



**Scottish
Water**

Trusted to serve Scotland



Your water quality explained

Your water quality

At Scottish Water we work to ensure that we deliver a clean supply of quality water for you to use in and around your home. We work around the clock, 24 hours a day, 365 days a year to provide you with high quality water and waste water services. We all use water every day, to live and work. So it's vital your water is clean and safe to use.

In Scotland, drinking water standards are set down by law in The Public Water Supplies (Scotland) Regulations 2014, which are in line with European Community (EC) requirements.

Scottish Water must meet these standards, and produce an adequate and high quality supply of water to your taps.

Every year we take samples from your taps, our service reservoirs and treatment works and carry out over 300,000 tests, to ensure that you receive consistently high quality drinking water. It's reassuring to know that over 99% of our samples pass all of our tests.

Why water is treated

Your mains water is treated to remove any impurities that may be present in the raw water source so that it complies with our strict regulations.

What's in your water

Depending on the natural environment of the water supply source, your water may contain harmless traces of some of the substances listed below.

Aluminium

Some aluminium can occur naturally in water. However in some areas aluminium may be present at low levels where it has been used as part of a treatment process to clarify and cleanse the water. The regulatory limit is set at 200 microgrammes per litre.

Fluoride

Low levels of fluoride can occur naturally in water. The regulatory limit is set at 1500 microgrammes per litre. We do not add any additional fluoride to your water.

Iron and manganese

These are both naturally occurring metals abundant in surface and ground waters.

Levels of naturally occurring iron and manganese can vary from season to season.

The regulatory limit is set at 200 microgrammes per litre for iron and 50 microgrammes per litre for manganese. There are no health risks from either of these substances and regulatory levels are set to avoid colouring, tastes and staining.

Water treatment

How we make your water safe

The way we treat your water depends on where it has come from. Surface and groundwaters do contain some naturally occurring substances, as mentioned previously. Each water source will have unique characteristics and requires a tailored treatment process to ensure that it is safe for you to drink.

A typical treatment process

1. Screening

Once the water has been piped to our treatment works it is then passed through mesh screens to remove any leaves and debris.

2. Aeration

Aeration is the process of bringing water and air into close contact to remove dissolved gases, such as carbon dioxide. The dissolved gases are then eliminated and metal salts are oxidised to allow them to filter more easily.

3. Clarification

Just prior to clarification a chemical coagulant is added. This reacts with the water to form loosely connected 'super particles' called a floc, which settles and carries any suspended particles with it. The floc also traps bacteria and absorbs colour, and as it settles it forms a sludge which is removed for disposal leaving behind clarified water.

4. Filtration

The clarified water is then filtered to remove any remaining particles before disinfectant is added.

5. Disinfection

A disinfectant, usually chlorine, is the most effective and reliable way of ensuring that your water is safe to drink when it reaches your tap. It is vital to ensure that there is no risk from water borne disease. It has been used in water supplies since 1897. Chlorine is harmless to humans at the concentrations we use in our supplies.

6. PH adjustment

pH is a scientific term used to describe the acidity or alkalinity of a substance. We have to control the level in your water supply to make sure that it does not corrode the metal pipes in the distribution system by being too acidic, or leave deposits on the pipes by being too alkaline.

Your water is now clear, safe and ready to drink. The water then flows into our vast network of pipes and to your taps.

Our investigation

Our investigation

If you contact our Customer Helpline regarding a water quality enquiry, our customer service adviser will first check to make sure your water quality enquiry is not linked to any known network activity.

If required the customer service adviser will arrange a visit from one of our customer representatives to investigate the water quality at your property.

The customer representative will start their investigation by checking your water supply at your kitchen tap or where the water first enters your property.

If a water quality issue is identified our customer representative may then undertake further investigation, the exact nature of which depends upon the specific issue, but may include:

- Flushing the water main to try and improve the water;
- Carrying out an on-site chlorine check to determine if chlorine residuals are normal;
- Taking a range of samples depending on the nature of your enquiry.

Sample results

If a field customer representative has taken a range of samples they will then be delivered to our laboratories for further analysis.

Within 10–14 days of the samples being taken a scientist in our public health team will send you a detailed letter explaining the results of the samples taken.

For more information on Water Quality enquiries visit www.scottishwater.co.uk and download the following factsheets:

- **Factsheet 1** Your water explained
- **Factsheet 2** Water quality standards explained
- **Factsheet 3** Water treatment explained
- **Factsheet 4** Colour, taste and odour explained
- **Factsheet 4a** Geosmin explained
- **Factsheet 5** Chlorine explained
- **Factsheet 6** Chloramination Explained
- **Factsheet 7** Lead explained
- **Factsheet 8** Biofilm and staining explained
- **Factsheet 9** Manganese explained
- **Factsheet 12** Hardness in drinking water

Water quality – your customer journey



Step 1 You contact Scottish Water using your channel of choice to report a concern with your water quality to your property.

Step 2 Customer representative arrives on site to investigate your water quality enquiry and to locate and determine the cause of the problem.



Step 3 Depending on the nature of the water quality complaint the customer representative may take a variety of water samples and a chlorine residual from the kitchen tap (or where the water first enters the property).

Step 4 The customer representative will then deliver the samples to the lab for analysis.



Step 5 You will receive a letter (usually within 14 days) stating the results of the samples taken.

Frequently asked questions

After an interruption to my water supply why is my water sometimes white in colour?

White water often occurs as a result of a disturbance in the water network i.e. when air enters the network from a burst main. The air dissolves and forms tiny bubbles giving a milky appearance to the water. This does not pose any health risks.

If you fill a glass of water, you should see the air clear from the bottom up as the bubbles rise to the surface.

Your water is still safe to drink and this issue will generally improve within 24 hours. If the problem persists, please contact our **Customer Helpline** on **0800 0778778** and we will investigate this further for you.



Why is my water sometimes discoloured?

If the water from your cold kitchen tap (or any other mains tap) suddenly becomes discoloured, this could be because some maintenance or repair work is being carried out on our network in your area.

Your water may also be discoloured if there has been a reversal of flow, for example, water redirected from a neighbouring area. There could also be a sudden increase or decrease in your

flow, for example, if the Fire Service needs water to put out a fire, or a pipe has burst. This change in flow could lead to some scouring effect within the mains which can increase both the colour and particles. This is normally only temporary and will disappear after a short interval. To clear, run your cold water tap for a short period of time. If problem persists contact our **Customer Helpline** on **0800 0778778**.

Why is my water sometimes blue in colour?

Your water may sometimes appear to have a slight blue colour if it is viewed against a white background e.g. in a white bath. This may be because your water is from a high quality treatment works or is from a high quality spring or borehole with very little or no organic content (the same effect can be seen in glaciers, where these can appear blue and white). This is normal, and is typical of water free from natural colour.

What should I do if I am concerned about the water quality of my internal storage tank?

If you have any concerns about your internal storage tank we would always recommend the use of a licensed plumber.

Scottish Water supports and promotes the WaterSafe scheme. WaterSafe is a dedicated online search facility to help customers to find the nearest qualified plumbing and heating professionals in their area.

To find a licensed plumber in your area, visit WaterSafe at **www.watersafe.org.uk**

Why am I able to taste and smell chlorine in my water supply?

Chlorine has been used for over 100 years for disinfecting water supplies. The concentrations we use in our supplies are harmless to humans.

Some customers are more sensitive to the taste of chlorine than others. You may also be more aware of the taste and smell if:

- A water mains near you has been replaced. This is because the new main does not 'absorb' chlorine in the way the old mains did.
- You live close to a service reservoir/tank where secondary chlorination is used to increase the residuals in order to keep the water safe.
- You live close to a treatment works

If you smell or taste chlorine in the water from your tap, you can run some water from your kitchen tap into a clean jug. Cover the jug with a clean cloth and leave it in the fridge for a couple of hours before you drink it. Leaving the water to stand for some time helps the chlorine dissipate from it thus reducing the residual level of the chlorine.

Always use the water stored in the jug within a 24 hour time period.



What if a sample fails?

With over 99% of our samples meeting the required regulatory standards, we provide a quality supply of fresh drinking water straight into your home. This means you have a reliable supply of fresh drinking water on tap to help keep you hydrated throughout the day. If for any reason water quality does not meet the high standards we expect, we investigate all of these situations thoroughly and action is taken to resolve the issue.

We report all water quality test failures to the Drinking Water Quality Regulator (DWQR). It is DWQR's role to enforce The Public Water Supplies (Scotland) Regulations 2014.

On DWQR's website it is possible to check the quality of the water where you live. **www.dwqr.scot**



The following units of measurements have been referred to in this document:

1 microgramme per litre ($\mu\text{g}/\text{l}$) is 1 part per billion or thousand million

Keeping up to date and getting in touch

We are always working so the cycle never stops – find out more about Scottish Water, our services and keep up to date with what we are doing in your area:

Visit



www.scottishwater.co.uk

E-mail



help@scottishwater.co.uk

Follow us



facebook.com/scottishwater



[@scottish_water](https://twitter.com/scottish_water)

Call

Customer Helpline free 24/7



0800 0778778



How did we do? Are you impressed with the service you received? Did one of our team go the extra mile for you? Nominate them for a Scottish Water gem Award and give them the recognition they deserve. Visit www.scottishwater.co.uk/gem or call our Customer Helpline on **0800 0778778** to make your nomination.



Alternative formats of this leaflet can be made available free of charge. For information on Braille, large print, audio and a variety of languages, please call our Customer Helpline.

If you have a disability, medical condition or other reason where you may need additional assistance from Scottish Water then please contact us and we can add your name, address and requirements to our confidential Priority Services Register.

We record all calls for quality and training purposes.