Taste, Odor and Appearance Issues

TAP INTO QUALITY

Introduction

At times, generally the months of July through October, water can have an unusual taste, odor or appearance. Aesthetic characteristics generally do not pose a public health threat. There are ways to improve the aesthetics of the tap water you receive in your home.

The first step in solving a taste, odor or appearance issue is to identify whether it originates from the household plumbing or the water utility. One way to tell is to ask others in your neighborhood if they have a similar problem. Another is to contact your water utility.

Below are typical concerns, their most common causes, and what you can do about them. If you receive your water from a public water system and you have any of these problems, or if they don't clear in the suggested time frame, contact your water utility.

Taste and Odor Issues

Chlorine, chemical or medicinal tastes or odors are usually caused by the addition of chlorine to the water by your public water system, or the interaction of chlorine with a build-up of organic matter in your plumbing system. This is not a health threat. However, if you find the chlorine taste to be unpleasant, you can fill a container with water and chill it in the refrigerator before use. This will allow the chlorine taste and smell to dissipate.

Moldy, musty, earthy tastes or odors are commonly caused by seasonal occurrences when organic matter such as plants or algae are more prevalent in in lakes, reservoirs, and the canals that deliver the water to water treatment facilities. These things are removed as the water is treated but harmless residual odors will remain in the water (in much the same way as the aroma of roses will remain in a room long after the roses have been removed). With current treatment technologies, the odor causing compounds are difficult to remove. The detection of residual odors is dependent upon an individual's olfactory sensitivity. Many people may never detect them, while others who are sensitive may detect the musty/moldy taste and smell at levels below instrument detection levels.

To problem-solve this issue, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass and smell it. If the water has no odor, then the likely problem is the sink drain. The drain can be cleaned by pouring bleach in the drain allowing it to stand for a few minutes then flushing with water.

If the water does have an odor, the source could be the trace odors from the organic matter in your drinking water mentioned above. Although harmless, it can affect the taste and smell of your drinking water even at very low concentrations. The best way to reduce taste and odor is to run the faucet for several minutes, put some water in a container, and refrigerate it before drinking. You may also consider installing a certified water filter or other treatment device.

If you choose to purchase a device that will provide additional treatment, we suggest you contact one of the following agencies to determine that the device you select will meet your needs.

- **National Sanitation Foundation**, NSF independently tests home water treatment devices. "Consumers can be confident that home water treatment devices that carry NSF certification will actually reduce the contaminants as claimed by the manufacturer on the product label. In addition, you can also be assured that the product itself is not adding harmful levels of contaminants to the water."
- Arizona Water Quality Association (480) 947-9850. This is a non-profit organization that specializes in secondary water treatment devices.

If the taste or odor occurs at every water faucet on the property, the cause could be the water supply. If it occurs only in certain faucets, the problem is with the fixture and pipe specific to those faucets. If the problem goes away after running the water for a few minutes, the problem is somewhere in your plumbing system.

Many of the Valley cities have participated in studies with Arizona State University (ASU) specific to seasonal taste and odor occurrences and how to alleviate them. Another project with ASU is still under way which will provide recommendations to water providers about treatment based on regular monitoring.

Sulfur or rotten egg taste or odor is most commonly caused by bacteria growing in your sink drain or water heater. But, in some cases, this smell is caused by naturally occurring hydrogen sulfide. To problem-solve the cause, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass and smell it. If the water has no odor, then the likely problem is bacteria in the sink drain. The drain can be cleaned by pouring bleach in the drain allowing it to stand for a few minutes then flushing with water.

If the water does have an odor, it could be your water heater. This occurs if the hot water has been unused for a long time, the heater has been turned off for a while, or the thermostat is set too low. Contact a licensed plumber to remedy this problem. If the drain or water heater have been ruled out, and the odor is definitely coming from the tap water, immediately contact your water utility.

Metallic taste is usually due to minerals, such as iron or copper that can leach into water from pipes. Metals such as zinc and manganese are less common causes. Only a certified laboratory can analyze the water to determine if metals are present. Certain metals may have human health effects if consumed over long periods of time. Additionally, some medications prescribed by doctors can cause a patient's taste and odor senses to be distorted to the point where water and other food and beverage items taste metallic. If you think medications may be the issue, check with your doctor of pharmacist, or if you believe it is the water, then have your water analyzed by a certified lab, or contact your water utility (link to contacts page).

Petroleum, gasoline, turpentine, fuel or solvent odors are rare and potentially serious. While water distribution systems are protected from underground storage tanks, it is possible, however unlikely, that a leaking storage tank may be near your water supply. If you suspect your water is contaminated, immediately contact your water utility (link to contacts page).

Appearance Issues

Brown, red, orange or yellow water is usually caused by iron rust. Rusty water can be caused by galvanized iron, steel or cast iron pipes, or an aging hot water heater found in either a home or business, and on rare occasions, can be coming from the water main. While unpleasant and potentially damaging to clothes and fixtures, iron in drinking water is not a human health concern. However, if this condition persists, you should contact a licensed plumber.

Milky white or cloudy water is almost always caused by tiny air bubbles trapped in the water. If your water is white or cloudy, fill a clear glass with water and set it on the counter. If the water starts to clear at the bottom of the glass first, then this means the trapped air is making its way to the top of the glass. This situation is not a health threat and should clear in several minutes.