

## Water Treatment - Commonly Asked Questions



**What are Total Coliforms?** Total coliforms are usually harmless bacteria that are naturally present in the environment. Because total coliforms and more harmful bacteria can exist in the same environment, the presence of total coliforms is used as an indicator that potentially harmful bacterial may also be present.

**What is *E. coli* bacteria?** *Escherichia coli* (*E. coli*), is a type of fecal coliform bacteria, commonly found in the intestines of warm-blooded animals. The presence of *E. coli* in water is a good indication that sewage or animal fecal materials have contaminated the water supply and suggest an increased likelihood of harmful pathogens in the water. For additional information visit the [United States Environmental Protection Agency website](#).

**What is pH?** pH is the measurement of the acidity or alkalinity of a solution, with a scale of 0 to 14. The ideal pH level of drinking water is usually between 6 to 8.5, while typical rainwater is usually 5.6.

**What is Turbidity?** Turbidity is a measure of the cloudiness of water, and is a good indicator of the effectiveness of the water filtration system. Dissolved air bubbles, created from the pressure of the water system, may also create a temporary cloudy appearance to tap water until the trapped air bubbles dissipate.

**How hard is Great Falls water?** Great Falls water is classified as moderately hard, ranging from 127 to 167 milligrams per liter (7.4 to 9.8 grains per gallon) of calcium carbonate. Some households may install water softeners as a matter of personal preference, but is generally not necessary.

**Why does my water smell like "rotten eggs"?** Sulfur bacteria produces a slime which can promote the growth of other bacteria, such as iron bacteria. This bacterial slime may appear white, grey, black or reddish brown if associated with iron bacteria, and may clog plumbing and irrigation systems.

Hydrogen sulfide gas (H<sub>2</sub>S) gives water a "rotten egg" taste or odor. H<sub>2</sub>S can occur naturally in groundwater; can be produced by sulfur bacteria in groundwater, wells, or in water distribution systems; can be produced by sulfur bacteria or chemical reactions inside water heaters; and in rare instances, it can result from pollution. While sulfur bacteria is not harmful, high levels of H<sub>2</sub>S can be hazardous, may cause black stains on silverware and plumbing fixtures, and may corrode pipes.

Odor coming from the hot water faucets only is most likely from the hot water heater. Consider contacting a

## **Water Treatment - Commonly Asked Questions**

Published on City of Great Falls Montana (<http://www.greatfallsmt.net>)

---

plumber about replacement or removal of the magnesium anode, and flushing and disinfecting the water heater tank.

Smell from both hot and cold faucets which are supplied with water treated by a water softener, and no odor from untreated water taps, usually indicates sulfur bacteria in the water softener. Contact the manufacturer or installer regarding equipment disinfection procedures.

**Source URL (retrieved on 02/01/2015 - 7:56am):**

<http://www.greatfallsmt.net/publicworks/water-treatment-commonly-asked-questions>