Applied Process Mathematics

TRE 6026-16-11: All Operators

(Process) 7 hours

Operators often have to use higher level mathematical formulas to perform their day to day work functions. This course will build on mathematical concepts taught in Introduction to Applied Process Mathematics and is designed to provide operators with problem solving skills specific to the water and wastewater industry. Participants will practice manipulating formulas for unknown variables, analyze operational problems using math skills, and review math skills necessary for certification exams. Upon completion of this course, the student should be able to calculate operational problems such as flow quantity, effluent treatment and sludge volume.

Hypochlorite Disinfection

TRE 5456-13-11: All Operators (Process) 7 hours

Hypochlorites - sodium and calcium - are the most common form of disinfection used in water treatment. This course focuses on the properties, use, and feed equipment when using hypochlorite for disinfection. Operators will be introduced to the uses and properties of hypochlorites, chemical handling including safety, regulatory requirements, and feed equipment. Various mathematics principles will be addressed throughout the workshop including changing % concentrations, dosage/feed rates, chlorine demand/dose, and CT calculations.