

# 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.*

Agenda Day 1	
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 Process Equipment; Operation Strategy; Microorganisms</li> <li>• Abnormal Operation Trouble shooting; Making Corrections</li> </ul>
10:45am – Noon	<div> <div>                     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> </div> <div> <ul style="list-style-type: none"> <li>• BOD Loading</li> <li>• F/M Ratio</li> <li>• Return Rate Estimated</li> </ul> </div> </div>
Noon	Lunch (provided)
12:45pm – 2pm	Plant Tour and Process Familiarization
2pm – 3pm	Math Continued
3pm	Adjourn



Agenda Day 2	
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