**Drinking Water Discoloration**

The most common questions people have about their drinking water are:

* + Where does the discoloration come from and is my water safe?
	+ How is the city dealing with the discoloration?

Naturally occurring minerals (primarily calcium carbonate, with iron and manganese) flowing with the water are typically to blame for water discoloration. These minerals, which are heavier than water, settle in water pipelines when water usage is low — especially during winter months. When the water flow and pressure through the water pipes increases again (due to irrigation, construction, etc.) the minerals are stirred up and flow out of your faucets when you turn on the tap. Discolored water results when water traveling through the water mains reaches high enough velocities, or changes direction, to stir the sediment lying in the bottom of the water mains. Carson City performs a systematic flushing of the water mains in the spring and as needed throughout the system to remove these sediments that cause discoloration. This year has been particularly challenging as the water flow within the system is different due to so many people staying home more, schools being closed, and other effects of the pandemic on how people move around town and use water.

When the discoloration is due to minerals such as iron and manganese, it remains safe to drink. It does look bad, however, and not wanting to drink it is perfectly understandable. Discoloration doesn’t necessarily mean your water has become unhealthful. Many sources of tap water discoloration are listed in the Environmental Protection Agency’s “secondary standards,” which recommend maximum levels for 15 contaminants that may affect color, odor, or taste – but won’t hurt your health.

If your water is milky or white opaque, let it sit in a glass until bubbles rise. If the cloudiness disappears, it was caused by air and is not a health concern.

If your water is discolored, such as by minerals, run cold water from the tap to see if it clears (it may take a while). You can help clear your house of discolored water by running the cold water tap nearest your water meter first, until clear, then moving back through the house away from the meter until the water all runs clear. It is best to avoid using hot water until the discolored water is removed from your house to avoid pulling it into your water heater tank. Avoid running water through filters until it is clear to prolong the filter life. Please avoid washing light colored laundry while your water is discolored as it may stain.

It is recommended that you clean out your water heater tank at least twice per year, according to the manufacturer’s instructions, normally found in the owner’s manual for the heater. This will keep the tank flushed free of the sediments that can cause spots on dishes, odors in hot water, and discolored hot water. If you no longer have the owner’s manual most can be found on-line by searching for the manufacturer and model of heater. If you are unable to clean out the tank yourself most plumbers will do so for a small fee.

Your phone calls and communications with us help track any discoloration in the system and more clearly define the problem so we can clean out the system. Our staff responds to reports of discolored water by low flow flushing in the area to remove the discolored material from the system. We will continue to perform the systematic flushing in the spring from one area to the next, to flush out any sediments that may have built up over the winter during lower water use times. We will also flush selected areas as needed in response to discoloration found in the system. Our flushing program is constantly being evaluated and updated to respond to conditions in the system.