What is Turbidity?

Turbidity is the measure of cloudiness of a liquid, like the way smoke can make air appear cloudy. Turbidity in water is caused by large numbers of suspended organic and inorganic particles, such as sediments or microscopic organisms. These particles are picked up as water moves through rock and soil, and into your groundwater supply.

High turbidity levels can protect harmful contaminants from the effects of drinking water disinfection and some treatment devices. Therefore, it is imperative to keep turbidity levels low when treating your water.

What are the health effects of Turbidity?

Turbidity has no direct health effects. However, high levels of turbidity may indicate the presence of disease-causing organisms including bacteria, parasites, and viruses which can cause nausea, cramps, diarrhea, and associated headaches.

If you suspect contamination or experience illness, stop drinking and cooking with the water immediately, and do not resume until testing has proven it to be safe to use. Always seek advice of your medical doctor if you have any health concerns.

How do I test for Turbidity?

The U.S. Environmental Protection Agency (EPA) has set the drinking water standard for turbidity at 1 NTU (nephelometric turbidity unit) for public water systems. Well owners should use the EPA’s standard as a guideline.

An NTU is the measurement of light that passes through a sample of water; the more particles that are in the water, the higher the NTU number. Most well owners will not notice high turbidity at levels at or below 5 NTU in their drinking water. However, health standards are much lower.

If your water looks cloudy or if you plan to install a water treatment device, you should have your water tested for a minimum of turbidity. Water testing should be performed by a certified laboratory, county extension office, or local health department to ensure the test results are reliable. Water Systems Council maintains a list of certified laboratories in each state or province. Visit our website for more information: https://www.watersystemscouncil.org/water-well-help/water-testing-by-state/. If you need help determining what to test for or where to test, contact the wellcare® Hotline at 1-888-395-1033.

What are the treatments for Turbidity in drinking water?

To reduce turbidity in water, the Water Quality Association (WQA) recommends using products certified for particulate reduction to NSF/ANSI Standard 42 or products certified for turbidity reduction to NSF/ANSI Standard 53 or 58. Contact a certified water treatment professional for guidance. If you need assistance with locating a certified water treatment professional contact the wellcare® Hotline at 1-888-395-1033.
FOR MORE INFORMATION to help maintain your well and protect your water supply

wellcare® is a program of the Water Systems Council (WSC). WSC is the only national organization solely focused on protecting the health and water supply of the 43 million people nationwide who depend on household wells for their water supply.

This publication is one of more than 90 wellcare® information sheets available FREE at www.watersystemscouncil.org.

Well owners and others with questions about wells and well water can contact the wellcare® Hotline at 1-888-395-1033 or visit www.wellcarehotline.org to fill out a contact form or chat with us live!

JOIN THE WELLCARE® WELL OWNERS NETWORK!
By joining the FREE wellcare® Well Owners Network, you will receive regular information on how to maintain your well and protect your well water.

Contact us at 1-888-395-1033 or visit www.wellcarehotline.org to join!