



Chlorine Odor Facts

If the smell of your tap water gives you flashbacks to summers spent by the pool, it's likely that there's high levels of chlorine in your drinking water. Treatment plants throughout the U.S. use chlorine to neutralize bacteria, parasites, viruses, and assorted harmful microorganisms before drinking water is distributed to households. Even though chlorine is a common additive, it's important to identify the reasons why your water is emitting a noticeable odor so that you can fix the issue and get back to enjoying crisp, scentless water again. This scent can sometimes also be recognized as a bleach smell.

Quick Facts

If your tap water has a chlorine smell it's likely down to the fact that municipal water plants use chlorine to eradicate waterborne germs like e.coli and the norovirus.

The Environmental Protection Agency (EPA) requires treatment facilities to maintain chlorine levels that are no greater than 4 mg/l, as these are safe levels for human consumption. The City of Streetsboro maintains Chlorine levels between 0.50 mg/l and 1.60 mg/l which is far below the allowed upper threshold of 4.0 mg/l. *Note Portage County Water Resources (PCWR) in accordance with EPA treats the water the city purchases. However even though the city does not treat the water, the Water Department is still responsible for performing daily Chlorine Testing in accordance with EPA Regulations.*

The strength of this chlorine scent will usually depend on the distance of which your public water source is from your household. However the smell can also be affected on the temperature of the water, as in the colder months, the colder water can hold on to free chlorine for longer periods of time.

Over time, chlorinated water will naturally lose its smell, but if preferred, using a filtration system will eliminate the odor immediately. However this also reduces free chlorine to protect against bacteria and reduces other chemicals that protect the water system such as orthophosphates used to reduce leeching of Lead and Copper that at higher levels can cause health issues.

What Causes The Smell?

The EPA mandates that a certain level of chlorine be present in "Public Water Systems" (PWS) which is known as a "residual." If the residual exceeds 1mg/l, a discernible smell will be present.

There may be several reasons why a water supply source has a chlorine residual higher than 1mg/l. For instance, heavy chlorination is required for water supplies that are transported over extended distances in order to compensate for dissipation during the course of the journey. The effect the long distance has on transported water is even worse during warm weather, thus treatment facilities often raise chlorine levels accordingly throughout the year.

What Should You Do?

It is important to note that while a chlorine smell is certainly unpleasant, exposure to levels below 4mg/l do not pose a risk to human health. However, it's relatively easy to eliminate the smell with two solutions: time or a carbon water filter.

Though the passage of time will cause chlorinated water to lose its smell, a more immediate resolution is to utilize a water cooler with carbon filtration built-in. This can effectively reduce the levels of chlorine odor from water, while preserving its quality.

Improving your Drinking Water

Although chlorine helps to keep our water free of bacteria, over 316 contaminants have been detected in water reservoirs across the U.S. As such, it's vital to get your water tested or find alternatives to tap water if you suspect that your water quality poses a threat to your health or has an off-putting taste or aroma.

"Our mission at the City of Streetsboro Water Department is to deliver high quality of potable water to our businesses, residents and transients, at a fair price, and our employees to provide professional, courteous and prompt service".