Water Quality Basics

Having a basic understanding about water quality will help ensure that your well or water provider is supplying potable water for your household.

Along with human activities, water quality is affected by a combination of natural processes. The most common processes relate to the chemical composition found underground as aquifers are recharged. However, other factors such as biological, physical, and radiological conditions can also affect your water quality.

If your water is provided by a public utility, it must meet minimum State and Federal Standards. To ensure the safety of the water your utility supplies, the utility is required by law to sample their water at regular intervals. The most frequent constituent monitored is bacteriological contamination—specifically the presence of coliform bacteria. Bacteriological testing is normally performed at monthly intervals; however, public water utilities are typically required to analyze the chemicals in their water only on an annual basis.

If your water comes from a private well, it is not required to be tested. Many well owners have never had their water tested for either chemical or bacteriological contamination. Furthermore, the quality of ground water (water produced from wells) can vary dramatically within a given geographic region because of many factors – varying well depths, different construction methods, and varying rates of pumpage. The National Ground Water Association recommends that water-well owners have their wells checked and tested to ensure water safety.

Whether your water comes from a public utility or a private well, it only has to meet minimum standards infrequently. Furthermore, according to State and Federal Laws, there are allowable limits for many chemicals that may find their way into your drinking water. For example, the threshold for mercury is 0.002 mg/l, while the allowable amount of arsenic cannot exceed 0.010 mg/l.

If you would like to have your water tested for chemical contamination, please call and schedule a free analysis with one of our water quality experts.

Click here for a complete list of the Federal Standards for drinking water.