

Technical Information:

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Subject: Turbidity
Product: Water
Category: What is it and how is it measured?
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Turbidity is the measure of cloudiness of the water, or how “clear” the water is. Turbidity is caused by Total Suspended Solids (TSS) in the water. The more TSS in the water, the higher the Turbidity. These suspended solids can be any number of things.

In rivers and lakes, they can be silt, plankton, or other organic material that could effect the clarity of the water. Higher turbidity levels are usually related to higher levels of disease causing micro-organisms. In drinking water the turbidity is very low as most of the micro-organisms and other TSS are filtered out.

Turbidity is used to measure the water quality and the effectiveness of filtration. It is measured in Nephelometric Turbidity Units (NTU's) and is measured by a Turbidimeter or a Nephelometer. A Tubidimeter measures the light scattering from suspended particles and calculates an NTU value.

A turbidimeter has a photocell at 90 degrees to the direction of the light beam used to estimate the scattered light, rather than the absorbed light. As water passes by the light it is reflected or absorbed into the solids in the water. The light that passes through to the photocell is measured and related to the source light. This measurement usually provides a very good correlation with the concentration of particles in the water that effect the clarity.