

# City of Monroe

## Water Resources Department

### Drinking Water Quality - Taste and Odors

#### **What water taste and odors might be in my drinking water?**

Sensitivity to taste and odor (T&O) in drinking water varies greatly from person to person. Taste and odors are normally aesthetic concerns and not related to the health or safety of the drinking water. Activities in the home, including home appliances and plumbing, can also impart T&O in the water that is not in the City water supply.

**Chlorine** – Chlorine is added to drinking water during the treatment process to kill bacteria and ensure the water is safe to drink. We carefully monitor the water throughout the City to make sure chlorine is added at the proper amount. While there is no health implication of chlorine taste, if you find it unpleasant, you can fill a container with water and chill in the refrigerator overnight. Adding lemon can also help.

**Sulfur or rotten egg** – This T&O is most commonly caused by bacteria growing in your sink drain or water heater and may not be in the drinking water supplied to you. Make sure you only drink water from the cold faucet. Clean your sink drains regularly by pouring bleach down the drain.

**Metallic** – These tastes are typically due to dissolved minerals such as iron and copper and generally are not a health concern. Taking certain medications can distort a person's sensitivity to metallic tastes.

**Earthy-Musty-Moldy** – These T&O's can be related to seasonal algae blooms in the City's lake supplies. See reverse side for more information about earthy-musty-moldy T&O's.

#### **If I sense a taste or odor in my drinking water, does it mean it is unsafe to drink?**

Not necessarily. The City's drinking water must meet stringent federal and state standards before it can be delivered to our customers. These primary drinking water standards require that we monitor over 150 contaminants and conduct over 2,000 water quality tests per year. All tests are completed by certified laboratories. We are required to have state-certified water treatment plant operators on duty every minute of every day to ensure your water is safe. By law we must publish an annual customer confidence report to show our compliance with these standards. Our latest report can be viewed at [www.monroenc.org](http://www.monroenc.org). Any time you have a water quality concern, we can be reached at (704) 282-4601, 24 hours a day.

#### **What has the City of Monroe done to improve drinking water quality?**

The City's Water Resources Department has been proactive in making changes and improvements to better the drinking water. The following timeline shows actions taken:

- 2000 - Installed an in-lake aeration system in Lake Twitty to pre-treat the water entering the water treatment plant (WTP). This helps control algae and avoids stagnation in the lake water.
- 2002 - Upgraded our treatment process chemicals to enhance removal of organic material.
- 2003 - Funded a full-time chemist at the WTP to optimize water treatment and water quality. Expanded our program to treat in-lake algae blooms using copper sulphate.
- 2008 - Improved and expanded the treatment process of powdered activated carbon (PAC). PAC is a recognized technology for safely removing compounds that cause taste and odors.
- 2012 - Implemented a vegetative buffer program and policy for all City lakes to help control nutrients and improve water quality.
- 2013 - Formed a taste and odor testing panel using people across the City. Panel members sample Monroe tap water each week and provide a scored assessment of water quality.
- 2017 - Conducted staff training and enhanced our work order tracking system to ensure each water quality complaint is thoroughly and scientifically investigated.

### **What can I do in my home to improve water quality?**

When water flows from the treatment plant to your tap, many factors in the distribution system and household plumbing can affect your water quality. Some things you can do to improve overall water quality and to decrease taste and odor issues are:

- Run cold-water taps before using water for drinking and cooking. When water sits in your pipes for long periods, the water quality can decline. For drinking, fill a container with water and chill in the refrigerator overnight. Adding lemon can also help.
- Do not use hot tap water for drinking or cooking. Hot water dissolves contaminants and may contain metals, sediment, and bacteria that build up in the water heater.
- Routinely clean faucet aerators and replace them as needed.
- Drain your water heater annually. Sediment, bacteria and metals can build up in the water heater tank and can impact the overall household water quality and pressure.
- If you have a home filter system or refrigerator water filter, routinely replace water filter cartridges. Bacteria and metals can build up in filter cartridges. Be sure to follow manufacturer's instructions.

### **What about websites like EWG.org that question the City's drinking water quality?**

Websites such as EWG display certain water quality data for Monroe that we have submitted under our federal and state compliance requirements. We and many other water utilities across the United States fundamentally disagree with how EWG portrays the information and the water quality standards they reference. The bottom line is that Monroe meets or exceeds all federal and state drinking water standards.

**Important to note: The EWG site is linked to home water filter system sales.** We do not believe it is necessary for any Monroe customer to buy a home filter system to ensure the water is safe. However, if you choose to purchase a water filter system for aesthetic (non-health) reasons, make an informed decision by using information on our website and make sure the system is certified by NSF International to meet your needs.

### **What about earthy-musty-moldy taste and odors?**

During the summer and fall, City lakes experience high organic content, low alkalinity, and high temperatures. These elements, combined with nutrient over-enrichment caused by stormwater runoff from urban and agricultural sources, create increased algae growth. Algae is removed in the treatment process but leaves behind two by-product compounds (Geosmin and MIB) in very small trace amounts. Geosmin and MIB are difficult to remove from treated water and can be detected by some people in extremely low concentrations (parts per trillion). One part per trillion is so small, it is like imagining one second out of 31,000 years of time or one inch in a journey circling the earth 633 times! Many people are not sensitive to these compounds, but some are. **It is important to note that these compounds have no negative health implications and only relate to the aesthetics of the water (taste and odor).**

The City is proactive in treating our drinking water to reduce Geosmin and MIB as noted above and continues to look for improvements in addressing this challenge. Customers who are sensitive to the earthy-musty taste and odors should chill their water in the refrigerator overnight before drinking and also follow the recommendations spelled out above related to home plumbing and appliances. A home water filter might improve the taste of water for sensitive customers during this seasonal time period. Consult NSF International to make an informed decision.

### **How can I get involved or get more information about my water quality?**

Residents concerned about the quality or safety of their water can contact the Water Resources Department at (704) 282-4601. Consider volunteering to participate in our weekly taste and odor testing panel and call the above number if interested. We encourage you to visit our website ([www.monroenc.org](http://www.monroenc.org)) for water quality information and links to more information.