Why Test Your Well Water for Turbidity?

What is turbidity?

Turbidity is a measure of water clarity. Turbid water can look cloudy or opaque and can also affect the color of the water.

Material that causes well water to become turbid includes:

- Clay
- Silt
- Finely dissolved organic and inorganic material
- Microorganisms such as bacteria and viruses

A turbidity test will measure the decrease in the passage of light through a water sample based on the amount of floating particles in the water.

What can cause turbid water?

- A leaky or malfunctioning septic or sewer system
- Soil erosion
- Algae or weeds
- High iron concentrations which can give water a rust-red coloration
- Air bubbles or particles from a water treatment system

Potential health effects of turbidity?

- Health effects from turbid water will depend upon the type of material in the water that is causing the turbidity.
- Higher turbidity levels are often associated with disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as
  - Nausea
  - Cramps
  - Diarrhea
  - Head aches

What is the standard for turbidity in drinking water?

The Maximum Contaminant Level, as set by the Environmental Protection Agency, is 1 nephelometric turbidity unit (NTU).

Water samples with different levels of turbidity, measured in NTU’s.
Test your well water for turbidity:
- Every year
- If you notice that your water has become cloudy or opaque
- Have your water tested at a certified laboratory

If my water is high in turbidity, how do I treat it?

Treatment of turbid water will depend upon the type of contaminant causing the turbidity. Below are different treatment systems that can be used to treat high turbidity, note that each system will vary and some will be better suited for specific contaminants. Refer to your lab results and contact URI Cooperative Extension at 401-874-5398 with questions about which treatment system you should use.

- Microfiltration
- Chlorination - If the turbidity is a result of microorganisms
- Ozone Treatment
- Distillation
- Aeration
- Reverse Osmosis

Information on this page has been adapted from the Environmental Protection Agency and the United States Geological Survey