

WATER TASTE AND ODOUR ISSUES

Content within this document is prepared by Water Authorities throughout the UK. All information is readily available via the internet under local water authorities' advice notes, taste and odour issues.

TASTE & ODOUR ISSUES

There are several possible causes of unusual tastes or odours in water:

TCP Taste / Metallic

TCP tastes can occur when the internal stop tap has been operated to carry out any work, or if the tap is operated after many years of not being used. Washers can start to degrade over time and cause TCP taste and odour problems. However this applies more to properties where the internal stop tap is more than a few years old and is seldom or never used.

Since TCP like compounds are formed when the chlorine reacts with plastic or rubber, this sometimes means that the TCP taste is more noticeable when the Chlorine level is highest. Although Chlorine is added to water continually a demand for water can mean that it may sometimes have a higher level of chlorine in it, for example, in the morning or when you get home from work.

Filters

Many filters are ineffective at removing TCP like compounds from water. Although they can remove the Chlorine they are unlikely to remove all traces of the TCP taste. The best course of action to eliminate the TCP taste, is to follow these steps.

Advice note

1. Check your stop tap (if it has been used) Fitting a secondary stop tap (Internal Stop taps - simply turning a stop tap a tiny amount can expose a fresh surface of rubber even if the tap has not caused a problem recently).
2. Flush through your system and ensure all is clear
3. Rinse out your aerator on your tap to avoid debris settling in.
4. Fit a non return valve.
5. Check your plumbing for washing machines, dishwashers as if these are ill fitted can cause the issue also.
6. Check all your taps for wearing of rubber seals as although the taste may be from one particular tap it can be a matter of another tap affecting the whole of the system, especially if other taps in the home are older.

Chlorine

Chlorine is used in the treatment process to disinfect the water and kill bacteria. The levels of chlorine are harmless in the quantities which are used.

A small quantity of chlorine remains in the water after treatment to ensure that the treated water system remains disinfected from the treatment works to your tap. You may occasionally experience a slight smell or taste of chlorine coming from the water in your taps. This does not mean that there is anything wrong with the water.

An easy and safe way to overcome the taste and smell of chlorine in water is to cool the water. Fill a plastic water bottle and cool it in the fridge before drinking.

Chlorine is also commonly noticed in swimming pools, where it is used in much higher concentration as a disinfectant. The levels are entirely different from the amounts used in the water treatment process.

FAQ

I have moved house – the water tastes and smells different

The makeup of water (including the levels of chlorine) varies from area to area and this will mean that the water may taste or smell slightly different from the water that you were used too .

Another reason may be due to our having to alter the treatment process slightly depending on the weather, demand and time of year. These factors all affect the levels of chlorine that we must add to the water which in turn will slightly affect the taste and smell.

My water tastes salty

Incorrectly installed water softeners, fitted to washing machines for example, can cause salty tastes and contaminate the drinking water supply. Do not drink water from water softeners because it contains high levels of salt – you should always use a tap with unsoftened water for cooking and drinking.

Is it my plumbing that is causing the problem?

One of the main factors affecting the taste and/ or odour of water is the customer's own internal plumbing.

Water is highly susceptible to materials and chemicals - all of which can affect its taste. The most common problems are detailed below:

New copper pipe work – can cause a metallic or bitter taste

Plastic pipe work and plastic kettles – can cause a plastic/ chemical smell or taste.

Tap washers - can cause a rubbery or metallic taste

Tap washers, plastic pipework, and particularly the hoses used to connect washing machines or dishwashers - can cause a disinfectant or 'TCP' type taste.

Note that plastic pipe work is vulnerable to contamination from chemicals and solvents. If your water tastes of petrol, a chemical or solvent the cause may be due to a plastic water pipe on your property being contaminated and allowing the chemical or solvent to bleed through into the water. You should investigate sources of potential contamination (eg your oil tank) and obtain further advice from the Company.



Do not drink or cook with water from bathroom taps or the hot water system. This water usually comes from a storage tank in the loft and is not as fresh or safe as

water that comes directly from the mains. You should use cold water from the kitchen tap for all drinking and cooking requirements.

If the taps have not been used for a while, if you have been on holiday for example, you may find a metallic taste from the pipe work and possible discolouration in the water. Run the tap clear to get rid of water that has been standing in the pipes, before drinking.

How will I know if my plumbing is causing the problem?

You can get advice from a professional plumber to find out if any taste, odour or discolouration problem is due to your own household plumbing.

The water coming out of the taps is discoloured

Depending on the colour of the water this may well be a problem with your internal plumbing.



If the problem is coming from all cold taps except the kitchen cold tap it is likely that the water is being affected after it has entered your property. If you have a cold water storage tank you should check to ensure that nothing has fallen into it (there should be a fitted lid with air vents to prevent this from happening).

If the problem is also affecting the cold water kitchen tap (which should be fed directly from the mains) then it is likely that water is being affected before it reaches your internal plumbing.

The water is cloudy

White and / or cloudy water can mean one of two things.

If the water clears from the bottom to the top, that simply means there is some dissolved air in the water – this is not a quality issue.

The water is a reddish/brown colour

Reddish or brown coloured water is most commonly associated with iron contamination, generally from corroded steel and iron pipe work.

If the corrosion is on your pipe work then this will need to be addressed by your plumber.. Before engaging a plumber to investigate your pipe work contact your local water board who can assist you and establish the source of the problem.

The water is green in colour

This is most commonly associated with the corrosion of copper pipe work. In this case the cause of the problem is almost certainly due to the corrosion of internal pipe work which is a job for your plumber. Chemicals and minerals in the water

Aluminium

Aluminium occurs naturally, both in the environment and at low levels in most waters and also forms an ordinary part of the water treatment process. Treated water actually contains less aluminium than untreated water. The use of aluminium in the treatment process is quite safe.

You will absorb more aluminium from food and cooking utensils than from water, which provides only a fraction of your daily intake.

Lead

Water supplied by the Company must comply with the quality parameters set down for lead.

Occasionally, the concentrations of lead in water may exceed these levels and this is normally due to Customers' internal pipe work being made of lead.

Nitrates

Nitrates occur naturally at low levels in most water. Additional levels of nitrate can also arise in areas where nitrogenous fertilisers are used (ie agricultural areas). In Jersey the extensive use of nitrogenous fertilisers in the Potato industry can result in higher than normal levels of nitrates in untreated water collected in the reservoirs for treatment. This pollution of the Island's waterways can result in higher than normal levels of nitrates in the treated water supplied by the Company.

Hard water / soft water

'Hard' or 'soft' water relates to the percentage of dissolved minerals in the water. Rain water is naturally soft and contains very little dissolved matter, but as it seeps through the ground it picks up various minerals from the soil and rocks that it passes through.

Hard waters are most often found associated with chalk and limestone areas, which contain calcium and magnesium compounds. Soft waters are associated with impermeable rocks such as granite. In general surface waters such as streams are softer than ground water such as boreholes, as there has been less contact with the minerals present in the earth.

The problems associated with hard water include pipes furring up and scale which collects in kettles, causing them to work less efficiently. This is normal and does not mean there is something wrong with the water.. This is manganese which occurs naturally in local waters, which although not pleasant to the eye, is totally harmless.

Appliance settings

More soap is needed to create lather in hard water areas. To overcome this, dishwasher manufacturers often recommend the addition of salt to soften the water, and so enable less soap to be used, which is better for the environment.

Waters are classified using the following description.

Hardness as mg CaCO ₃ /l	
0-50	Soft
50-100	Moderately soft
100-150	Slightly hard
150-250	Moderately hard
250-	Hard
>350	Very hard

The hardness of the mains tap water in is classified as slightly to moderately hard and tends to fall in the following range (hardness is often quoted in different units by dishwasher manufacturers so the most commonly used are also listed).

108-179	mg/l as CaCO ₃
7.7- 12.8	as Clarks degrees
6.4- 9.5	as German degrees
10.8 - 17.9	as French degrees

Should I use a water filter?

Where customers decide to install or use any kind of filtration system, including water filters and jugs, care and attention to the instructions are very important. All such appliances should be used in strict accordance with the manufacturer's recommendations to avoid bacteriological growth and therefore contamination of the water which passes through these filters.

If the filter is not used and replaced in strict accordance with the manufacturer's instructions bacteria can form on the filter and contaminate all water passing through it. This can result in food poisoning.