Storm Water Quality

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The Parameters Of Stormwater Quality

Temperatures within ten feet of the earth's crust are a constant 50 °F to 60 °F. The pH of stormwater is slightly higher than that of rainwater due to the alkalinity that stormwater picks up when coming into contact with paved surfaces. Rain water has a pH of 5.6. Turbidity often increases sharply during a rainfall, especially in developed watersheds, which typically have relatively high proportions of impervious surfaces. The turbidity should be around 5.5.

What is Spectrophotometry?

Spectrophotometry is a method to measure how much a chemical substance absorbs light by measuring the intensity of light as a beam of light passes through sample solution. The basic principle is that each compound absorbs or transmits light over a certain range of wavelength.

Simple UV/UV-visible method for nitrogen and phosphorus measurement in wastewater

A simple UV/UV-visible method is described for the determination of global nitrogen and total phosphorus in wastewater. This method includes two steps: first, the photo-oxidation of nitrogen and phosphorus forms into nitrate and orthophosphate ions, and their quantification by UV-visible spectrophotometry. Potassium peroxodisulfate is used as oxidant. The developed system consists of on-line association of UV photo-oxidation reactor with UV-visible detector. The conversion yields vary between 80 and 100% for both nitrogen compounds (ammonium, urea, amino acids, and other N-containing compounds), and phosphorus compounds (ADP, ATP, and other P-containing compounds). The time required for nitrogen and phosphorus forms determination is no longer than 20 min.

Sources

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