesticides standards. These included both catchment solutions, along with new treatment processes. However, the risks from the presence of pesticides within catchments remains a challenge for NI Water within PC21 and moving into PC28.
- 5.1.2. The Inspectorate will expect NI Water to have a long-term strategic plan in place to identify and manage current and future risks arising from pesticide/herbicide use within catchments, and to use this plan to determine its work programmes for PC28 and beyond.

5.2.Algae

- 5.2.1. With the increasing occurrence of algal blooms in drinking water source waters across Northern Ireland, particularly in Lough Neagh, NI Water should assess and manage the risks these events pose to drinking water quality. Appropriate mitigation measures should be implemented to control algal toxins and minimise impacts on the taste and odour of drinking water.
- 5.2.2. Particular consideration should be given to geosmin and 2-methylisoborneol (MIB), naturally occurring organic compounds associated with algal activity. Although current evidence indicates that these compounds are not harmful to human health at the levels typically encountered, they can impart earthy or musty tastes and odours that are readily detectable by consumers and may lead to increased customer complaints.
- 5.2.3. The risks presented by geosmin and MIB are well understood, and NI Water should ensure that these risks, together with appropriate mitigation measures, are incorporated into catchment and drinking water safety risk assessments.

5.3.Trihalomethanes

- 5.3.1. Trihalomethanes (THMs) remain a significant compliance and operational challenge, particularly where source waters contain elevated concentrations of natural organic matter. As part of its long-term planning, NI Water should develop and maintain strategies to reduce

the formation of disinfection by-products through a combination of catchment management, treatment optimisation, and distribution system management.

5.3.2. This should include measures to reduce the organic load entering treatment works through improved source water protection and catchment interventions, alongside investment in treatment processes that enhance the removal of organic precursors prior to disinfection. NI Water should continually assess the effectiveness of existing treatment processes and identify opportunities to implement more efficient and resilient treatment technologies where required.

5.3.3. NI Water should also consider the optimisation of disinfection practices, including the dosage of disinfectants used, contact times, storage arrangements, network operation, and water age within the distribution system. This should ensure that microbiological safety is maintained while minimising the formation of THMs and other disinfection by-products.

5.4. Lead

5.4.1. NI Water's lead strategy should be reviewed prior to PC28, taking account of the future requirement to meet the recast standard of 5 µg/l by January 2036. Associated lead risk assessments should be regularly reviewed and include consideration of:

- Low, medium, and high risks as identified through the drinking water safety plan for the relevant water supply system;
- continuation of, and, if necessary, further enhancement to plumbosolvency control measures;
- replacement of the lead communications pipe where the standard of 10µg/l is not met and notification to consumers on steps to take on reducing lead levels;
- consideration of the benefits of opportunistic lead communication and service pipe replacement from planned work on the distribution system;
- work with local councils, the Public Health Agency, and other key stakeholders, to identify vulnerable consumers and appropriate solutions, in particular, for schools, nurseries, hospitals and other vulnerable populations;
- a communications and education strategy to make consumers, and other stakeholders, aware of the risk of lead in tap water, what can be done to mitigate the risk, and who has responsibility for lead pipes.

5.5. Other emerging risks

5.5.1. NI Water, in its engagement with other UK Water companies through Water UK, should keep itself informed of developments in emerging risk areas such as new and emerging contaminants.

5.5.2. In its plans for PC28, NI Water should also consider potential amendments to Northern Ireland's drinking water legislation arising from the recast Drinking Water Directive (Directive (EU) 2020/2184). Long-term planning should therefore take account of the recast drinking water quality standards, including new parameters such as PFAS, microcystin-LR, chlorate, chlorite and haloacetic acids (HAAs).

6. Supporting development of business plans for PC28

- 6.1. NI Water must ensure its long-term plans are consistent with the outputs within the Department for Infrastructure's: Sustainable Water - A Long-Term Water Strategy for Northern Ireland (2015 – 2040), the Social and Environmental Guidance for Water and Sewerage Services (2021 - 2027), and the Utility Regulator's Approach to PC28.
- 6.2. The Inspectorate will review and update as necessary this Guidance Note on publication of the Social and Environmental Guidance for PC28.
- 6.3. The Inspectorate encourages innovation by NI Water. This is particularly relevant for catchment management schemes and for innovative treatment solutions. Where legal instruments are put in place, mitigation steps may include investigative or modelling actions to facilitate identification or confirmation of the optimum solution.
- 6.4. If NI Water identify that a proposal may no longer be the best available solution, then a revised proposal may be put forward. This should detail how it will deliver benefits over and above the original proposal. The Inspectorate will consider such proposals where genuine unforeseen circumstances have occurred, or new studies have indicated a better solution. Any new solution should be considered against the benefit to the consumer. Alternative solutions should be provided to the Inspectorate prior to further consideration under the change control process.
- 6.5. Similar to 6.4 the Inspectorate may consider any new or revised requirements that might arise from the company's review of its current risk assessments. If proposals for control measures are supported, they may be incorporated into agreed undertakings.
- 6.6. As highlighted throughout this guidance NI Water should take a clear strategic long-term approach to their planning needs. This should include a strategic and long-term direction on ensuring compliance with the water quality standards, particularly in relation to lead, trihalomethanes, taste and odour, pesticides, and iron. The Inspectorate will consider large scale programmes of work, for example in dealing with levels of lead within distribution systems, as part of submissions under Annex A.
- 6.7. For improvement schemes under PC28 the case for justification of need must be accompanied by the evidential information, including:
 - a. how it has derived the most appropriate technical and cost-effective options to mitigate each named hazard and identified risk;
 - b. summary details of the capital costs and the net additional operating costs, as part of the overall total expenditure (TOTEX), of each of the options considered;

- c. identification of the preferred option and the rationale for choosing that option and reasons for discounting all other possible options and;
 - d. evidence that the preferred option will adequately mitigate the risk and deliver the required outcome within an appropriate timescale, and that the solution is sustainable; improves resilience; and meets consumers' needs.
- 6.8.** The information requirements to support individual proposals are provided in Annex A. This should include an up-to-date risk assessment report and comprehensive supporting information and should be sent electronically to dwi@daera-ni.gov.uk .
- 6.9.** The Inspectorate will provide its assessment of each proposal to NI Water's board level contact, and copied to relevant contacts within the Utility Regulator, the Department for Infrastructure, and the Consumer Council for Northern Ireland.
- 6.10.** NI Water should be able to demonstrate that their business plans have been directed by consumer engagement in ensuring consumers' needs are met. NI Water are also expected to consider more generic risks, for example, power outages, flooding, drought, security of supply for treatment chemicals, analytical capacity, and system issues such as critical telemetry, SCADA, and other IT systems.
- 6.11.** The Inspectorate's timetable for PC28 has been developed on the basis that NI Water's Outline Capital Submission was provided on 03 April 2026, with the subsequent Business Plan Submission to be available by 12 November 2026.
- 6.12.** The Inspectorate would request that Annex A submissions are provided by **31 January 2027** with a view to our assessment being issued by **31 March 2027**. As agreed, NI Water should commence submitting Annex As in advance of this deadline to facilitate the assessment process.
- 6.13.** Submissions received after this date, whether as updates to existing submissions or as new submissions, may still be considered by the Inspectorate. However, the Inspectorate cannot guarantee that sufficient time will be available to complete its assessment and provide support in time for inclusion within the PC28 programme.

Annex A: Proposals to carry out improvements for drinking water quality reasons – Submission of Information

An up-to-date Regulation 31 risk assessment report must be appended with all submissions.

This annex lists all of the information that NI Water should provide to the Inspectorate with PC28 proposals, for drinking water quality drivers. If the information is already included in the Regulation 31 reports submitted with proposals, or in other documents appended to the submission, there is no need to provide the information again separately, but this should be sufficiently referenced below.

Details of the proposed Scheme

Section 1

Background information	
Title of Proposed Programme of Work:	
Date of submission:	
Name of Water Supply System:	
Regulation 31 Report Version Reference Number(s): <i>[Unique reference number for each report that applies].</i>	
Name of Water Treatment Works / Distribution System / Service Reservoir / Other asset:	
Water Quality hazard(s) / drivers identified:	
Reference to outcome in Long Term Water Strategy: <i>[or any other long-term planning the company may have already published that their proposals feed into].</i>	

Section 2

Details of the water treatment works and associated water supply system			
1	Provide supply arrangements and treatment works details:		
2	A description and diagram of the water supply system related to the treatment works		
3	Design capacity of the water treatment works (Ml/d)		
4	Volume supplied: • Daily average (Ml/d) • Daily maximum (Ml/d) <i>[Please include a commentary if there are any constraints on deployable output due to limitations associated with any part of the treatment process. E.g. constraints in relation to blend water or seasonal constraints]</i>		
5	Sources of raw water (continuous / seasonal / standby) <i>[Include names of each individual source, nature of the source (e.g., surface direct abstraction; surface impounding reservoir; borehole; spring; type of aquifer). Where appropriate include detail of any existing raw water optimisation / control measure(s) that are in place (e.g. artificial mixing; selective withdrawal depths for abstraction; raw water monitoring; water column profiling; etc.)]</i>		
6	Treatment processes currently employed (including pre-treatment of raw waters) <i>[In this case, blending is defined as treatment. This includes blending of raw waters prior to treatment. Please also indicate if bankside storage of raw water is utilised, and average retention time in the reservoir]</i>		
7	Service reservoirs/booster pump details		
8	Water supply zones supplied and population of each water supply zone <i>[If the supply is blended with waters from other treatment works in the zone, please indicate the relative proportions (as %)]</i>		
WSZ ID	WSZ Name	WSZ Population	%

Section 3

Hazard identification and Risk Characterisation	
1	Provide details of methodology used to identify hazard. For example: • Historical data • Events / incidents including near miss situations • Operator knowledge • Modelling and validation of modelling • Site visits / technical audits
2	Summary of historical data on the values and concentrations of the organism, substance(s) or parameter(s) associated with the hazard in the raw water source and the water entering supply from the relevant treatment works from compliance, investigative, or operational sampling.
3	Details of any existing contraventions of regulatory requirements and whether they are likely to recur (at WTW, SR and/or at consumers taps)
4	If evidence of likely to contravene any regulatory requirement, details of when this is likely to occur (at WTW, SR and/or at consumers taps) including trend analysis & prediction modelling
5	Details of any other data relevant to the hazard identified
6	If appropriate, summary of data/ information on consumer complaints
7	Details of any events that have occurred in the catchment, at the treatment works and in supply that are associated with hazard identified
8	Details of any existing control measure(s) that might influence the values and concentrations of the organism, substance(s) or parameter(s) associated with the hazard in the catchment, in treatment and in supply
9	Details of monitoring of the existing control measure(s) (including validation monitoring)

Hazard identification and Risk Characterisation	
10	Details of any changes in practices or policy which might have influenced the values and concentrations of the organism, substance(s) or parameter(s) associated with the hazard in water supplied to consumers, i.e., in relation to resources, blending arrangements, treatment or supply arrangements and the dates of those changes.
11	Details of any licensed abstraction issues which might influence the values and concentrations of the organism, substance(s) or parameter(s) associated with the hazard in raw water.
12	Reasons for the presence of the hazard, if known, otherwise details of what is being done to identify the source of the hazard.
13	Outline Risk characterisation. For example, details and score arising from consequence v. likelihood matrix, where score sits in the risk profile for the water supply system.

Section 4

Control Measures Required – Provide details of short, medium, and long-term control measures	
1	Details of short-term actions currently in place to mitigate against risk & their effect
2	Details of mid to long-term control measures identified for any residual risk: - Options the company has considered which should, where appropriate, include catchment management controls, or communications controls in association with other stakeholders - Timescale for delivery of each option - Capital costs and net additional operating costs of each option considered - Summary of costs and benefits of each option - Reasons for choosing the preferred option - Specific supporting evidence that the preferred option will address risk of hazard within the required timescale
3	Full details of how the company intends to assess and measure the benefits delivered (the outcome), including details of proposed sampling programme, number of samples to be taken over the specified period and parameters to be monitored.