

Dear [REDACTED],

EIR Reference: EIR/ID/363

Thank you for your request. We have collated all the questions you asked throughout your request and have addressed them within the below response.

Questions:

1. Who sets the UK limits for drinking water and are they up to date or truly safe for long term health, especially for people who are vulnerable?

The World Health Organisation (WHO) provides guidance on the levels of parameters that can be present in drinking water which do not cause concern for human health. The 4th edition of the drinking water quality guidelines can be accessed at [https://www.who.int/publications/m/item/guidelines-for-drinking-water-quality-4th-ed.-incorporating-the-1st-addendum-\(chapters\)](https://www.who.int/publications/m/item/guidelines-for-drinking-water-quality-4th-ed.-incorporating-the-1st-addendum-(chapters)). The WHO regularly review these guideline values to ensure that they are still appropriate. When they set the guideline values they consider a number of factors including how much water an individual may consume, how much of the parameter may be consumed through other means, for example through food, and set a limit which would not cause harm over the lifetime of the individual. The calculations also consider the individual, so it also means that it is safe for the vulnerable in society. The WHO is therefore satisfied that water that meets the guideline values is safe.

In England and Wales, the government (Department for Food, the Environment and Rural Affairs), is responsible for establishing the UK limits within UK law, and these are based upon the WHO Guidelines. In some cases, the UK standards are stricter than these guideline values. In England it is the role of the Drinking Water Inspectorate to check that the water companies supply safe drinking water that is acceptable to consumers and meets the standards set down in law. Further Information on the drinking water standards and regulations can be found on the Drinking Water Inspectorate's (DWI) website by accessing the following link [Drinking Water Standards and Regulations - Drinking Water Inspectorate](#)

2. Copper Standard and whether the 2000 ug/l concentration is safe in the drinking water supply

The copper concentration in drinking water is measured in samples taken at customers' properties. There is virtually no copper in the water as it leaves our water main. The standard is 2000 ug/l and was set in line with the WHO guideline values for drinking water. This standard has since been transposed into legislation in England and Wales through the Water Supply (Water Quality) Regulations 2016.

United Utilities is responsible for the part of the service pipe which runs from the water main to the highway boundary of your property (also known as the communication pipe). The remaining length of service pipe, from the highway boundary to the inside of your property (also known as the supply pipe) is the responsibility of the property owner. Please note that the pipe material used to provide water to your property by United Utilities, is not a good indicator of that used within your property.

The presence of copper in water supplies is typically due to contact with internal plumbing within a customer's property. Elevated concentrations can occur when customers install new pipework or taps, when water is in contact with copper pipework for a prolonged period of time (e.g. when

water is not used in a property overnight). As the internal pipework within customers' properties can vary, the copper concentration in the results will vary. However, if there are elevated results, then we will carry out an investigation. Where samples do exceed the regulatory standard, a full investigation is undertaken. This involves obtaining a second set of resamples from the property where the exceedance has occurred, along with samples from neighbouring properties. We take two samples from the initial property, one known as a 'pre flush' sample and the other known as a 'post flush' sample. The post flush sample is collected following a two-minute flush of the customers tap, this often reduces the concentration of copper in the water, as water is drawn from the water main outside of customers properties, rather than water that has been sat in internal pipework. In a small number of cases, flushing the customers tap does not reduce the copper content significantly enough (this may be due to the copper pipework being significantly corroded) in this instance, we may issue 'Do Not Drink' advice to the customers, until issues with their private internal plumbing is rectified. In this instance, we would work with the customer to try and advise them on remedial works to reduce the copper content in their water. We would then resample the property following the works to ensure that the issues have been rectified, and that water quality samples are within the regulatory limits. In summary, we take resamples, inspect the plumbing and provide advice to customers as to how they can reduce the concentration.

As with all parameters monitored for in drinking water, the guideline values are kept under review by the WHO. In addition, the Drinking Water Inspectorate have established a water quality standards advisory panel that will review the latest research and information and make recommendations as to whether the standards in England and Wales should be updated. Their latest review did not include a proposal to change the drinking water standard for copper which will remain at 2000 ug/l.

We also participate in research undertaken by UKWIR (UK Water Industry Research). They regularly review the latest information, including research on chlorine, nitrates and all other parameters, and provide up to date information to the industry. They have proposed that we respond to copper results that exceed a revised limit of 1050 ug/l. The result that you mention of 176 ug/l is well below this revised action limit. We will continue to keep abreast of the work undertaken by the WHO, the water quality advisory panel and UKWIR, all of whom have the relevant experts assessing the information, to ensure that the water we provide is safe to drink.

3. Chlorine concentration in drinking water supply

Chlorine is added to the water supply to ensure that there are no pathogenic microorganisms present. The concentration of chlorine is kept to a minimum to minimise the formation of disinfection by products; however, we must ensure that the water is adequately disinfected to protect public health.

The regulations we mention above require us to minimise disinfection by products. To be able to demonstrate this we routinely test for trihalomethanes (THMs) across our water supply zones. The regulatory standard for total THMs is 100 µg/l and all samples we have taken in your water supply zone are lower than the standard. In addition, whilst there is no regulatory standard, or requirement to monitor for haloacetic acids (HAAs) we do test for them as part of our enhanced monitoring programme. The water quality advisory panel has recommended that HAAs are included in a revision to the Water Supply (Water Quality) Regulations in due course. All the samples that we have taken in your area meet the proposed new standard. The THMs and HAAs

data for samples taken within your water supply zone from 01/01/2024 to 23/04/2025 can be found in *Appendices 1 and 2*.

4. Additional Information

a) You requested information on what scientific sources and risk assessments we rely on to define safe levels and whether we've reviewed any newer or independent studies. As we mention above, the independent experts review the latest science and toxicology data. This includes the WHO, the water quality advisory panel (which includes representatives from the UK Health Security Agency) and UKWIR who all provide guidance to world, country or industry specific audiences. As a company we follow best practice and ensure that the water we provide meets the required standards and is safe to drink.

b) We have provided information on the reasons why copper concentrations can vary between properties. This will be associated with the presence (and length) of any copper pipework or plumbing within the property. Should we receive elevated copper results from a sample, these are fully investigated and appropriate advice provided to customers.

c) Yes, we test for disinfection by products including trihalomethanes and haloacetic acids and have attached the data.

d) We have attached a copy of the postcode specific report to this email. The results are relevant to your postcode area. The attached version is specific to a moment in time (12 months to April 2025). All samples taken in your area met the water quality standards. As mentioned in previous correspondence, an up to date postcode specific report can be accessed by following this link and entering your postcode. <https://www.unitedutilities.com/waterquality> at any time.

e) We would be happy to arrange for one of our Water Quality Officers to visit your property to take some water quality samples. We have tried to contact you to arrange a convenient time to take a sample from your property, however, there has been no response. Therefore, we have arranged to visit your property on Thursday 15th May 2025 between 12pm and 4pm. Please note, arranging a sampling appointment yourself is the best approach, as it means that you can choose a date and a time that suits you. If the above appointment does not suit you, please get in touch via our call centre on 0345 672 3723 to rearrange this.

We hope that the above answers the questions that you raised in your email but if you would like to speak to a member of our Water Quality team to go through the water quality standards and requirements to demonstrate that the water is safe to drink then please let us know.

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 EIIRRequests@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.

Kind regards