



## If Your Tap Water Appears Brown, Red, Orange, or Yellow in Color

Brown, red, orange, or yellow water is caused by rust in the water. The different colors can be attributed to varying chemical oxidation states of the iron (rust) and by varying concentrations of the rust in the water. There are two major sources that can cause water to be rusty: 1) the Water System's water mains or 2) the water pipes in your house, apartment, or business.

The Water System's annual flushing program normally removes any sediment accumulated in the mains serving the majority of our customers. However, in areas of low flow where aging pipes contribute rust and sediment, discoloration of the water can occur.

If an unusual flow of water through the main occurs, this sediment can become disturbed and temporarily suspended in the water causing a brown, red, orange, or yellow color. Unusual water flows are commonly caused by a broken water main, the Water System repairing/replacing a water main, a fire hydrant being knocked off its base due to an automobile accident, or by someone operating a fire hydrant nearby. This type of disturbance usually lasts for approximately two to four hours after which time the sediment will settle out and the water will clear. **This discolored water is not a health threat. If you, your children, or your pets happen to drink some of the discolored water, it will not make you sick.** As the rust can stain clothing, it is best to wait several hours for the water to clear before doing any laundry. Also, do not use any hot water as you may draw this rusty water into your hot water tank, which may have to be flushed out later. If you were doing laundry when the water became discolored, rewash the laundry later when the water clears. Use a rust stain remover or regular detergent. **DO NOT USE CHLORINE BLEACH.** Chlorine reacts with iron and can form a permanent stain. **Run cold water only and use outside hose bibs or utility sinks to run water. Generally, do not use your interior faucets that may have an aerator.**

The major cause of brown, red, orange, or yellow water is rusty water pipes in your house, apartment, or business. There are two commonly used water pipes - copper and galvanized steel. Copper pipes are usually considered to be better because they last longer and generally do not significantly affect water quality as they age. They are also more expensive than galvanized steel pipes, so the steel pipe is still often used. On average, galvanized steel pipes will last about 20 years before showing signs of corrosion (rusting). Well-made galvanized pipe can last as long as 40 years, while poorly made pipe can show signs of corroding in just a few years. If old, rusty pipes are discoloring your water, the only permanent solution is to replace them. Replacing only some of the pipes can improve the problem, or it can actually make it worse. If some of the old steel pipes are replaced with new copper pipes and the two different metals are connected directly together, the copper can cause the steel to rust even more than before the replacement. This process can be stopped with the use of proper dielectric coupling between the two dissimilar pipes. Consult an experienced seller of plumbing materials or an experienced plumber. Water that is being discolored by rusty pipes is not a health hazard, however, it is an indication that pipes are corroding and they can eventually begin leaking.

If you are experiencing discolored water, run cold water from an outside hose or utility basin. Allow the water to run for ten to fifteen minutes, turn the water off, and then allow the water to rest for one half hour to one hour. If the water is still discolored, contact the **Public Utility Office at 440-326-1570**. If you call after hours, please leave a message that includes your name, address, telephone number, and a brief description of your problem or request. We will return your call at the earliest opportunity.