

**#3562**  
**Microbiology of Anaerobic Digesters**

**#3245**  
**Troubleshooting the SBR**

**6 WASTEWATER CONTACT HOURS**

**Microbiology of Anaerobic Digesters:** The course reviews five areas of concern related to the microbiology and successful operation of anaerobic digesters, including causes and corrective operational measures for foam and scum production.

**Troubleshooting the SBR:** Troubleshooting the SBR presents a description and history of the batch feed system for the treatment of wastewater. The description includes a biological review of each phase, phase time and adjustments in phase times in the SBR, along with the occurrence of toxic, anoxic, and anaerobic conditions. Process control measures, target nutrient values, sampling techniques, and troubleshooting charts are reviewed. An examination of biological and chemical nutrient removal measures (nitrogen and phosphorus) is presented.

**Topics to be covered:**

- Bacteria involved in degradation of soluble, colloidal and particulate BODs
- Acceptable operating conditions
- Troubleshooting process and control measures
- History of wastewater treatment and the role of SBR
- Nutrient removal in SBR

**November 13, 2019**

**Bedford Township  
Municipal Authority**  
1007 Shed Road  
Bedford, PA 15522  
**Bedford County**

**Class Time: 8:00 am - 4:00 pm**  
**Registration: 7:30 am**

*Lunch and materials provided  
with your registration*

**Instructor: Michael Gerardi**  
*Wastewater Microbiologist*

**Questions?**  
Call 800-653-7792 ext. 107 or 108  
Or email: Training@PRWA.com  
**WE HOPE TO SEE YOU THERE!**

**THE PRWA PROMISE**

If you're not 100% satisfied with the training class for any reason, we will give you a refund!

**WWW.PRWA.COM/PROMISE**

Location:

**Bedford Township  
Municipal Authority**  
1007 Shed Road  
Bedford, PA 15522  
**Bedford County**

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**Attendance cost per person:**  
\$195 for PRWA Members  
\$230 for Non-Members

**PRWA Member?**  Yes  No

Name: \_\_\_\_\_ PA-DEP Client ID (if applicable): \_\_\_\_\_

System/Company: \_\_\_\_\_ Phone: \_\_\_\_\_

Address:  Home  System Fax: \_\_\_\_\_

City \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Email: \_\_\_\_\_

**PAYMENT:**

Check (payable to PRWA)

Invoice Me:  Home  System

Credit Card:  AmEx  Discover  Visa  MasterCard

Card Number: \_\_\_\_\_

Exp Date (mm/yy): \_\_\_\_\_ CVC (3 or 4 Digit # on card): \_\_\_\_\_

Name on Card (Please print): \_\_\_\_\_

Signature: \_\_\_\_\_

Amount Due: \$ \_\_\_\_\_

To register by FAX or MAIL:

FAX: 814-353-9341

MAIL: 138 W. Bishop St., Bellefonte PA 16823

EMAIL: TRAINING@PRWA.COM

EMAILING REGISTRATIONS: EMAIL IS INHERENTLY INSECURE. CREDIT CARD INFORMATION SHOULD NOT BE EMAILED OR SENT IN AN ATTACHMENT.

**Questions?**

Call 800-653-7792 ext. 107 or 108

Signature shown on card

## MEET THE INSTRUCTOR



**Michael Gerardi**

*Wastewater Microbiologist*

Michael has developed and offered numerous wastewater biology courses in the United States, Canada, Caribbean and Europe. He has over 35 years experience in the wastewater treatment profession and has authored seven wastewater microbiology texts for John Wiley and Sons. He has performed microscopic analyses of wastewater samples and provided troubleshooting services for numerous municipal and industrial wastewater treatment facilities. He managed the Williamsport Sanitary Authority wastewater treatment facilities for 10 years.

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## Microbiology of Anaerobic Digesters

### Troubleshooting the SBR

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Municipal Authority  
*Bedford County***

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*Association*

138 West Bishop Street  
Bellefonte, PA 16823  
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*Association*