



RECOMMENDED COURSE GUIDE – Fall 2024 NEIW PCC Massachusetts Wastewater Operator Training (MWOT) Program

The Board of Wastewater Operator Certification provides training courses to assist operators in preparing for all grades of municipal, industrial, and combined exams. For Fall 2024, this MWOT Program will be offered virtually through NEIW PCC. This program is also offering an in-person Basic Municipal Wastewater course and an in-person Basic Industrial Wastewater course. You can view and register for all courses via the following link: <https://payments.neiwpc.org/product-category/training/>

These courses are being offered as a resource to build a custom wastewater syllabus for each individual. **Students are not required to take every class offered by this program.** Students should select those courses needed to gain sufficient depth of knowledge on topics likely to be seen on their respective exams.

There are many additional exam preparation opportunities, including other online training providers, correspondence courses, study guides, vendor training, YouTube videos, and contacting experienced wastewater professionals and association members (e.g., MAWEA). It may take a combination of training approaches to prepare for a wastewater certification exam. If you know of additional training opportunities that can supplement the courses listed below, please contact John Murphy of MassDEP (john.j.murphy@mass.gov, 617-352-3375).

The following tables offer a guide to selecting NEIW PCC courses for each grade of the Massachusetts operator exam. Most course content is also applicable for other states. Operators are also encouraged to take any other classes on our training calendar.

MUNICIPAL GRADES 1 & 2 (LIVE VIRTUAL)

| Class name | Date | Time | TCHs |
|---|----------|-----------------|------|
| Basic Wastewater Math - Part I | 9/03/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Municipal Wastewater Treatment | 9/04/24 | 8:30 - 11:30 AM | 3 |
| Basic Wastewater Math - Part II | 9/10/24 | 8:30 - 11:30 AM | 3 |
| Massachusetts Wastewater Regulations & Certification Overview | 9/11/24 | 8:30 - 10:30 AM | 2 |
| Introduction to Collections Systems | 9/12/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Pumps - Part I | 9/30/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Preliminary & Primary Treatment | 10/01/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Pumps - Part II | 10/02/24 | 8:30 - 11:30 AM | 3 |
| Water Quality & NPDES Permitting | 10/03/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Secondary Treatment - Part I | 10/08/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Water & Wastewater Laboratory | 10/10/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Secondary Treatment - Part II | 10/15/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Disinfection | 10/22/24 | 8:30 - 10:30 AM | 2 |
| Basic Municipal & Industrial Wastewater - Solids Handling | 10/30/24 | 8:30 - 11:30 AM | 3 |
| Wastewater Safety | 11/06/24 | 8:30 - 11:30 AM | 3 |

MUNICIPAL GRADES 1 & 2 (IN-PERSON)

| Class name | Dates | Time | Location | TCHs |
|---|------------------------------------|-------------------|--------------|------|
| Basic Municipal Wastewater (In-Person)* | October 2, 9, 16 & 23 and 30, 2024 | 8:30 AM - 3:30 PM | Millbury, MA | 30 |

* Prerequisite: attending live virtual Basic Math Part I (9/03/24) and Basic Math Part II (9/10/24) is strongly recommended prior to this class.



RECOMMENDED COURSE GUIDE – Fall 2024
NEIW PCC Massachusetts Wastewater Operator Training (MWOT) Program

MUNICIPAL GRADES 3 & 4 (LIVE VIRTUAL)

| Class name | Date | Time | TCHs |
|--|----------|-----------------|------|
| Massachusetts Wastewater Regulations & Certification Overview | 9/11/24 | 8:30 - 10:30 AM | 2 |
| Introduction to Pumps - Part I | 9/30/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Pumps - Part II | 10/02/24 | 8:30 - 11:30 AM | 3 |
| Water Quality & NPDES Permitting | 10/03/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Secondary Treatment - Part I | 10/08/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Water & Wastewater Laboratory | 10/10/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Secondary Treatment - Part II | 10/15/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal Wastewater - Disinfection | 10/22/24 | 8:30 - 10:30 AM | 2 |
| Laboratory Analyses - pH & Total Residual Chlorine | 10/24/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part I | 10/29/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal & Industrial Wastewater - Solids Handling | 10/30/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses - Biochemical Oxygen Demand & Dissolved Oxygen | 10/31/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part II | 11/05/24 | 8:30 - 11:30 AM | 3 |
| Wastewater Safety | 11/06/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses – Bacteria | 11/07/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses – Solids | 11/21/24 | 8:30 - 11:30 AM | 3 |

INDUSTRIAL GRADES 1 & 2 (LIVE VIRTUAL)

| Class name | Date | Time | TCHs |
|---|----------|-----------------|------|
| Basic Wastewater Math - Part I | 9/03/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Industrial Wastewater Treatment | 9/06/24 | 8:30 - 11:30 AM | 3 |
| Basic Wastewater Math - Part II | 9/10/24 | 8:30 - 11:30 AM | 3 |
| Massachusetts Wastewater Regulations & Certification Overview | 9/11/24 | 8:30 - 10:30 AM | 2 |
| Introduction to Pumps - Part I | 9/30/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Pumps - Part II | 10/02/24 | 8:30 - 11:30 AM | 3 |
| Basic Industrial Wastewater - Characteristics & Chemistry | 10/09/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Water & Wastewater Laboratory | 10/10/24 | 8:30 - 11:30 AM | 3 |
| Basic Industrial Wastewater - Treatment Processes | 10/16/24 | 8:30 - 11:30 AM | 3 |
| Basic Industrial Wastewater - pH Neutralization | 10/23/24 | 8:30 - 11:30 AM | 3 |
| Basic Municipal & Industrial Wastewater - Solids Handling | 10/30/24 | 8:30 - 11:30 AM | 3 |
| Wastewater Safety | 11/06/24 | 8:30 - 11:30 AM | 3 |

INDUSTRIAL GRADES 1 & 2 (IN-PERSON)

| Class name | Dates | Time | Location | TCHs |
|--|-----------------------------|-------------------|--------------|------|
| Basic Industrial Wastewater (In-Person)* | October 1, 8, 22 & 29, 2024 | 8:30 AM - 3:30 PM | Millbury, MA | 24 |

* Prerequisite: attending live virtual Basic Math Part I (9/03/24) and Basic Math Part II (9/10/24) is strongly recommended prior to this class.



RECOMMENDED COURSE GUIDE – Fall 2024
NEIW PCC Massachusetts Wastewater Operator Training (MWOT) Program

INDUSTRIAL GRADES 3 & 4 (LIVE VIRTUAL)

| Class name | Date | Time | TCHs |
|--|-------------|-----------------|-------------|
| Massachusetts Wastewater Regulations & Certification Overview | 9/11/24 | 8:30 - 10:30 AM | 2 |
| Introduction to Pumps - Part I | 9/30/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Pumps - Part II | 10/02/24 | 8:30 - 11:30 AM | 3 |
| Introduction to Water & Wastewater Laboratory | 10/10/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part I | 10/29/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part II | 11/05/24 | 8:30 - 11:30 AM | 3 |
| Wastewater Safety | 11/06/24 | 8:30 - 11:30 AM | 3 |
| Advanced Industrial Wastewater - Treatment Processes - Part I | 11/13/24 | 8:30 - 11:30 AM | 3 |
| Advanced Industrial Wastewater - Treatment Processes - Part II | 11/20/24 | 8:30 - 11:30 AM | 3 |
| Electricity, Motors, & Horsepower | 12/04/24 | 8:30 - 11:30 AM | 3 |
| Advanced Pumps & Hydraulics | 12/11/24 | 8:30 - 11:30 AM | 3 |
| Advanced Laboratory Procedures | 12/12/24 | 8:30 - 11:30 AM | 3 |

COMBINED GRADES 5 & 6 (LIVE VIRTUAL)

| Class name | Date | Time | TCHs |
|--|-------------|-----------------|-------------|
| Massachusetts Wastewater Regulations & Certification Overview | 9/11/24 | 8:30 - 10:30 AM | 2 |
| Water Quality & NPDES Permitting | 10/03/24 | 8:30 - 11:30 AM | 3 |
| Basic Industrial Wastewater - pH Neutralization | 10/23/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses - pH & Total Residual Chlorine | 10/24/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part I | 10/29/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses - Biochemical Oxygen Demand & Dissolved Oxygen | 10/31/24 | 8:30 - 11:30 AM | 3 |
| Intermediate Wastewater Math - Part II | 11/05/24 | 8:30 - 11:30 AM | 3 |
| Wastewater Safety | 11/06/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analysis - Bacteria | 11/07/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Treatment Technologies | 11/12/24 | 8:30 - 11:30 AM | 3 |
| Advanced Industrial Wastewater - Treatment Processes - Part I | 11/13/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Activated Sludge | 11/19/24 | 8:30 - 11:30 AM | 3 |
| Advanced Industrial Wastewater - Treatment Processes - Part II | 11/20/24 | 8:30 - 11:30 AM | 3 |
| Laboratory Analyses - Solids | 11/21/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Process Control & Troubleshooting | 11/26/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Biological Nutrient Removal | 12/03/24 | 8:30 - 11:30 AM | 3 |
| Electricity, Motors, & Horsepower | 12/04/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Solids Handling | 12/10/24 | 8:30 - 11:30 AM | 3 |
| Advanced Pumps & Hydraulics | 12/11/24 | 8:30 - 11:30 AM | 3 |
| Advanced Laboratory Procedures | 12/12/24 | 8:30 - 11:30 AM | 3 |
| Advanced Municipal Wastewater - Administration, Management & Finance | 12/17/24 | 8:30 - 11:30 AM | 3 |



RECOMMENDED COURSE GUIDE – Fall 2024
NEIW PCC Massachusetts Wastewater Operator Training (MWOT) Program

ADDITIONAL TRAINING OPPORTUNITIES

Please note that this is not a comprehensive list of available wastewater operator training. There are many other training providers and opportunities available.

SELF-STUDY COURSES

- Sacramento State – Water Programs: <https://www.owp.csus.edu/courses/wastewater.php>
- Water Environment Federation (Wastewater Treatment Fundamentals): <https://www.wef.org/resources/publications/books/>
- CEUPlan.com
- RoyCEU.com
- SkillWorks.com
- Clear-Water-Consulting.com

COURSES OFFERED BY BRISTOL COMMUNITY COLLEGE

Through a grant from the DESE Integrated Education & Training Program, BCC has been offering the following water and wastewater courses at no charge (students must purchase the course books):

| Section | Course Title | Credits |
|-------------|---|---------|
| EGR 143.GRA | Conceptual Math for Environmental Technicians | 3 |
| EGR 241.GRA | Clean Water Technology 1 (Wastewater Treatment) | 4 |
| EGR 242.STM | Clean Water Technology 2 (Wastewater Treatment) | 4 |
| EGR 248.STM | Advanced Water Treatment (Drinking Water) | 4 |

Form more information, please contact Robert Rak at Robert.Rak@bristolcc.edu.

OTHER WASTEWATER TRAINING PROVIDERS IN NEW ENGLAND

- Clear Water Consulting
- Falcone Environmental Services
- NEWWTA
- Peterson School
- Practical Applications
- Tighe & Bond
- Wastewater Technology Trainers
- Weston & Sampson
- Local colleges, universities, and community colleges