

Nitrogen Removal Workshop

Optimizing and Troubleshooting BNR Systems and New Physical/Chemical Technology

October 22, 2010 – Ballston Spa
October 29, 2010 – IBM East Fishkill

**6.0 Wastewater Hours
6.0 PDHs Applied For**

Agenda

- 8:00 am Registration / Continental Breakfast
- 8:30 am Forms of Nitrogen
- 9:15 am Nitrification: Fundamentals & Key Factors
- 10:15 am Break (15 minutes)
- 10:30 pm Denitrification: same as above
- 12:00 pm LUNCH
- 1:00 pm Target MCRT
- 1:30 pm Denitrification: Operating Strategies
- 2:00 pm Break (15 minutes)
- 2:15pm Denitrification Modifications Case History
- 2:45 pm Troubleshooting
- 3:15 pm CASTion: New Phys/Chem Technology
- 4:00 pm End of Session.

Registration fee includes lunch and AM & PM Breaks

The workshop is interactive with several practical group exercises - Target MCRT and Troubleshooting a BNR facility. It also covers the reactions, biochemistry, process monitoring, control approaches, and how nitrogen mass balances. Key calculations are simplified with worksheets. The last presentation covers the new Controlled Atmosphere Separation Technology for ammonia removal.

Saratoga Co. Fire Training Center Friday, October 22, 2010

Directions to the Saratoga County Fire Training Center
FROM ALBANY: Take 1-87 to Exit 12

- Left off exit, proceed West on Route 67 for about 3 miles
- At the junction of Route 50 (traffic light) turn right (onto Rte 50)
- Turn left at the next traffic light onto Route 67, also known as West High Street. (You will be heading West).
- Follow Route 67 to the next traffic light and turn right onto Middleline Rd.
- Take first right off Middleline Rd. onto County Farm Rd. Follow to an intersection and turn left into County Farm.
- Pass Sheriff's Office/Jail and animal shelter. The Byron J. Baker Fire Training Center is the next building on the left.

FROM GLENS FALLS: Take 1-87 to Exit 13S

- At traffic light turn right onto Malta Avenue. Follow for about 1 mile. Turn right onto *Northline Rd. (this will be your second right after going over the Northway). Take Northline until you see a sign for the Saratoga County.
- Dept of Public works-turn left there. (Sign will be shortly after you go over the Kaydeross Creek).
- Go past the gas pumps and turn left, proceed past Sheriff's Dept and turn left.
- The Training Center is the second building on your left.

*Please note at some point in your journey Northline Rd will change to Galway Rd.

IBM East Fishkill Friday, October 29, 2010

84 East—Take Exit 15. Bear right onto Lime Kiln Rd. At second traffic light, make left through Hudson Valley Research Park Gate 5.

84 West—Take Exit 15 ramp to traffic light. Turn right onto Lime Kiln Rd. At first traffic light, make left onto Hudson Research Park through Gate 5.

Route 9—Follow Route 9 to the intersection of Route 52. Proceed East on 52, for approx. 4 miles. Turn right onto Hudson Valley Research Park Gate 1.

Entering from Gate 5: Follow South Drive to blinking traffic signal. 7 tenths of a mile bear right onto West Drive for 7 tenths of a mile. From right lane turn onto Administration Ct. Take your first left onto North Drive then first right into parking area. Walk back past B320A to the Main Entrance Lobby in B320.

Entering the site from Gate 1: Following West Drive thru the Main Gate & take the first left onto Administration Ct. Take your first left onto North Drive then first right into parking area. Walk back past B320A to the Main Entrance Lobby in B320. Sign in with the guard & wait in the lobby area. You will be escorted to the Conf. Rm



NYWEA

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Water Quality Management

Our Presenters

Phil Smith, P.E., M.S. was with the NYSDEC for 32 years providing training to operators, engineers and regulatory staff. He was Project Manager for the Long Island Sound Nitrogen Removal Training Program.

He brings extensive experience and has helped many communities optimize their nitrification and denitrification systems. Additionally, he has delivered numerous presentations on nitrogen removal.

Mike Coley, P.E., First Deputy Commissioner, Westchester DEF. He oversees the County's major nitrogen removal upgrade project. When with NYSDEC, he also did extensive nitrogen training and assistance.

Mark Simon, VP of Process Chemistry, CASTion, Worcester, MA developed the Controlled Atmosphere Separation Technology for ammonia removal. He is the environmental engineer that developed this Ammonia Recovery Process.



--Who Should Attend

The workshop is intended for operators and engineers that have to deal with activated sludge systems that nitrify and/or denitrify. More and more communities are being required by USEPA and NYSDEC to remove nitrogen. This training brings low cost tools to better evaluate and optimize these BNR facilities. Additionally, there is a presentation on a new physical/chemical process from 'CASTion'.

**You must be present for the entire Workshop. No partial credit given
Presented by the Member Education Committee - www.nywea.org**

Sign-up Form Nitrogen Removal Workshop

(Please register no later than 1 week prior to workshop)

- October 22, 2010 Saratoga Co. Fire Training
- October 29, 2010 IBM East Fishkill

Name _____

Employer _____

Address _____

Phone _____

E-Mail _____

Certificate Requested: Please Check () .

- Wastewater
- PE

Cost (includes lunch & breaks)

Please Check One (✓).

- NYWEA Member \$ 65.00
- Non-Member* \$145.00

Method of Payment

- Check
- Voucher
- MasterCard
- American Express
- Visa

Credit Card No. _____ Expire Date _____

Signature _____ V-Code _____

Fax, mail or e-mail Form to:

NYWEA
525 Plum Street, Suite 102
Syracuse, NY 13204
Phone: (315) 422-7811 -- Fax: (315) 422-3851
mah@nywea.org

Make Checks Payable to NYWEA

***Non-Member registration includes
a one year Affiliate Membership.**

Please Post