

Dear [REDACTED]

Thank you for your request for environmental information. We appreciate your interest, and we want to let you know that your request has been carefully considered in accordance with the Environmental Information Regulations (EIR). As your request contained a number of specific questions, this response, restates each part of the request (in bold) and then follows this with our response.

I am writing to request detailed environmental information regarding the drinking water supplied to my property in [REDACTED] within Water Supply Zone Z134 (Gorsehill).

For awareness, I'd like to clarify that your property is in water supply zone (WSZ) 138, not 134. This is an error on our external website which will be corrected in the coming weeks.

I have reviewed the public water quality report, which confirms compliance with UK drinking water standards. However, I would like to obtain a more comprehensive understanding of the water quality beyond the standard consumer report.

Under the Environmental Information Regulations 2004 (EIR), I would be grateful if you could provide any available monitoring data, laboratory results, reports or risk assessments relating to my water supply.

Please see enclosed a copy of the sample data we hold for your WSZ in Appendix 1. This covers the period July 2025 – July 2026, and is separated into two tabs, which are:

- Final water sample data (including water treatment works, service reservoir, and WSZ sample data).
- Raw water sample data

When reviewing the attached dataset, it is important to note that all laboratory methods have a Limit of Quantification (LOQ). This means that the method cannot read lower than a certain value. Any results marked as less than the LOQ means that the result is lower than the lowest quantifiable value that the method can detect. In this dataset, results less than the LOQ are marked 'LT'.

1. PFAS ("Forever Chemicals")

Please provide:

- Results of all PFAS testing undertaken on my water supply.
- Individual concentrations for each PFAS compound analysed (including, but not limited to, PFOS, PFOA, PFHxS, PFNA, PFBS, GenX and any others tested).
- Total PFAS concentrations.



Water for the North West

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- Dates samples were collected.
- Detection limits used by the laboratory.
- Analytical methods used (e.g. LC-MS/MS).
- Any historical PFAS monitoring data available.
- Any risk assessments relating to PFAS contamination.
- Any planned treatment upgrades intended to reduce PFAS concentrations.

Please see enclosed in Appendix 2, a copy of the PFAS data that we hold for the water treatment works which supply your property. This covers the last 12 months.

In addition to the data, we can confirm that all of our water sources are monitored for PFAS and in most cases these substances are not present. We do not have any high-risk sources. Water companies are required to monitor PFAS monitoring in the raw water (untreated) and water treatment works (treated water), rather than consumers' taps.

Where very low levels have been detected we have the appropriate risk management plans in place, to ensure the treated water supplied to customers meets the necessary regulatory standards. At this time there are currently no statutory standards for PFAS in drinking water, nor is there a World Health Organisation guideline value. The DWI has taken a precautionary approach and produced tiered guideline values for water companies, which we adhere to.

The DWI's three-tier system reflects the level of PFAS detected and determines the actions required for detections at each level:

Tiers	Value	Risk Level
Tier 1	<0.01 µg/L	Low Risk
Tier 2	<0.1 µg/L	Medium Risk
Tier 3	>0.1 µg/L	High Risk

The results from the source waters and the WTW supplying your property are assessed as Tier 1 (lowest risk). Due to the supply being in the lowest risk category no treatment upgrades are required.

Should we receive any elevated PFAS results; we carry out investigations and increase monitoring. We keep the DWI and the relevant health authorities up to date on the results and there are options available to us for example, removing a source from supply, additional treatment, or carrying out controlled blending to minimise any concentration. We are also continuing to participate in the latest research to improve our understanding of treatment options for PFAS in drinking water.

We also note that there have been no PFAS contamination events within your water supply zone, and as such we are unable to provide with copies of risk assessments in line with Regulation 12(4)(a) of the EIR, as this does not exist. With regards to the sample methodology, this is noted within our UKAS accreditation - [Schedule of Accreditation](#).

2. Microplastics

Please advise:

- **Whether microplastics are routinely monitored.**
- **Results of any monitoring undertaken.**
- **Particle size ranges measured.**
- **Polymer types identified.**
- **Sampling frequency.**
- **Planned future monitoring.**

We do not currently monitor for microplastics in drinking water as we are not required to. We do not hold any datasets with regards to microplastics in drinking water and as such cannot provide these in line with Regulation 12(4)(a) of the EIR.

All of our water treatment works that treat water from rivers, springs and reservoirs have robust treatment processes in place that are designed to remove particulates, including microplastics, from the drinking water. Conventional drinking-water systems can remove particles smaller than a micrometre through processes of coagulation, flocculation, sedimentation/flotation, and filtration. Water UK research shows that current water treatment processes remove 99.9% of microplastic particles from sources of drinking water. Raw water (untreated water in the environment) contained on average 4.9 microplastics per litre while potable water (water that has gone through a treatment process) contained only 0.00011 microplastics per litre. This was further confirmed by research published by the Drinking Water Inspectorate in 2022 [Publication of research on the Removal of Microplastics by Drinking Water Treatment Processes - Drinking Water Inspectorate \(dwi.gov.uk\)](#). We continue to be involved in research in this area, as well as development of standardised methods for future microplastic analysis.

3. Pharmaceuticals and Personal Care Products

Please provide any monitoring results relating to:

- **Antibiotics**
- **Painkillers**
- **Antidepressants**
- **Hormonal medications**
- **Veterinary medicines**
- **Personal care products**
- **Cosmetic residues**
- **Caffeine**
- **Nicotine metabolites**

We do not routinely monitor for pharmaceuticals in drinking water and as such are unable to provide you with copies of monitoring results in line with Regulation 12(4)(a) of the EIR, as these do not exist.



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Most of our drinking water comes from upland impounding reservoirs that have very few wastewater inputs, therefore our sources would be considered low risk. We are actively involved in research to understand the concentrations of pharmaceuticals in the environment and should any risks be highlighted through this work, then further investigations, including monitoring will be undertaken. No standards currently exist for pharmaceuticals in drinking water; so, water companies are not required to routinely look for them.

Additionally, it is worth noting that the water treatment works which supplies your water supply zone uses Granular Activated Carbon (GAC) as part of the treatment process, which removes organic contaminants from the raw water.

4. Endocrine Disrupting Chemicals

Please provide monitoring data for:

- **Oestrogens**
- **Synthetic hormones**
- **Bisphenol A (BPA)**
- **Phthalates**
- **Nonylphenols**
- **Any other endocrine-disrupting compounds monitored.**

We do not routinely monitor for endocrine disrupting chemicals in drinking water and as such are unable to provide you with copies of monitoring results in line with Regulation 12(4)(a) of the EIR, as these do not exist. As per our response to question 3, most of our drinking water comes from upland impounding reservoirs that have very few wastewater inputs, therefore our sources would be considered low risk. Whilst the water supply to your property does not come from an upland impounding reservoir, I can also confirm that the treatment works which supplies your water supply zone uses Granular Activated Carbon (GAC) as part of the treatment process, which removes organic contaminants from the raw water.

5. Pesticides and Herbicides

Please provide:

- **Full pesticide screening results.**
- **Herbicide monitoring.**
- **Glyphosate concentrations.**
- **AMPA (glyphosate breakdown product).**
- **Fungicides.**
- **Insecticides.**
- **Individual concentrations for each compound tested.**
- **Detection limits.**

Copies of the available pesticide sample data can be found in the second tab of Appendix 1.

6. Industrial Chemicals

Please provide monitoring data for:

- **Volatile Organic Compounds (VOCs)**
- **Persistent Organic Pollutants (POPs)**
- **Perchlorate**
- **Chlorate**
- **Chlorite**
- **Cyanide (if monitored)**
- **Solvents**
- **Petroleum hydrocarbons**
- **Any other emerging contaminants monitored.**

Copies of chlorate, chlorite, cyanide and persistent organic pollutants such as PFAS or pesticides sample data can be found in appendices 1 and 2. Please note that we do not hold any sample data for volatile organic pollutants and as such, are unable to provide this in line with Regulation 12(4)(a) of the EIR.

Solvents and petroleum compounds would be detected via Gas Chromatography-Mass Spectrometry (GCMS) analysis which is scheduled when certain water quality complaints are made. It is a semi-quantitative (estimate of approximate concentrations) method, and it gives an indication of the type and level of any contamination rather than a detailed breakdown of what was in the water at the time. We can confirm that in the past 12 months, where GMCS analysis has been carried, no organic compounds including solvents and petroleum hydrocarbons, were detected.

7. Disinfection By-products

Please provide results for:

- **Total Trihalomethanes (THMs)**
- **Individual THM compounds**
- **Haloacetic Acids (HAAs)**
- **Bromate**
- **Other disinfection by-products.**

Copies of the available data for trihalomethanes, haloacetic acids, bromate and any other disinfection by-products is available in Appendix 1.

8. Heavy Metals

Although some metals are included in the public report, I would appreciate the most recent laboratory results for:

- Lead
- Arsenic
- Mercury
- Cadmium
- Chromium
- Nickel
- Copper
- Aluminium
- Iron
- Manganese
- Uranium (if monitored).

Copies of this information is included in Appendix 1.

9. Radioactivity

Please advise whether monitoring is undertaken for:

- Radon
- Gross alpha activity
- Gross beta activity
- Tritium
- Other radionuclides.

Yes, we monitor for these parameters at our source waters, and our water treatment works. Copies of the available data is included in Appendix 1.

10. Water Treatment

Please provide details of the treatment processes used before water reaches my property, including whether the treatment works uses:

- Activated carbon
- Granular activated carbon (GAC)
- Powdered activated carbon (PAC)
- Ozonation
- Ultraviolet (UV) disinfection
- Membrane filtration
- Reverse osmosis

- **Ion exchange**
- **Advanced oxidation processes**
- **Biological filtration**

Water supplied to your property is abstracted from the River Dee and undergoes a number of treatment processes before entering the distribution network.

The treatment process includes the following stages:

- Coagulation – Ferral coagulant is added which causes particles in the raw water to combine together.
- Clarification – Microsand is added to the coagulated water to aid the removal of the particles from the water.
- Filtration - there are two stages of filtration, the first is through Granular Activated Carbon (GAC) to remove the remaining coagulated particles and any organic compounds present in the raw water adsorb to the GAC. The second stage of filtration is designed for manganese removal.
- pH correction - we either add sulphuric acid, or an alkali (caustic or lime solution) at various points in the process to ensure that the pH of the water is optimised at each treatment stage.
- Finally, phosphoric acid is added for plumbosolvency control to help minimise lead dissolution within the downstream distribution system before the water reaches your property.

Therefore, the treatment works supplying your property uses coagulation and clarification, pH correction, granular activated carbon (GAC) filtration, chlorination (via sodium hypochlorite), secondary filtration, dechlorination, and phosphate dosing for lead control before the water reaches your property. The treatment process at the treatment works supplying your property does not use, the following treatment methods or chemicals: ozonation, ultraviolet (UV) disinfection, reverse osmosis, ion exchange, advanced oxidation processes or biological filtration.

11. Chlorine

Please provide:

- **Typical free chlorine residual entering the distribution network.**

This information is included in the first tab of Appendix 1.

- **Typical chlorine residual at customer taps within Water Supply Zone Z134.**

This information is included in the first tab of Appendix 1.

- **Maximum and minimum residual values recorded over the previous 12 months.**

This information is included in the first tab of Appendix 1.

- **Whether chloramine is used anywhere within this supply.**

I can confirm that we do not use chloramine at any of our water treatment works.

- **Any internal guidance regarding chlorine optimisation.**

Internal guidance documents relating to treatment processes at each of our water treatment works contain information which is deemed to be sensitive under Regulation 12(5)(a) of the EIR, and also form part of Critical National Infrastructure. We are therefore not able to provide you with copies of these. Whilst this is the case, we can confirm that United Utilities operates a precautionary approach and seeks to keep residual treatment chemicals as low as reasonably practicable while maintaining effective treatment and disinfection.

12. Monitoring Programme

Please provide:

- **Sampling frequency for each contaminant group.**

The Water Supply (Water Quality) Regulations 2016 sets the monitoring schedules for sampling. It states the locations and how many samples we need to take from our water treatment works, storage tanks and customer properties. I have enclosed a copy of the sampling frequency for your water supply zone, for each parameter in Appendix 3.

Additionally, with regards to PFAS sampling frequency, I can confirm that the raw water source is sampled quarterly (four samples per year), with one additional sample being collected annually from each of the final water sampling taps at your supplying water treatment works.

- **Copies of the most recent laboratory reports for my supply zone.**

This information is included in the first tab of Appendix 1.

- **Any Drinking Water Inspectorate correspondence relating to my water supply.**

There have been no water quality exceedances or events in the past 12 months and as such, we are not able to share copies of any correspondence with you in line with Regulation 12(4)(a) as this information is not held. For awareness, we share water quality sample data with the Drinking Water Inspectorate on a monthly basis. A copy of this data has been shared with you in Appendix 1.

- **Any internal risk assessments relating to emerging contaminants.**

I can confirm that we do not hold any risk assessments relating to emerging contaminants. As such, Regulation 12(4)(a) of the EIR is applicable.

- **Any planned treatment improvements or infrastructure upgrades relevant to this water supply.**

We do not have any improvement plans or infrastructure upgrades planned for your water supply. As such, we are not able to provide copies of these in line with Regulation 12(4)(a) of the EIR.

We hope that this response answers your request. However, if you're not satisfied with how we've handled it, you can request an internal review. To do this, please write to us at Environmental Information Office, Haweswater House, Lingley Mere, Warrington, WA5 3LP or email us at EIRRequests@uuplc.co.uk, addressing your request to [REDACTED], and explaining why you're unhappy with our response. We'll be very happy to review your request and ensure we've done everything we can to assist you.

Any request for an internal review should be made within 40 working days of receipt of this response, and we will reply within 40 working days from receipt of the request for internal review.

Many thanks
[REDACTED]

We'd love to hear your feedback on how we handled your request! If you have a moment, please complete our short survey [here](#) – your input helps us improve our service.