#### **Biological Wastewater Process Control**



#### Training Seminar Overview:

This 2-day (16 hours) course is approved as Training for Wastewater Operators, Engineers, & Laboratory personnel.

This seminar will present the process control methodologies and laboratory techniques necessary to control the activated sludge process or any wastewater treatment system with an emphasis on process monitoring & trouble shooting. These approaches are equally applicable to domestic and industrial facilities. Past participants from industries such as Food and Beverage, Wineries, Chemical, Papermill & petrochemical have been successful in applying these methods to control their processes. Municipalities will greatly benefit from this training course. The course will consist of lecture, microscopic analysis, plant audit, demonstrations of certain laboratory procedures and microscope use.

#### **Course Materials**

Each attendee will receive complete class notes on a CD also included is our Wastewater Microscopic / Biological Training CD... valued at \$250.00.

#### Who should attend?

The course is designed for all wastewater professionals, particularly operations personnel, such as operators, engineers & laboratory personnel.

Registration Form – 2-Day Training
Biological Wastewater Process Control Seminar
by Tracy Finnegan-Environmental Leverage® Inc.
October 2nd Wed. & 3rd Thurs. 2019
8am - 4:30pm both days
Seminar held at:

Environmental Leverage Inc. 1454 Louis Bork Dr., Batavia, IL 60510

Name	
Position or Title	
Organization	
Business Address	
City, State & Postal Code	
Phone	
Email	

## **Registration Fee**

Full 2 Day Course \$395.00 Includes lunch both days of class.

## Method of Payment

Check, Visa, Master Card, Discover or PO#
Please register & payment checks or PO to:

Environmental Leverage Inc.

Reg. & Mailing Address Only: 812 Dogwood Dr. Suite A., North Aurora, IL 60542 Email: elfenvironmental@aol.com Phone: 630-906-9791

#### Course Outline

## Day 1 Schedule

Wastewater Basics Overview
Microbiology Overview
Floc & Filaments Analyses
Microscope Use, Techniques & Stains
Lab Sample Handling & Prep
Hands on Microscopic Observation
Visual Observations & Troubleshooting
Filaments, Zooglea & Foam control
Solids Carryover & Settling Problems

## Day 2 Schedule

Process Overview & Process Variations
Process Control Strategies
Equipment Optimization,
Preliminary, Primary, Secondary,
Clarifiers, Digesters and Dewatering
Settleometer, Clarifier Simulation Test
Sludge Judge Profile
Plant Tour (weather & facility permitting)
Land Application & Biosolids Handling
Environmental Issues
Troubleshooting
Case Histories - Plant Examples

Please be sure to bring a 100ml / 3-4 oz.'s, of your MLSS sample from your own facility. Microscopic plant biomass analyses will be taught in class for each sample.

Leave 1-2 inches air space in bottle.

Keep cool & do not freeze. You can overnight ship to address of class, if you cannot carry sample.

# Are Wastewater Treatment problems getting to you lately?



Don't miss this opportunity to increase your knowledge of biological process control in your wastewater treatment system. Learn how to troubleshoot and optimize your treatment system.

General Information:
Registration first day is at 7:45 a.m.
2-Day course begins at
8:00 a.m. to 4:30 p.m.

October 2<sup>nd</sup> Wed. & 3<sup>rd</sup> Thurs. 2019 Lunch will be provided both days

Register by mail, telephone, email or fax through the information below:

Environmental Leverage® Inc.

Reg. Mailing Address Only: 812 Dogwood Dr. Suite A., North Aurora, IL 60542 Fax: 630-906-9792

Phone: 630-906-9791 elfenvironmental@aol.com

## The Course Instructor:

Tracy Finnegan is an environmental engineer with Environmental Leverage® Inc., Illinois. She was formerly associated with Nalco and Suez, where she worked for more than 12 years in numerous positions related to research, operations, design evaluation, auditing and troubleshooting wastewater systems. She now operates her own Environmental Engineering Company that supplies products, training, lab services, audits and auditing services.

www.EnvironmentalLeverage.com

Tracy has taught biological wastewater process control to operators & engineers for over 26 years and performed audits and troubleshooting for ~5-6000 industrial and municipal treatment plants.

Tracy holds a BS degree in Business Chemistry from Northern Illinois University.

She is a co-author in WEFTEC's Book

Wastewater Biology: The MicroLife, and has now developed 12 new wastewater Training CD's.

## **Course / Seminar Location at:**

Seminar held at:

Environmental Leverage Inc. 1454 Louis Bork Drive Batavia, IL 60510

This course is approved by numerous states\_\_\_\_
Other states may have different credit systems.
Contact us for approvals in other states for this class.
For additional information & register contact:

Elfenvironmental@aol.com or (630)-906-9791

## 2-Day Biological Wastewater Process Control Seminar

October 2nd Wed. & 3rd Thurs. 2019 Register early, class size is limited!

Training provided by Tracy Finnegan and Jennifer Oakes of:





Wastewater Training Course
Class is limited so register early



