



Wednesday December 15<sup>th</sup>, 2021

9:00 AM to 10:30 AM

## CSWEA Operator Training Course: Fundamentals of Secondary Treatment

### OVERVIEW

As the name would imply this course picks up the journey of wastewater as it travels through the plant right after Primary Treatment. Secondary clarification signifies the end of the biological treatment portion of wastewater treatment. Often referred to as 'polishing', it is the last component of the solids removal process and happens just before tertiary treatment or disinfection, depending on the process employed by the individual plant.

This course offers a thorough examination of the process and provides strategies and tools necessary to address the operation of this segment of treatment.

### AGENDA

10:00 am Introduction

10:05 am Course Topics:

- Overview of Secondary Clarifiers
- Aeration
- Oxidation Ditches
- Wastewater Stabilization Ponds
- Sampling and Analysis
- Rotating Biological Contactors (RBCs)
- Trickling Filters
- Secondary Treatment Effluent
- Common Calculations and Practice Problems

11:30 am Adjourn



### CONTINUING EDUCATION

1.5 CEUs for Operators in Illinois, Wisconsin & Minnesota.

Operator ID/Quiz required for webinar.

1.8 PDHs for all Professional Engineers



### COST

\$20 – Members (Discount Code: CSWEA)

\$25 – Non-Members

\$5 – Student (Discount Code: Student)

\$5 – International (Discount Code: International)

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CENTRAL STATES WATER ENVIRONMENT ASSOCIATION  
OPERATOR TRAINING PROGRAM

**Instructor:**



**Wade Lagle**

Wade is the Director of Operations at the Urbana and Champaign Sanitary District (UCSD). He has been in the wastewater field since 1987. Wade has served several roles for UCSD over the years, operations intern, operator, lab technician, and operations supervisor. He holds an Illinois Class 1 operators license since 1991. In his free time Wade likes to compete with the CSWEA in the WEFTEC Operations Challenge. He also enjoys traveling, fishing, hunting and spending time with his family and friends.

