

MEMBRANE FILTRATION FOR DRINKING WATER

May 3-4, 2021
Online | Central Time



**NITRIFICATION &
DENITRIFICATION IN ACTIVATED
SLUDGE TREATMENT**

May 4-5, 2021



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The Membrane Filtration for Drinking Water course addresses the design, installation, operation and maintenance of membrane filtration systems for drinking water treatment and wastewater reuse. The course covers both low-pressure membranes (microfiltration and ultrafiltration) and high-pressure membranes (nanofiltration and reverse osmosis). Operations, engineering, and management staff from utilities considering implementing membrane filtration, or that already operate membrane filtration plants should attend this course. Attendees are assumed to be generally familiar with water treatment, but no special knowledge of membrane filtration is required. Attendees will learn the main components of membrane filtration systems, the detailed structure of an individual membrane element and the details of how and why a membrane filtration system operates.



EUCI is authorized by IACET to offer 1.0 CEUs for the course. Participants must log on each day and be in attendance for the entirety of the course to be eligible for continuing education credit.

LEARNING OUTCOMES

On completion of this course, attendees will:

- Identify the main applications of membrane filtration in drinking water treatment
- Discuss the benefits and limitations of membrane filtration compared to alternative processes in drinking water treatment
- Define the components of membrane filtration systems, with in-depth knowledge of the structure and function of membrane filtration elements
- Practice the operation of membrane filtration systems
- Discuss typical membrane filtration system procurement projects and know the major decision points
- Characterize key components in a membrane filtration process warranty and in a membrane element warranty
- Gain insights on best practices in operation, maintenance and troubleshooting of membrane filtration systems

INSTRUCTOR

Paul Gallagher, *Experience Consultant, Membrane Filtration and Water Treatment*

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“EUCI does a fantastic job of providing relevant and timely topics with speakers that have the experience and expertise to provide real insights.”

Economic Development Manager, OG&E



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Ammonia removal is becoming more common in Wastewater plant discharge permits and is one of the most important and challenging process to maintain. Nitrification is the oxidation of that ammonia by converting it, in a two-step process, to nitrate using aerobic bacteria.

The EUCI Nitrification & Denitrification in Activated Sludge Treatment course will review the general treatment operations and protocol for nitrification and denitrification wastewater treatment. This basic to intermediate course has been developed for all professionals in the wastewater field to provide an understanding of how this process can be applied to various wastewater plants. Proper operation and maintenance of the Nitrification process in biological and municipal wastewater treatment facilities can add to the plant's sustainable use and reuse of water.



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LEARNING OUTCOMES

- Describe and identify the Activated Sludge process elements: components, requirements, differing designs, mathematical equations, etc.
- Practice the manipulation of the Activated Sludge process to remove nutrients through nitrification and denitrification or phosphorus uptake
- Review how inventory control (SRT) effects nutrient removal and disinfection
- Detect and mitigate common challenges faced in daily wastewater plant operations
- Calculate important equations relating to both BOD and nutrient removal
- Utilize the chemistry basics of Nitrification (like what $\text{NH}_3 \rightarrow \text{NO}_2 \rightarrow \text{NO}_3$ means)
- Troubleshoot common problems relating to nutrient removal and activated sludge

INSTRUCTOR

Ryan Staples, Senior Wastewater Operator at Portland Water District

To Register Click Here, or

Mail Directly To:

PMA Conference Management
405 Highview Rd
Englewood NJ 07631
201 871 0474
Fax 253 663 7224
register@pmaconference.com

ONLINE DELIVERY & PARTICIPATION DETAILS

EUCI will use Microsoft Teams to facilitate participation in the upcoming event. Attendees do not need to have an existing Teams account to participate in the broadcast. The course will play in attendee's browser. When attendees sign on, their microphones are typically muted. Attendees should keep their mic muted until such time as it's needed to ask a question. During the event, participants will have the option of using a microphone to speak with the room and ask questions, or type in any questions via the chat window and our online administrator will relay your question to the instructor.

- Each attendee will receive an event invitation by e-mail, which will include one link to sign on for each half-day of the event (i.e., three links for a 1 ½ day event). The appropriate link must be used to join each half-day event segment at the appropriate time.
- The remote meeting connection will open approximately 30 minutes before the start of the course. We encourage attendees to connect as early as possible in case of unforeseen problems.

BUNDLE PRICE: MEMBRANE FILTRATION FOR DRINKING WATER AND NITRIFICATION & DENITRIFICATION IN ACTIVATED SLUDGE TREATMENT ONLINE COURSES:
MAY 3-5, 2021: US \$2,195 (Single Connection)

MEMBRANE FILTRATION FOR DRINKING WATER ONLINE COURSE ONLY: MAY 3-4, 2021: US \$1,195 (Single Connection)

NITRIFICATION & DENITRIFICATION IN ACTIVATED SLUDGE TREATMENT ONLINE COURSE ONLY:
MAY 4-5, 2021: US \$1,195 (Single Connection)

Recording: Each event is recorded, and will be available for three business days. For registrants only.

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name

Job Title

Company

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

CREDIT CARD INFORMATION

Name on Card

Billing Address

Account Number

Billing City

Billing State

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

Billing Zip Code/Postal Code

OR Enclosed is a check for \$ _____ to cover _____ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before April 2, 2021 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices. EUCI reserves the right to alter this program without prior notice.