

# Activated Sludge Process and Control

## 1.1 CECs, Wastewater Technical

You must attend the entire class to earn the CECs



Class qualifies for 1.1 SHE Engineering. Must take and pass an additional written exam administered at the end of the class to earn SHE credits.

<b>Agenda Day 1</b>	
8:30am – 8:40am	Introduction
8:40am – 9:30am	Introduction to the Activated Sludge Process <ul style="list-style-type: none"><li>• The Basic Process</li><li>• Modifications of the Activated Sludge Process</li><li>• Keywords and Definitions</li><li>• Process Description</li></ul>
9:30am – 10:30am	Operation <ul style="list-style-type: none"><li>• Normal Operation<ul style="list-style-type: none"><li>Process Equipment; Operation Strategy; Microorganisms</li></ul></li><li>• Abnormal Operation<ul style="list-style-type: none"><li>Trouble shooting; Making Corrections</li></ul></li></ul>
10:45am – Noon	Activated Sludge Math <ul style="list-style-type: none"><li>• Tank Volumes</li><li>• MLSS &amp; MLVSS</li><li>• MCRT &amp; Sludge Age</li><li>• Wasting Rates</li></ul> <ul style="list-style-type: none"><li>• BOD Loading</li><li>• F/M Ratio</li><li>• Return Rate Estimated</li></ul>
Noon	Lunch (provided)
12:45pm – 2pm	Plant Tour and Process Familiarization
2pm – 3pm	Math Continued
3pm	Adjourn



<b>Agenda Day 2</b>	
8:30am – 10:30am	Math continued
10:45am – Noon	Math continued
Noon	Lunch (provided)
12:45pm – 2:30pm	Laboratory <ul style="list-style-type: none"><li>• Microorganisms</li><li>• SVI / SDI</li></ul>
2:30pm – 3pm	Review & Questions
3pm	Adjourn