**Color, Taste, and Odor: What you should know**

From time to time the MassDEP receives consumer questions or complaints regarding the look, taste or the odor of drinking water. Listed below are common problems with drinking water and their most common causes. Please note that a particular problem in your drinking water may be the result of a cause not listed here; the only way to confirm a cause is to have a certified lab analyze the water and discuss the results with drinking water professional. If you receive water from a public drinking water system it is important to contact the Public Water Supply (PWS) before having a laboratory analyze the water. Information on [private water testing](http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/qalabjp.doc) is available.

Filtering or treating the water may remedy persistent problems; however MassDEP does not recommend filtering or treating your water supply if your water is supplied by a MassDEP-approved PWS. MassDEP also does not regulate or recommend specific treatment systems for private home use. If you decide to use a filtration or treatment device in your home, the Department strongly encourages you to contact National Sanitation Foundation (NSF) for a list of approved devices. If you purchase a treatment device for private home use MassDEP also strongly recommends that it is maintained and provide active maintenance according to the manufacturer's instructions. Failure to maintain the equipment properly may make treatment ineffective and/or may create the potential for contamination.

Common problems with drinking water:

* Color problems
* Particles in water

**Brown, Red, Orange or Yellow Water**

Brown, red, orange, or yellow water is usually caused by rust. 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.

Rusty water occurs from sediment in the pipes or rust from the inside walls of the water mains. The rust can be disturbed and temporarily suspended in water with unusual water flows from water main breaks or maintenance or by flushing of a hydrant. This discolored water is ***not*** a health threat. When the water is discolored it is recommended to either not wash laundry or to use a rust stain remover or regular detergent but not chlorine bleach as it will react with the iron to form a permanent stain.

The following are some common characteristics of a water main disturbance:

* The water was clear earlier but suddenly became discolored.
* Only the cold water is discolored.
* The water is discolored at all of the water faucets in your home and does not clear or improve after the water has been run for several minutes.

Iron can also occur naturally in a well supplying a public water system. The presence of iron can be confirmed through analysis of the water. Another possible cause of brown (or black) water is manganese, the presence of which can also be confirmed through analysis.

**Particles in Water**

Brown or black particles are usually small pieces of rusted steel that have broken off the water mains. These particles are very hard, irregular in size and shape, and can be several different colors (including black). They consist of mostly iron and are not a health hazard but they can be a nuisance if they clog your washing machine screens, shower heads, and/or the screens at the ends of your faucets (called aerators). If the water is clear with these particles in it, they probably came from the inside of your pipes. If the particles come from the water mains, the water will usually be discolored for a few hours as well