

NH DES WASTEWATER OPERATOR TRAINING SPRING 2017 COURSE DESCRIPTIONS

Granite State Rural Water Association See 2017 Training Events listing for dates and classes offered at <http://granitestatewater.org> for the class descriptions and to obtain the registration form OR call Granite State at 603-756-3670

No Walk-ins please. Many of the Classes offer Education Credit Recognized by BOTH NH Water and Wastewater Certification Renewal Programs. A Very Good BUY☺

TAKE NOTE
Ed credit approved
for WW operators

White Mountains Community College (WMCC) has a General Studies degree that students can design themselves. There are requirements for a certain number of credits in Humanities, Social Science, Math, English, Science, etc. that can be taken just about anywhere, some may even be offered on-line, and then I believe it is 33 credits in a major or concentration, of the students choosing. WMCC offers 10 Water Quality Technology courses on-line (30 credits) and 1 self-directed, independent study course (3 credits). So it would be possible for a student to earn an Associate's Degree without ever setting foot on the Berlin campus. Another advantage is that a student can design the degree to include college level courses that they already have taken. Students can contact Sheldon Towne directly if they wish to discuss this option.

Info submitted by
Sheldon Towne

stowne@ccsnh.edu 603-616-8663 If WMCC doesn't offer one of the courses online, another of the community colleges likely does and students can transfer credits.

Academic Technology and Distance Learning Department

24/7 Phone, Live Chat and FAQ Help: <http://ccsnh.edusupportcenter.com>

For training *e-mail*: distancelearningtraining@ccsnh.edu

Ed credit approved
for WW operators

NH Bureau of Education and Training

Year round classes offered by BET are open to state & municipal employees.

Contact BET to
register directly

The BET registration form: <http://das.nh.gov/hr/documents/Registration%20Form.pdf> Contact info: Robin Hoyt at Robin.Hoyt@NH.Gov or 271-1429. To view the complete BET course catalogs, which include Lean process improvement techniques, soft skills programs, and computer skills classes: <https://das.nh.gov/hr/trdev.html> or call 603-271-1429.

Class location info
available thru BET

Contact MJ Meier to request ww ed credit approval before you register!

So Many Ways to
Learn
New Sources for
2016

NEED Education credit in a hurry?

Your Certification Committee has approved training credit for classes offered on-line thru CEU Plan found at www.ceuplan.com ; RedVector at www.redvector.com; Courses from Roy Pelletier found at www.royceu.com or call 386-574-4307; and Hazmateam Inc. at www.hazmateam.com ; Paula Jackson provides training in NH find info at www.earthwaterspecialists.com Correspondence style courses offered through SkillWorks, Inc. found at www.skillworks.com or call 508-393-3973; Primex³ offers classes to its members on-line and in-person at the office in Concord, NH for topics and information go to <http://www.nhprimex.org/EducationTraining/index.php>

NEIWPC News

Register online now for NEIWPC's Spring 2017 Courses!

NEIWPC's Spring 2017 course catalog online registration is available. If you are interested in enrolling in any of their classes in New England and would like to sign up online, please go to <http://www.neiwpc.org/training/calendar.asp>

If you prefer to mail or fax your registration, access the complete course catalog at http://www.neiwpc.org/training/training-docs/current_train_cat.pdf. The catalog includes a registration form. 3 Spring 2017 classes are approved for Water and Wastewater Ed credit

MARCH 7

Tuesday
8:30 am- 2:30pm
\$40
0.5 CEUs
FTC

Screening Technology- from Headworks to Septage

Taught by: Warren Kersten- Lakeside Equipment Corp; Paul Sussman- The Maher Corp

This seminar includes an overview of coarse screen and fine screen types available for wastewater and sludge handling systems. A discussion of the advantages and disadvantages and How and Where to apply each type will be covered. Example installations of the various type screens to be presented. **Make checks payable to NHWPCA and mail to NH DES**

MARCH 15

Wednesday
8:30 am-2:30 pm
\$50
0.5 CEUs
FTC

Using Biosolids: Nutrient Management & Best Field Practices

Taught by: Ned Beecher- NEBRA; Andrew Carpenter- Northern Tilth; Carl Majewski- UNH Cooperative Extension

This class will provide key concepts and details for application of Class A and Class B biosolids in a variety of uses, including agriculture, horticulture, and land reclamation. Larger applications of biosolids must follow agronomic rates; a review of calculations and examples to be covered. We will explore solutions to issues related to increased phosphorus content in biosolids that result from nutrient removal treatment processes. Required field practices to be discussed such as setback limits & site evaluations, and BMPs to avoid potential environmental and social (neighbor) impacts. **Make checks payable to NHWPCA and mail to NH DES.**

MARCH 22

Wednesday
8:30 am-2:30 pm
\$40
0.5 CEUs
FTC

What's NOT to Love About those 'Dam' Lagoons

Taught by: NH DES Operations and Dam Bureau Staff; Gregory Kidd- NEWWTA; Russell Sullivan- RCS Environmental LLC; Lagoon Operators from Waterville Valley, Colebrook, Newport and Mt Washington Hotel

Come and learn about the many facets of operations at treatment Lagoons and Impoundment structures. To include- proper O&M for Lagoon systems; facility inspection checklist templates used by Dam Bureau and the Permit Compliance staff; the Dam maintenance Bullet List & classification system for dam failure and risk severity rankings and inspection frequency. We offer discussion on a variety of topics- pesticide and herbicide applications and information on 'Algae and Duckweed & HABs, oh my!' A segment on Baffle installation technology to be shared. Plus a UV disinfection discussion on intensity and transmissivity.

Make checks payable to NHWPCA and mail to NH DES

MARCH 28

Tuesday
9:00 am-2:30 pm
\$50
0.5 CEUs
NH DES Offices at
Pease Trade Port
Portsmouth NH

The Fat Oil and Grease (FOG) Program Basics

Taught by: Ray Gordon- NH DES & Matthew Brown- ADS Echo Level Monitor

Learn why FOG creates collection system problems, and basic methods to treat these problems. Participants will learn about NH regulations, how to inspect FOG sources, and receive information on how to develop or improve their own FOG management program. Also planned is a demonstration of an easy-to-use sewer level monitor for overflow prevention. Pre-Registration Required. Lunch is included. Driving Directions are available upon request.

Contact Ray Gordon at 603-271-3571 or ray.gordon@des.nh.us with questions. Registration form at <http://www.des.nh.gov/organization/divisions/water/www/documents/fogbasics2017.pdf>

Make checks payable to NHWPCA and mail to NH DES Class offered again May 11 in Franklin NH see description below

MARCH 29

Wednesday
8:30 am – 3:30 pm
\$135
0.6 CEUs
NH DES Offices at
Pease Trade Port
Portsmouth NH

NEIWPCP presents: Application, Troubleshooting & Maintenance of Water & Wastewater Pumps & Valves

Taught by: Don Kennedy- NEIWPCP; Preston Campbell- Penn Valley Pump C. Inc.; Steve Connell – Red Valve, Inc; Bert Souliere- Water Industries, Inc.

To guarantee long-term successful installations, pumps and valving must be applied properly and consider the system hydraulics. This course will review two pump technologies- dual disc diaphragm and self-priming centrifugal pumps with associated valve applications commonly used in water and ww treatment. The course features in-class disassembly & assembly of both pumps.

Use the NEIWPCP registration form found at neiwpcp.org or on the DES web site. Checks Payable to NEIWPCP. Mail directly to NEIWPCP by March 17, 2017 Sign in begins at 8:00 am. Ed credit hours approved for Water & WW programs.

MARCH 31

Friday

8:30 am-2:30 pm

\$40

0.5 CEUs

FTC

Laboratory Essentials : BOD/TSS, Benchsheets & QC Trends

Taught by: Stephanie Wilson & Michael Serard, Eastern Analytical Laboratory, Inc.

This course is intended for Lab techs with entry level background. The NPDES program puts a huge emphasis on the BOD and TSS removal required for permit compliance. Therefore, the covered material consists of gearing up for the analyses, SOP writing, proper sample and dilution technique, data documentation, QC adherence, and review. The course will also address the time dynamic needed, known issues and/or symptoms that something is not right and what you should do or can do about it. Finally, the course will address data documentation making use of paper bench sheets and the use of spreadsheets, to monitor your QA/QC and trend your data over time. Ed credit hours approved for Water & WW programs. **Make checks payable to NHWPCA and mail to NH DES**

APRIL 5

Wednesday

8:30 am- 2:30 pm

\$40

0.5 CEUs

FTC

Centrifugal Pump System Seminar

Taught by: Eric Knudsen – Gorman Rupp Co. and Bert Souliere – Water Industries, Inc.

This seminar covers centrifugal pumps and their applications. Topics to include hydraulic terms, types of centrifugal pumps, cavitation, reading pump performance curves and parallel and series pumping. Additional topics include troubleshooting, tear-down, how to use gauges and lift station safety. A glass-faced self-priming pump is utilized throughout the seminar to illustrate and clarify the technical material presented.

Class size is limited to 25 people. Training hours approved for Water & Wastewater programs. **Make checks payable to NHWPCA and mail to NH DES**

APRIL 6

Thursday

8:30am- 1:00pm

0.2 CEUs for

NHWPCA members only

NHWPCA Trade Fair- The Executive Court Banquet Facility Manchester

The latest in water pollution control equipment, services and appurtenances will be represented by vendors in the exhibit hall. NHWPCA members can earn 0.2 CEUs for attendance. Technical session attendance will earn additional 0.1CEU education credit for non-members too. If you are interested in becoming a member contact any Association officer or visit nhwpc.org. Refer to your member mailing or the Collector for session descriptions. FREE Entry for Exhibit hall only. **Separate Mailing and Registration**

APRIL 12

Wednesday

8:30am- 2:30 pm

\$50

0.5 CEUs

FTC

Understanding the Site Selection Process for Land Treatment and Disposal of Reclaimed Wastewater

Taught by: Mitch Locker- DES Groundwater Bureau; Jon Warzocha, PG- CEO/Sr. Hydrogeologist Horizons Eng; Guest Speakers from NH WWTFs

Since our last class in Fall 2014, the popularity of land treatment of municipal wastewater has expanded across the Granite State, as surface water discharge permits have become more stringent. Learn the steps to investigate and determine if a site is a viable candidate to consider a groundwater discharge alternative. Experienced professionals will provide instruction. A program summary and discussion of methods available to wwtf's to be presented as outlined in the Guidance for GW Discharge Permitting document prepared by DES. NH operators will share their insight and experiences on their facility's gw discharge systems and permits. Participating Operators- Spray Irrigation facility: Atkinson Country Club- Joshua Manning- Lewis Builders, Inc.; Wolfboro NH - Russell Howe- Plant Manager Woodard & Curran RIBs: Canaan NH- John Coffey- Utility Partners LLC NEW construction- piloting phase for RIBs: Definite Maybe from Meriden, NH – Bill & Rob Taylor- Town of Meriden **Make checks payable to NHWPCA and mail to NH DES**

APRIL 13

Thursday

8:30 am – 2:30 pm

\$40

0.5 CEUs

FTC

Polymer Performance Hands-on Demonstration

Taught by: Randy Homan- Water Science Technologies Inc.

This workshop provides operators with an opportunity to make informed decisions on polymer chemical selection and purchases. Our experienced presenter will perform a hands-on demonstration of making down polymer samples for testing in a couple of formats for settling and dewatering. He will develop a couple of settling curves and dewatering curves to demonstrate the relative effectiveness of two polymers for each condition. The properly matched Polymer offers many benefits for the plant and the operator and assists with meeting effluent discharge quality requirements. Coagulation, flocculation and clarification will be discussed, along with feed systems do's and don'ts. **Make checks payable to NHWPCA and mail to NH DES**

APR 19, 20 & 21
Wed thru Friday
8:00am – 4:00pm
Cost Varies
CEUs Varies
FTC

NASSCO Training for NEW Users - Pipeline, Manhole, and Lateral Assessment Certification Programs –PACP, MACP, LACP

Taught by: Laurie Perkins, P.E. – Sr Project Manager Wright-Pierce Engrs

Ms. Perkins is a certified trainer for the highly acclaimed NASSCO programs in PACP, MACP and LACP. The PACP is a 2-day course and the MACP/LACP is a 1-day class, with PACP pre-requisite. These workshops greatly benefit all those involved in data collection for the assessment of infrastructure elements. The primary objective is to learn proper data collection and consistency in defect coding standards. **Use the NASSCO registration form on the DES web site. Cost info and details on the form. Class size limited to 20. Register by March 22, 2017**

APRIL 24
Monday
8:30 am – 3:30 pm
\$135
0.6 CEUs ??
NH DES Auditorium
Concord NH

NEIWPCC presents: Optimizing SBR Efficiency and Nutrient Removal

Taught by: Michael Gerardi

Part 1 of this course covers the operational conditions needed for acceptable nitrification and the forms of nitrification to be monitored for process control and troubleshooting purposes. Discussion includes Complete & 4 types of Incomplete Nitrification, desired operational conditions, cold weather impacts and limiting factors associated with these conditions. The role of cBOD- removing bacteria and use of bioaugmentation products to be covered. Part 2 will focus on Sequencing Batch Reactors- the conditions and bacterial activities that occur during the treatment phases- fill, react, settle and decant. Discussion includes nitrification and denitrification as well as biological and chemical phosphorus removal. **Use the NEIWPCC registration form found at neiwpc.org or on the DES web site. Checks Payable to NEIWPCC. Mail directly to NEIWPCC by April 10, 2017** Sign in begins at 8:00 am.

MAY 2
Tuesday
8:30 am – 3:30 pm
\$135
0.6 CEUs
NH DES Offices at
Pease Trade Port
Portsmouth NH

NEIWPCC presents: Extreme Weather in the Forecast: Is Your Facility Prepared?

Taught by: Guest Speakers and NEIWPCC Staff

This class helps operators to prepare for extreme weather events that threaten the facility operations and infrastructure. The growing frequency and intensity of damaging weather events require the facility to become more resilient through preparedness planning and physical upgrades. Having the proper emergency plans and procedures in place is the first line of defense against extreme weather. **Use the NEIWPCC registration form found at neiwpc.org or on the DES web site. Checks Payable to NEIWPCC. Mail directly to NEIWPCC by April 18, 2017** Sign in begins at 8:00 am. Training hours approved for Water & WW programs.

MAY 3
Wednesday
8:30 am- 2:30pm
\$40
0.5 CEUs
FTC

Phosphorus Removal for the Rest of Us

Taught by: NHDES Operations Staff; David St. Armand, Manchester WWTF; Leo Gaudette, Merrimack WWTF; Ken Harwood, Ayer, MA WWTF

This class will take a non-engineering approach to teaching the basics of phosphorus removal and bring it down to the operator level without the aid of fancy and complicated graphs. We will discuss chemical and biological removal, process design and operations, and sampling and analysis. Case studies will be presented by operators actually making these systems work and DES staff will present results of biological optimization efforts at several NH facilities. **Make checks payable to NHWPCA and mail to NH DES**

MAY 5
Friday
8:30am–12:30 pm
\$40
0.4 CEUs
FTC

Evaluating Clarifier Performance

Taught by: John Esler, P.E. – Clarifier Performance Evaluations, Inc.

This workshop provides all the information you need to evaluate and optimize your clarifier's performance and offers do-it-yourself proven techniques from flow-splitting to stopping those unwanted currents dead in their tracks. A hands-on field session is featured rain or shine- please dress appropriately. Enrollment limited to 30. **Make checks payable to NHWPCA and mail to NH DES**

MAY 9
Tuesday
8:30 am- 2:30pm
\$40
0.5 CEUs
FTC

Fundamentals of Math for Operators

Taught by: Gregory Kidd- NEWWTA

Math skills and problem solving are indispensable tools for all levels of wastewater professionals who use these skills in their jobs daily. Class focus is teaching an understanding of basic mathematical concepts and calculations. Fractions, decimals and per cent, unit calculation, basic algebra and ww formulas are some of the topics to be taught with an emphasis on ww math. Time will be allotted for individual instruction on all subjects presented. A pencil & the willingness to learn is required. Training hours approved for Water & WW programs. **Make checks payable to NHWPCA and mail to NH DES**

MAY 10
Wednesday
8:30 am- 2:30pm
\$40
0.5 CEUs
FTC

What WWTF Operators Need to Know for Daily Performance and Future Design

Taught by: W. Steven Clifton, P.E.- Underwood Engineers

The workshop topics will help ww operators learn how data collection and interpretation can help them optimize daily plant performance AND how it is used in developing designs. It's time to get an overview and general understanding of WWTF design process from the engineer's perspective. Learn how to decode Engineer-speak, which factors are important, what should be measured and how plant design criteria are established. The focus will be on activated sludge, how ww characteristics and effluent limits drive the design (and Operation) and how a ww 'whole plant simulator' is used to design the process. The class will follow the recent Lebanon wwtf design to demonstrate engineering considerations. **Make checks payable to NHWPCA and mail to NH DES**

MAY 11
Thursday
9:00 am-2:30 pm
\$50
0.5 CEUs
FTC

The Fat Oil and Grease (FOG) Program Basics

Taught by: Ray Gordon- NH DES & Matthew Brown- ADS Echo Level Monitor

Refer to the class description under March 28 date above. May 11 class will be held at FTC.

Pre-Registration Required. Lunch is included. **Registration form**

<http://www.des.nh.gov/organization/divisions/water/wweb/documents/fogbasics2017.pdf>

Make checks payable to NHWPCA and mail to NH DES

Note- The class held March 28 will be at the NH DES offices at Pease Trade Port

MAY 16
Tuesday
8:00am- 2:30 pm
\$65
0.5 CEUs
NH DES
Auditorium
Concord NH

Combat Communications for Conservationists

Taught by: Erik Eckl- Water Words That Work, LLC

Conservation and controversy go hand in hand. Sooner or later, the mud will fly and your work and your reputation will be on the line. This new class hones your messaging skills needed to set the record straight so you come out on top! Learn skills to help your facility communicate better when dealing with controversial issues- about biosolids, upgrades, enforcement actions, etc. Our presenter applies his knowledge on marketing and PR skills to address the issues faced by wastewater professionals and organizations.

Sign-in begins at 7:30 am. Photo identification required. Lunch is on your own. **Make checks payable to NHWPCA and mail to NH DES**

MAY 17
Wednesday
8:30 am- 2:30pm
\$40
0.5 CEUs
FTC

The Principles of Advanced Process Control for Activated Sludge Treatment

Taught by: Donald Pottle, WW Guru-Revered Professor at UMASS Lowell

Learn from the Master ! This class is geared toward those studying for the ww exams who need a better understanding of the Activated Sludge Process principles and mathematical calculations. All levels of operators are welcome. Time will be given for topics of concern from students in the class regarding operational problems and solutions. Please bring a calculator to class. **Make checks payable to NHWPCA and mail to NH DES**

MAY 18
Thursday
8:30am – 3:30pm
\$135
0.6 CEUs
FTC

NEIWPCC presents: Instrumentation Measurement & Control with Use of SCADA for Process Efficiency

Taught by: Jeff Murray- Control Point, Inc.; Mark Vuksan- Xylem, Inc.; Don Kennedy- NEIWPCC
Producing high-quality water and ww effluent requires O&M personnel to have a full understanding of in-line instrumentation and SCADA for process efficiency. Topics include SCADA architecture and system security; use of RTUs and PLCs for data acquisition; Communication mediums – FM, fiber optics, radio, Ethernet, satellite & cellular; Networking of sensors across an entire plant; and Sensor stability, reliability and repeatability. **Use the NEIWPCC registration form found at neiwppc.org or the DES web site. Checks Payable to NEIWPCC. Mail directly to NEIWPCC by May 4, 2017** Sign in begins at 8:00 am. Training hours approved for Water & WW programs.

MAY 23
Thursday
8:30am – 2:30pm
\$75
0.5 CEUs
FTC

NEWWTA presents: NPDES Laboratory Compliance: 40 CFR parts 122 & 136 and Intro to QA/QC

Taught by Gregory Kidd- NEWWTA Course #: 12017 –NH
This class will focus on laboratory skills related to NPDES required analysis including excerpts from 40 CFR Parts 122: Standard Conditions; 40 CFR Parts 136 Approved Methods and sampling collection & preservation; and the fundamentals of a QA/QC program including data reduction & statistical run charts. **Use the NEWWTA enrollment form. Make checks payable and mail directly to NEWWTA.** Option to register on-line at www.newwta.com or via e-mail to gkidd@zwi.net

MAY 24
Wednesday
8:30am- 2:30 pm
\$40
0.5 CEUs
FTC

Applied Wastewater Math Review

Taught by NH DES Staff

This class offers a review for those registered for all grades of the WW Certification exams. We will review basic math calculations including perimeters, surface areas, volumes and flow rates. Basic laboratory calculations such as BOD, TSS and VSS will be covered as well as percentage calculations. These basic math skills will then be applied to calculations of detention times, surface loading rates, sludge volumes, chlorine dosages, and percentage of BOD removal, F/M ratios, MCRT, pumping rates, required horsepower ratings and power consumption. The NHDES sanctioned wastewater formula sheet will be distributed at the beginning of the class. Bring calculator & pencils. Training hours approved for Water & WW programs **Make checks payable to Treasurer State of NH and mail to NH DES**

JUNE 7
Wednesday
9:00am to 3:00 pm
\$50
FTC

CERTIFICATION EXAMS—ALL GRADES

Separate Pre-Registration and Pre-Approval Required

Applications are available from the NH DES Wastewater Operation Section by calling 603. 271.5553, or go to www.des.nh.gov/organization/divisions/water/wweb/applications.htm. Those interested are advised to submit applications to DES by **April 10, 2017**. The NH DES Certification Committee will notify applicants of their eligibility within 25 days of the exam date.

JUNE 13, 14, & 15
Tuesday thru
Thursday
8:30 am- 3:00 pm
**June 15- Exam
12:30- 3:30pm
\$225 (includes
exam fee)**
1.5 CEUs
FTC

NEWWTA presents: Collection System Math and O&M & NEWEA Voluntary Collection Systems Certification Exams Grades I- IV Course # 0416-NH

Taught by: Gregory Kidd- NEWWTA

Register for the Course and the Exam separately.

This course is designed for collection system operators and maintainers. Topics include: collection system components, inspection & maintenance techniques, safety procedures, pumps & pump stations, and applied math. NEWEA Collection System Voluntary Certification Exam Grades 1, 2 3 & 4 administered on June 15 from 12:30pm to 3:30 pm. The course fee includes the NEWEA Certification Exam fee.

Exam applications will be provided with course confirmation. Use the NEWWTA enrollment form. Mail directly to NEWWTA with checks made payable to NEWWTA. Option to register on-line at www.newwta.com or via e-mail to gkidd@zwi.net

JUNE 23
Friday
Registration thru
NHWPCA
Hampton Beach
South Pavilion

NHWPCA Summer Meeting and 50th Anniversary Celebration for NHWPCA at Hampton Beach South Pavilion

More information and details to be shared in the near future. Don't miss this Celebration in Honor of the years of Environmental Stewardship and Operator Support provided by the membership of the NH Water Pollution Control Association over the last 50 years! If you're interested in becoming a member, contact any Association officer for an application, or visit nhwpc.org. Refer to your individual NHWPCA-member mailing, the web site, or the Collector Newsletter for event highlights. You are encouraged to make hotel and lodging reservations early. **Separate Mailing and Registration Required**

JUNE 27, 28 & 29
Tues thru
Thursday
8:00 am- 2:30 pm
FREE
1.5 CEUs
FTC

Confined Space Entry – Full Certification

Taught by Gary Bartlett NH DOT

Confined spaces can be extremely hazardous and may contain a variety of health risks: atmospheric hazards, accumulation of toxic materials, flammable or explosive atmospheres and physical hazards. This is a hands-on workshop designed for the beginner, those who write confined space programs, and those seeking an in-depth refresher. **Enrollment is limited to 15 people.** Training hours approved for Water & Wastewater programs.

OLF