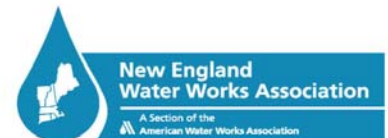


**Drinking Water and  
Wastewater Treatment Industries**  
January 2008



***Career  
Opportunities  
Reference Guide***

DRAFT



# Table of Contents

<b>Required Entry Level Education and Skills</b> .....	1
Entry Level Education.....	1
Entry Level Skills .....	2
<b>Certification &amp; Training Requirements</b> .....	4
<b>CONNECTICUT</b> .....	4
CT Wastewater Certification & Training Requirements .....	4
CT Drinking Water Certification & Training Requirements .....	5
<b>MAINE</b> .....	6
ME Wastewater Certification & Training Requirements .....	6
ME Drinking Water Certification & Training Requirements.....	7
<b>MASSACHUSETTS</b> .....	9
MA Wastewater Certification & Training Requirements.....	9
MA Drinking Water Certification & Training Requirements.....	10
<b>NEW HAMPSHIRE</b> .....	12
NH Wastewater Certification & Training Requirements.....	12
NH Drinking Water Certification & Training Requirements .....	13
<b>RHODE ISLAND</b> .....	15
RI Wastewater Certification & Training Requirements.....	15
RI Drinking Water Certification & Training Requirements.....	16
<b>VERMONT</b> .....	19
VT Wastewater Certification & Training Requirements .....	19
VT Drinking Water Certification & Training Requirements .....	20
<b>Education and Training Opportunities</b> .....	23
University & Community College Programs.....	23
Online Programs .....	25
Training Centers.....	26
<b>Job Posting Resources &amp; Links</b> .....	28

# Required Entry Level Education and Skills

## Entry Level Education

A high school diploma usually is required for an individual to become a drinking water or wastewater treatment plant facility operator. Operators need mechanical aptitude and should be competent in basic mathematics, chemistry, and biology. They must have the ability to apply data to formulas prescribing treatment requirements, flow levels, and concentration levels. Some basic familiarity with computers also is necessary because of the trend toward computer-controlled equipment and more sophisticated instrumentation. Certain positions – particularly in larger cities and towns – are covered by civil service regulations. Applicants for these positions may be required to pass a written examination testing their mathematics skills, and mechanical and general aptitude.

Due to the increasing complexity of treatment plants, the completion of an associate degree or a certificate program in water quality and wastewater treatment technology increases an applicant's chances for employment and promotion. Offered throughout the country, these programs provide a good general knowledge of drinking water and wastewater treatment processes, as well as basic preparation for becoming an operator.

Trainees usually start as attendants or operators-in-training (OIT) and learn their skills on the job under the direction of an experienced operator. Aside from opportunities as operators in treatment plants, drinking water systems employ distribution system operators. These individuals are responsible for the installation of drinking water service from the time the water leaves the treatment plant or pumping station to the customer's tap. These positions require mechanical expertise so as to all allow the proper sanitary installation, operation and maintenance of water mains, fire hydrants, storage tanks valves and other related system components. A background in math and basic science is also very helpful. They learn by observing and doing routine tasks such as recording meter readings, taking water and sludge samples, and performing simple maintenance and repair work on pumps, electric motors, valves, and other plant equipment. Larger treatment plants generally combine this on-the-job training with formal classroom or self-paced study programs.

Most state drinking water and water pollution control agencies offer courses to improve operators' skills and knowledge. The courses cover principles of treatment processes and process control, laboratory procedures, maintenance, management skills, collection systems, safety, chlorination, sedimentation, biological treatment, sludge treatment and disposal, and flow measurements. Some operators take correspondence courses on subjects related to drinking water and wastewater treatment, and some employers pay part of the tuition for related college courses in science or engineering.

As operators are promoted, they become responsible for more complex treatment processes. Some operators are promoted to plant supervisor or superintendent; others advance by transferring to a larger facility. Post-secondary training in drinking water and wastewater treatment, coupled with increasing responsibility as an operator, may be sufficient to qualify a worker for becoming superintendent of a small plant, where a superintendent also serves as an operator. However, educational requirements are rising as larger, more complex treatment plants are built to meet new drinking water and water pollution control standards. With each promotion, the operator must have greater knowledge of federal, state, and local regulations. Superintendents of large plants generally need an engineering or science degree.

## Entry Level Skills

Important skills, knowledge, and abilities for drinking water and wastewater treatment plant operators include:

- **Microbiology** - Basic knowledge of microorganisms that can cause illness when found in drinking water, and microorganisms used in wastewater treatment in anaerobic digestion and activated sludge.
- **Biology** - Basic knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- **Chemistry** - Basic knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interaction, danger signs, production techniques, and disposal methods.
- **Physics** - Knowledge of hydraulics, flow dynamics, electricity, and pressure.
- **Problem Sensitivity** - The ability to interpret data to tell when something is wrong or is likely to go wrong.
- **Near Vision** - The ability to see details at close range (within a few feet of the observer).
- **Operation and Control** - Controlling operations of equipment or systems manually.
- **Troubleshooting** - Determining causes of operating errors and associated solutions.
- **Information Technology** - The ability to use basic computer equipment, various software applications to control automated equipment or process units and to communicate with co-workers via e-mail, data entry, and other required technology.
- Ability to work well with others.
- Initiative

Operators need mechanical aptitude and the ability to read and understand charts and graphs, and carry out oral and written instructions. Operators must be able to make independent decisions within specified standards. Operators must also have knowledge of the materials, tools, and methods used in general construction, repair, maintenance, and operation of treatment plants and related pump stations; knowledge of elementary chemistry and biology; knowledge of the operation and maintenance of motors, pumps, and related equipment; ability to perform some heavy manual labor, learn to perform laboratory tests, maintain records, and take readings of gauges and meters; ability to follow detailed oral and written instructions and analyze, survey and act with minimum supervision.

Entrance requirements vary somewhat, depending on the employer. Some employers prefer that applicants to have an associate's or bachelor's degree in water treatment technology. Other employers hire applicants who have a high school education or equivalent. Many employers hire inexperienced but highly motivated applicants and train them on-the-job. Some hire only experienced, certified operators.

### **Certification & Training Requirements**

The following information is meant only to provide general guidelines. For comprehensive information see the full set of state regulations at the website links provided in each state section.

\* \* \* \*

## CONNECTICUT

### CT Wastewater Certification & Training Requirements

In Connecticut the Department of Environmental Protection Bureau of Water Management certifies Wastewater Treatment Plant Operators. There are four classes of certification, Classes I through IV (lowest to highest) based on treatment complexity.

In order to qualify to take a DEP-sponsored exam, an applicant must fully complete an application detailing how they meet the experience and education requirements appropriate for that particular class of exam. Once an exam is passed, a certificate is then issued, except in the case of an Operator-In-Training (OIT). In the case of an OIT, a certificate is issued when the operator provides documentation of having fulfilled the experience requirement. In some instances, extra education may be applied toward a portion of the experience requirement, and extra direct responsible charge experience may be applied toward a portion of the education requirement. While the regulations require that exams be given once per year, the practice has been that exams are given in January and July of each year.

OIT applicants may apply to take the Class I, II or III exam without meeting the experience requirements. A successful applicant that passes the exam is required to present to the DEP proof of having fulfilled the experience requirements prior to being issued the appropriate certificate. A valid certificate must be issued before the applicant is able to assume duties requiring that Class of certification.

Presently renewal is not a requirement to maintain wastewater certification in Connecticut. However, a certificate will lapse if an operator leaves a Water Pollution Control Facility and does not reemploy at a facility within 2 years. To reactivate a lapsed certificate, the operator will have to reapply, retest, pass and reemploy in order for a certificate to be reissued. Renewal, along with laboratory and collection certification, is being addressed and regulations will be drafted in the future.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association. This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four Grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at time and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website: <http://www.newea.org/>, on the Vol. Certif. tab.

#### **Contact for Connecticut Wastewater Treatment Certification:**

Joe Nestico

CT DEP, Bureau of Water Management

79 Elm St.

Hartford, CT 06106-5127

Phone: (860) 424-3755

Email: [joseph.nestico@po.state.ct.us](mailto:joseph.nestico@po.state.ct.us)

Web Site: [http://www.ct.gov/dep/cwp/view.asp?a=2719&q=325582&depNav\\_GID=1654](http://www.ct.gov/dep/cwp/view.asp?a=2719&q=325582&depNav_GID=1654)

## CT Drinking Water Certification & Training Requirements

In Connecticut the Department of Public Health certifies water system operators. There are four levels of certification based on treatment complexity for water treatment facility operators, Class I being the lowest and Class IV being the highest. There are three levels of certification based on population served for water distribution system operators, again Class I the lowest and Class III the highest.

Generally, no experience is needed to become an Operator-In-Training (OIT); however a high school diploma or its equivalent (GED) is required to attain water certification in Connecticut. To take an OIT exam, a person must receive a Certificate of Achievement in Water Management from a Connecticut Community College, or equivalent training, as determined by the Department. There are two certification exam opportunities per year. Every three years documented technical training contact hours are required for certification renewal.

Present regulations include the following general conditions:

- All Community Water Systems and all Non-Transient Non-Community Water Systems are required to have their Water Treatment Plants, Distribution Systems, and Small Water Systems operated by certified operators.
- Treatment Plants are divided into four classifications by a point system based on plant size, flow, and complexity. Distribution Systems are divided into three classifications based on populations served. A Small Water System serves fewer than 1000 persons and has no treatment.
- To become certified, an operator must meet specific education and experience requirements, based on the plant or system classification, and pass an examination. Operators must renew their certificates every three years by meeting specific training hour requirements for renewal.

### ***Contact for Connecticut Water Certification:***

Connecticut Department of Public Health - Drinking Water Section - WT, D, VSWS, X, BPAT  
Robert W. Rivard

CT DPH, Drinking Water Section

410 Capitol Ave. MS #51 WAT

Hartford, CT 06134-0308

Phone: (860) 509-7333

Email: [robert.rivard@po.state.ct.us](mailto:robert.rivard@po.state.ct.us)

Web Site: <http://www.dph.state.ct.us/BRS/Water/DWD.htm>

Training courses: [http://www.dph.state.ct.us/BRS/Water/op\\_cert/Training/Training.htm](http://www.dph.state.ct.us/BRS/Water/op_cert/Training/Training.htm)

## MAINE

### ME Wastewater Certification & Training Requirements

In Maine the Division of Water Quality Management of the Department of Environmental Protection oversees the Wastewater Operation Certification Program. Operators of publicly owned and industrial wastewater treatment plants must be certified by the Department. Treatment plants are classified as either Grades I-V Biological Grade I-III Physical/Chemical or Grade I-II spray Irrigation Treatment System according to population equivalents and type of treatment. Certification for each operator Grade is based on education and experience. There are provisions for substituting education for experience as well as certain work experience for actual treatment plant experience. At a minimum a high school diploma or its equivalent (GED) or two years of actual work experience at a wastewater treatment facility is required to attain wastewater certification in Maine. In addition to education and experience requirements, operators are certified through examinations which are given in May and November each year.

Maine does not have an Operator-In-Training classification. Those wishing to enter the wastewater treatment profession must first work under the supervision of a certified operator. Only after a new worker has met the experience and exam requirements will that person be granted a Maine wastewater operators certificate. These experience/education and exam requirements for two entry-level certifications are outlined below:

**Grade I Operator** - The applicant for this grade shall submit satisfactory evidence of graduation from high school or at least two years experience operating a wastewater treatment plant.

**Grade II Operator** - The applicant for this grade shall submit satisfactory evidence of at least four years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or submit satisfactory evidence of three years of related education and one year of related work experience.

Operators must renew their certification every other year by showing evidence that they have completed eighteen (18) hours of approved training and paying a renewal fee.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association (NEWEA). This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four Grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at times and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website: <http://www.newea.org/> , on the Vol. Certif. tab.



**Contact for Maine Wastewater Certification:**

Maine Wastewater Operator Certification Program

Leslie Rucker

ME DEP, Operator Certification Program

17 State House Station

Augusta, ME 04333-0017

Phone: (207) 287-9031

Email: leslie.a.rucker@maine.gov

Web Site: <http://www.state.me.us/dep/blwq/doceng/opcrtpg2.htm>

**ME Drinking Water Certification & Training Requirements**

In Maine the Department of Human Services (ME DHS) Board of Licensure of Water System Operators certifies water system operators. There are five levels of certification for water treatment facility operators based on treatment complexity. There are also five levels of certification for water distribution system operators based on population served.

Generally, no experience is needed for an Operator-In-Training (OIT), however an OIT must have passed at least a Class I examination. An operator with an OIT license is not authorized to supervise and operate a classified water system. Upon completion of the required experience, an OIT may apply to the Board for a Very Small Water System (VSWS) or Class I license.

At a minimum a high school diploma or its equivalent (GED) is required to attain water certification in Maine. Additional Entry Level Class requirements are as follows:

**VSWS Operator** - Six months of experience in a VSWS or higher water system or one year of related experience and pass the VSWS examination.

**Class I Operator** - One year experience in a Class I or higher water system or two years of related experience, and successful completion of the Class I examination.

**Class II Operator** - Two years experience in a Class I or higher water system or four years of related experience and pass the Class II examination.

Related experience may include, but is not limited to, wastewater treatment plant operations, pilot studies, design, planning, construction and other technical disciplines. Education may be substituted for experience as set forth below:

- 1) Post high school education in approved areas of engineering, science, and/or related fields: 60 semester hours or equivalent equals 1 year of experience.
- 2) Specialized training courses evaluated on an individual basis.
- 3) All experience and/or education submitted in support of applications that are not specified in this section shall be evaluated on an individual basis.

Every two years the operator shall fulfill the following minimum training requirements during the last renewal cycle. The required TCH are for the highest level of license held.

Operator Class	Training Contact Hours (TCH)
VSWS	6
I	12
II	18
III & IV	24

**Contact for Maine Drinking Water Certification:**

Maine Board of Licensure of Water Treatment Plant Operators - WT, D, VSWS

Teresa Trott

ME DHS, Drinking Water Program

11 State House Station

Augusta, ME 04333-0011

Phone: (207) 287-7485

Email: [teresa.trott@maine.gov](mailto:teresa.trott@maine.gov)

Web Site: <http://www.medwp.com>

## MASSACHUSETTS

### MA Wastewater Certification & Training Requirements

In Massachusetts there are seven levels of certification for wastewater treatment facility operators. Grade 1 (lowest) to Grade 7 (highest) correspond to increasing levels of treatment complexity. License Status - When and If (W&I): for an applicant that has passed an exam is not working in the field and does not have wastewater experience. Operator- In-Training (OIT) status is for an operator who has passed an exam and does not have enough experience needed for full certification.

There are two certification exam opportunities per year.

Entry Level Grade Operators shall possess experience and/or education as follows:

**Grade 1 Operators** - Shall have passed a Grade 1 examination and possess at least one year of experience at a level of responsibility comparable to that of a Class I plant or higher.

Education may be substituted for not more than six months of experience.

**Grade 2 Operators** - Shall have passed a Grade 2 examination and possess at least three years of experience at a level of responsibility comparable to that of a Class 1 plant or higher. Education may be substituted for not more than two years of experience.

**Grade 3 Operators** - Shall have passed a Grade 3 examination and possess at least five years of experience at a level of responsibility comparable to that of a Class 2 plant or higher. Education may be substituted for not more than three years of experience.

**Grade 4 Operators** - Shall have passed a Grade 4 examination and possess at least six years of experience at a level of responsibility comparable to that of a Class 3 plant or higher. Education may be substituted for not more than four years of experience.

Education-Experience equivalents are set forth below:

Education	Experience Equivalent
Masters Degree	5 years
Bachelors Degree (Chemical, Civil, Electrical, Environmental, Mechanical, or Sanitary. Environmental Science, Biology, Chemistry, Bacteriology, or Public Health)	4 years
Associates Degree in the above or Wastewater Treatment Technology	3 years
Bachelor's Degree in other fields	3 years
Graduation from High School or its equivalent	2 years

Every two years, Active operators must demonstrate to the Board in their application for renewal that they have earned twenty or more Training Contact Hours (TCH) in the previous two year period. If, during the two year period, the operator has passed a certification

examination which upgrades their certification, this shall equal 10 TCHs. An Operator with Full or OIT status who is not working in the field may apply for Inactive status; an Inactive operator need not obtain regular TCHs. If an Inactive Operator wishes to become Active, the operator must obtain 10 TCHs and apply for status change to active, then accrue TCHs for renewal as required above. A W&I operator who is not working in the field need not obtain TCHs, but must pay the license renewal fee when due.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association. This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at time and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website: <http://www.newea.org/>, on the Vol. Certif. tab.

***Contact for Massachusetts Wastewater Certification:***

Massachusetts State Board of Certification of Operators of Wastewater Treatment Facilities  
Thomas W. Bienkiewicz  
MA DEP, Central Region  
627 Main St.  
Worcester, MA 01608-2022  
Phone: (508) 767-2781  
Email: [Thomas.Bienkiewicz@state.ma.us](mailto:Thomas.Bienkiewicz@state.ma.us)  
Web Site: <http://www.mass.gov/dep>

***Contact for Wastewater Exam and Renewal Information:***

NEIWPCC  
116 John St.  
Lowell, MA 01852-1124  
Phone: 978-323-7929  
Fax: 978-323-7919  
Email: [mail@neiwpc.org](mailto:mail@neiwpc.org)  
Web Site: [www.neiwpc.org](http://www.neiwpc.org)

***Additional Information:***

Certification of Operators of Wastewater Treatment Facilities (the regulations)  
[http://www.mwpc.org/257\\_cmr\\_2.htm](http://www.mwpc.org/257_cmr_2.htm)

**MA Drinking Water Certification & Training Requirements**

In Massachusetts the Division of Professional Licensure Board of Certification of Operators of Drinking Water Supply Facilities certifies operators for both water distribution and treatment systems. There are four levels of certification for water treatment facility operators, based on treatment complexity, Grades T1 the lowest and GradeT4 the highest. There are also four levels

of certification for water distribution system operators, based on population served, again Grades D1 lowest and Grade D4 highest. Additionally, there is a VSS Grade for very small systems and a VND Grade for vending machines.

At a minimum a high school diploma or its equivalent (GED) is required to attain water certification in Massachusetts. No experience is needed to become an Operator-In-Training (OIT), but individuals need to pass an examination. Experience is needed for full certification.

For example, to attain a Grade I (class T or D) full certification, a person must have either:

- 1) High School diploma (or GED) and two years full-time experience in the particular grade of water facility; **or**
- 2) High School diploma (or GED) and Certificate of competency in water treatment technology or other related technical fields, or one or more years of education beyond high school with courses in the physical and/or biological sciences (courses shall be in the areas of sanitary, civil, chemical or environmental engineering, public health, biology, chemistry, or other discipline acceptable to the Board), **and** one year full-time experience in the particular segment of a public water system and pass the Board exam for the particular Grade.

There are three certification exam opportunities per year.

Every two years documented technical training contact hours are required for certification renewal. All operators, including operators-in training, must demonstrate to the Board that they have completed from between 5 to 20 approved training contact hours in the previous two years to renew their certifications.

***Contact for Massachusetts Water Certification:***

Massachusetts Board of Certification of Operators of Drinking Water Supply Facilities

Paul S. Niman, Board Chairman

MA DEP, Division of Water Supply

One Winter St., 5th Floor

Boston, MA 02108-4746

Phone: (617) 556-1166

Email: paul.niman@state.ma.us

Web Site: <http://www.mass.gov/dpl/boards/dw>

Training courses: <http://www.mass.gov/dep/water/compliance/certop.htm>

## NEW HAMPSHIRE

### NH Wastewater Certification & Training Requirements

The New Hampshire Department of Environmental Services (NH DES) administers the certification of wastewater treatment facility operators. In New Hampshire there are four levels of certification for wastewater treatment facility operators based on facility complexity and design flow, with Grade I lowest and Grade IV highest.

At a minimum a high school diploma or its equivalent (GED) is required to attain wastewater certification in New Hampshire.

There are two certification exam opportunities per year (June and December). Both application and renewal fees are \$50 for a two year cycle. Exam applications must be received by DES at least 60 days prior to the exam date.

In summary an applicant for Operator Certification shall:

- 1) Pass the written examination
- 2) Meet the minimum operating experience and education requirements specified below:

Grade	Operating Experience	Education
I OIT	0 years	High School Graduate or GED
I	1 year	High School Graduate or GED
II OIT	1 year	High School Graduate or GED
II	3 years	High School Graduate or GED
III OIT	2 years	High School Graduate or GED, plus 2 years relevant post HS education
III	4 years	High School Graduate or GED, plus 2 years relevant post HS education
IV OIT	4 years	High School Graduate or GED, plus 2 years relevant post HS education
IV	6 years	High School Graduate or GED, plus 2 years relevant post HS education

Note: OIT = Operator in Training

Relevant post-high school education shall include the following:

- 1) For programs in sanitary engineering, environmental technology or studies, water treatment, or wastewater treatment, a bachelor's degree shall be counted as 4 years of relevant education and an associate's degree shall be counted as 2 years of relevant education;

- 2) For programs in other relevant technical and scientific disciplines, such as natural sciences and non-sanitary engineering, a bachelor's degree shall be counted as 3 years of relevant education and an associate's degree shall be counted as 1.5 years of relevant education; and,
- 3) Partial credit toward relevant post-high school education requirements shall be allowed for academic work or vocational training.

The applicant may request substitutions for required education with two years of in-plant operating experience.

For renewal of all grades, except I and I-OIT, the operator shall acquire a minimum of 2 CEUs (20 TCH) of training in the relevant field during the 2 year period prior to the expiration date of the certification.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association. This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four Grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at time and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website: <http://www.newea.org/> , on the Vol. Certif. tab.

***Contact for New Hampshire Wastewater Certification:***

George C. Neill, P.E.  
NH DES, Water Division  
29 Hazen Dr.  
P.O. Box 95  
Concord, NH 03302-0095  
Phone: (603) 271-3325  
Web Site: <http://www.des.state.nh.us/rules/envws-901.pdf>

**NH Drinking Water Certification & Training Requirements**

In New Hampshire the Department of Environmental Services (NH DES) certifies water system operators. There are five levels of certification for water treatment facility operators based on treatment complexity with Grade A the lowest and Grade IV the highest. There are also five levels of certification for water distribution system operators based on population served with Grade IA the lowest and Grade IV the highest.

There are three exam opportunities per year. Applicants for examination shall:

- 1) Be in a physical condition which enables an operator to satisfactorily perform his or her intended duties relative to the size and complexity of an operator's particular water system;

- 2) Be able to read and write in the English language; and
- 3) Submit a \$50 fee and completed application showing evidence of the following minimum number of years of education and experience for the desired operator grade:

Certificate Grade	Operating Experience	Education
IA	6 months or completion of the "Small System Operation" course as specified in regulations	High School Graduate or GED
I	1 year	High School Graduate or GED
II	3 years	High School Graduate or GED
III	4 years	High School Graduate or GED, plus 2 years post-secondary education
IV	6 years	High School Graduate or GED, plus 4 years post-secondary education

An applicant for grade I, II, or III certification as a water treatment plant or distribution system operator may take an examination in a given grade, if the individual has submitted to the department evidence of at least one half the required experience or of education or experience in technical fields other than water works, for the purpose of becoming an Operator-In-Training (OIT).

Certified operators must apply for certification renewal every 2 years and provide proof of having completed specified training, typically 20 training contact hours.

**Contact for New Hampshire Drinking Water Certification:**

New Hampshire Department of Environmental Services - WT, D, VSWS  
Harrison 'Chip' Mackey  
NH DES, Water Supply Engineering Bureau  
29 Hazen Dr.  
P.O. Box 95  
Concord, NH 03302-0095  
Phone: (603) 271-2410  
Email: hmackey@des.state.nh.us  
Web Site: <http://www.des.nh.gov/dwgb/>

**Additional Information:**

New Hampshire Water Supply Engineering Bureau, Operator Certification Administrative Rules

<http://www.des.nh.gov/rules/envws-367.pdf>

The wastewater engineering bureau has started a job website for wastewater position in New Hampshire.

[www.des.state.nh.us/wwe/jobsrch.htm](http://www.des.state.nh.us/wwe/jobsrch.htm)



## **RHODE ISLAND**

### **RI Wastewater Certification & Training Requirements**

In Rhode Island the Department of Environmental Management (RI DEM) Office of Water Resources certifies wastewater treatment facility operators. There are four levels of certification for wastewater treatment facility operators based on treatment complexity with Grade 1 the lowest level and Grade 4 the highest level wastewater treatment operator certification.

Certificate shall be renewed every two years upon successful completion of minimum training requirements.

At a minimum a high school diploma or its equivalent (GED) is required to attain wastewater certification in Rhode Island. Applicants for certification must pass the required written examination. Examinations shall be held at least twice annually at a place and time set by the Board. Individuals not employed at an approved wastewater treatment facility in the State of Rhode Island shall not be allowed to sit for examination.

In evaluating qualifications of applicants, RIDEM will evaluate an individual's work experience and education. Where applicable, education may be substituted for a portion of experience requirements. For example, two (2) years of college studies in science, engineering, or related fields may be considered as equivalent to a maximum of one (1) year of experience.

Additionally, where applicable, experience may be substituted for a portion of educational requirements. For example, one (1) year of experience may be considered as equivalent to a maximum of two (2) years of college.

The Board may permit an applicant for any grade to take an examination in a given grade, if the individual has submitted evidence of education and experience satisfactory to the Board for the purpose of becoming an operator-in-training (OIT). OIT Certificates may be valid for up to three (3) years; therefore any applicant for examination must at the time of examination require only a maximum of three (3) years additional experience.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association (NEWEA). This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at time and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website <http://www.newea.org/>, on the Vol. Certif. tab.

**Contact for Rhode Island Wastewater Certification:**

Rhode Island Board of Certification of Operators of Wastewater Treatment Facilities

Bill Patenaude

RI DEM, Water Resources

235 Promenade St.

Providence, RI 02908-5767

Phone: (401) 222-3961, ext. 7264

Email: bill.patenaude@dem.ri.gov

Web Site: <http://www.dem.ri.gov/programs/benviron/water/licenses/wwoper/index.htm>

**RI Drinking Water Certification & Training Requirements**

The Rhode Island Department of Health (RI DOH) certifies drinking water operators. There are four levels of certification, in addition to VSS (Very Small System) certification. For water treatment facility operators, Grade 1T being the lowest level and Grade 4T being the highest-level water treatment operator certification, based on treatment complexity of the system. There are also four levels of certification for water distribution system operators, based on population served. Again, Grade 1D being the lowest and Grade 4D being the highest-level water distribution system operator certification.

Applicants seeking drinking water operator certification must have a high school diploma or its equivalent (GED). Additionally, applicants for certification must pass a drinking water operator certification examination.

Examinations are held at least three times per year at a time and place designated by the Board.

Full certification will be in effect for three (3) years from issuance and may be renewed in accordance with section 11.0 of these regulations.

Classification and qualifications of water supply treatment and distribution operators are as follows:

Full Grade 1 Treatment (1T), or Grade 1 Distribution (1D), certification requires:

- A high school diploma (or equivalent) and
- Six (6) months full-time experience as an operator at a Class 1T (or higher) drinking water supply treatment facility, or Class 1D drinking water distribution facility.

Each higher level of certification has an incrementally more stringent requirement for experience at correspondingly higher rated facilities. For example, a Full Grade 3 Treatment (3T) or Grade 3 Distribution (3D), certification requires:

- Possession of a Full Grade 2T or a Full Grade 2D with full-time experience as an operator at a Class 2T (or higher) drinking water supply treatment facility or Class 2D drinking water distribution facility for an additional two (2) years after certification; or

- A high school diploma (or equivalent) and four (4) years full-time experience as an operator at a Class 2T (or higher) drinking water supply treatment facility, or Class 2D drinking water distribution facility; or
- An Associate’s Degree in the physical and/or biological sciences and two (2) years full-time experience as an operator at a class 2T (or higher) drinking water treatment facility. (Degree shall be in the areas of sanitary, civil, chemical, or environmental engineering, public health, biology, chemistry, or other discipline acceptable to the Board); or
- A Bachelor's degree in the physical and/or biological sciences and one (1) year full-time experience as an operator at a class 2T (or higher) drinking water treatment facility. (Degree shall be in the areas of sanitary, civil, chemical, or environmental engineering, public health, biology, chemistry, or other discipline acceptable to the Board).

An applicant seeking certification as an Operator-in-Training (OIT) must meet all of the minimum qualifications outlined in the regulations except for the full-time employment and/or full time experience requirements for the certification type and grade for which he/she is seeking before he/she will be allowed to take the examination. If the applicant passes the examination to the satisfaction of the Board, the Board shall issue the applicant a certification as an OIT. Upon satisfactory completion of the required full time employment and/or full time experience for the certification type and grade for which the OIT is certified, and upon application to the Board, full certification shall be granted.

In order to renew a certification, an applicant must complete the number of continuing training/education contact hours related to drinking supply treatment and/or transmission and distribution specified below:

Certificate Class	OIT (Two Year Renewal Period)	FULL (Three Year Renewal Period)
Class VSS	2 hrs	3 hrs
Class 1	10 hrs	15 hrs
Class 2	10 hrs	15 hrs
Class 3	20 hrs	30 hrs
Class 4	20 hrs	30 hrs

Note: One (1) continuing education unit (CEU) equals ten (10) training contact hours.

OIT = Operator in Training status      FULL = Full Certification status

***Contact for Rhode Island Drinking Water Certification:***

Dana McCants Derisier  
 RI DOH, Office of Drinking Water Quality  
 3 Capitol Hill, Room 209  
 Providence, RI 02908-5097  
 Phone: (401) 222-7824  
 Email: [dana.mccants-derisier@health.ri.gov](mailto:dana.mccants-derisier@health.ri.gov)

***Contact for Rhode Island Drinking Water Operator Certification Board:***

June Swallow, P.E.  
RI DOH, Office of Drinking Water Quality  
3 Capitol Hill, Room 209  
Providence, RI 02908-5097  
Phone: (401) 222-7787  
Email: [june.swallow@health.ri.gov](mailto:june.swallow@health.ri.gov)

***Additional Information:***

Water Treatment, Distribution, and Very Small Water System Certifications  
Web Site: <http://www.health.ri.gov/environment/dwq/operator>  
Training courses: <http://www.health.ri.gov/environment/dwq/operator/courses.php>

## VERMONT

### VT Wastewater Certification & Training Requirements

In Vermont the Department of Environmental Conservation (VT DEC) Wastewater Management Division certifies wastewater operators. There are five grades of certification, I through V (lowest to highest) based on type (domestic or industrial), complexity, and design flow of the facility.

Operators are certified only after meeting specific education and experience requirements and passing a certification exam. The VT DEC conducts certification exams at least once per year.

Applicants for certification must be employed as an operator, assistant chief operator or chief operator in Vermont at the time of application. One must typically gain on the job experience prior to becoming certified unless they hold an advanced degree in a relevant field of study.

Entry Level Grade Requirements:

***Grade I Certificate (Domestic or Industrial)*** - Applicants for this grade must submit satisfactory evidence of at least two years experience in operation of a plant in this or higher class, and will be required to have passed a Grade I examination.

***Grade II Certificate (Domestic or Industrial)*** - Applicants for this grade must submit satisfactory evidence of at least two years experience in operation of a plant in Class I or higher and pass a Grade II examination.

Education may be substituted for experience for up to one half of the experience requirement. All education to be substituted for experience must be documented by a technical school completion certificate or college degree accompanied by a transcript detailing the courses completed. All coursework resulting in a degree must be in the field of sanitary engineering, environmental engineering, public health engineering, chemical engineering, chemistry or biology with specific course concentration in wastewater treatment. A college or technical school certificate must be specifically in the field of wastewater treatment.

A list of certificates and degrees and the amount of education that can be substituted follows:

Type of Degree	Equivalent Experience
Technical school or college certificate	6 months
Two-year Associates degree	1 year
Four-year Bachelors degree	2 years
Masters degree	3 years

The VT DEC may waive examination for applicants holding certificates or licenses in a comparable or higher classification issued by other states or certifying authorities, which the Department determines have equivalent standards, i.e. the VT DEC grants reciprocity.

Certifications are renewed every five years provided the operator satisfies specific renewal training requirements.

Certification for Collection System Operators is a voluntary program administered through the New England Water Environment Association, Inc. This voluntary certification program has been established to promote the employment of trained, experienced, reliable, and efficient personnel for the operation of public and industrial wastewater works. There are currently four Grades of certification based on system complexity and flow capacity. Certification exams are held by the Collection Systems Certification Committee of NEWEA at time and places of their choosing. Further information on this program, and the voluntary wastewater laboratory analyst certification program, can be found at the NEWEA website: <http://www.newea.org/> , on the Vol. Certif. tab.

***Contact for Vermont Wastewater Certification:***

Vermont Wastewater Facility Operator Certification Program

Carole Fowler

VT DEC, Wastewater Management Division.

Sewing Building

103 S Main St.

Waterbury, VT 05671-0405

Phone: (802) 241-2369

Email: [carole.fowler@state.vt.us](mailto:carole.fowler@state.vt.us)

Web Site: <http://www.anr.state.vt.us/dec/ww/wwmd.cfm>

***Additional Information:***

State of Vermont

Agency of Environmental Conservation

Department Of Water Resources and Environmental Engineering

Water Pollution Abatement Facility

Operator Certification Regulations

Effective Date October 21, 1985

<http://www.anr.state.vt.us/dec/rules/pdf/chap4.pdf>

**VT Drinking Water Certification & Training Requirements**

In Vermont the Department of Environmental Conservation (VT DEC) Water Supply Division certifies both water facility operators and water distribution system operators. There are five general certification classes. Classes 1, 2, 3, and 4 apply to water systems with their own source(s) of supply, and Class D applies to systems which distribute water. The certified operator shall hold a valid certification equal to or greater than the classification of the treatment facility and distribution system. Class 4 is the highest treatment facility and certification class.

At a minimum a high school diploma or its equivalent (GED) is required to attain water certification in Vermont, although experience and relevant training may be substituted for a high school diploma or GED. Entry level persons will work under the supervision of a fully certified operator until the experience and educational requirements of Vermont’s certification program are met, i.e. a minimum of .25 years of on the job experience.

To be eligible for operator certification, each applicant must:

- 1) Submit an application on a form provided by the State;
- 2) Meet the educational and experience requirements set forth in the regulations (see link below);
- 3) Classes 2, 3, 4 and D shall obtain a passing grade on the certification examination;
- 4) Satisfy all other state mandated requirements for professional licensing and certification.

An operator holding a certification in any class is permitted to operate all facilities in that class and any lower class. Class 4C is the highest Vermont water operator class. An Operator-in-Training (OIT) certification is required to operate a water system under the direct supervision of a certified operator and may be granted by the State to any applicant who has obtained three months of in-plant training experience appropriate to the required system class.

The table below contains the minimum experience requirements for several entry level certifications.

<b>Public Water System Class(s)</b>	<b>Class of Operator</b>	<b>Operating Experience Required (yrs)</b>
ALL	Operator-in-Training	2.5
ALL	Provisional	NONE
Class 1	Class 1	NONE
Class 2	Class 2	1.5
Class 3	Class 3	1.5

A portion of the certification operating experience requirements may be substituted with related schooling or courses for Classes 2, 3 and above but with the limitation that 50 percent of any stated experience requirement must be met by actual on-site operating experience in a plant, system, or facility. High school education cannot be substituted for any experience requirement. Approved relevant formal academic education at the post high school or college level may be substituted for experience requirement on a year for year basis, subject to a 50 percent limitation. Thirty (30) semester hours or equivalent educational hours of credit are considered to represent 1 year of formal education. Specialized operator training courses, seminars, workshops or approved technical conferences may be substituted for experience requirements subject to the 50 percent limitation. Continuing Education Units (CEUs) totaling 30 are considered equal to 1 year.

Operators must renew their certificate every three years with retesting or by completing the minimum required hours of continuing education as follows: Class I must complete 8 hours, Class 2 must complete 10 hours, and Class 3, 4, and D must complete 20 hours. The hours must be met with state approved seminar or other state approved instruction.

***Contact for Vermont Water Certification:***

Vermont Water Supply Division

Matthew Guerino

VT DEC, Water Supply Division

Old Pantry Building

103 S Main St.

Waterbury, VT 05671-0403

Phone: (802) 241-3415

Email: [matt.guerino@state.vt.us](mailto:matt.guerino@state.vt.us)

Web Site: <http://www.vermontdrinkingwater.org>



# Education and Training Opportunities

## University & Community College Programs

### Springfield Technical Community College - Springfield, MA

The Center for Business and Technology offers a wide variety of entry-level and advanced web-based courses in water and wastewater. Complete details are at [http://cvt.stcc.edu/descriptions/environmental\\_technology\\_online.html](http://cvt.stcc.edu/descriptions/environmental_technology_online.html) and questions should be directed to (413) 755-4502 or 755-4225 or [breeding@stcc.edu](mailto:breeding@stcc.edu)

### Bristol Community College - Fall River, MA

#### *Associate Degree in Science, Engineering Technology, Environmental Tech. Concentration Certificate of Recognition - Water Quality Professional*

For more information on these programs contact Robert S. Rak, Environmental Technology Coordinator, Bristol Community College, 508-678-2811 ext. 2771, [rrak@bristol.mass.edu](mailto:rrak@bristol.mass.edu)

Associate Degree in Science in Engineering Technology, Environmental Technology Concentration prepares students for entry level positions in the Environmental Technology field, including: wastewater treatment, drinking water treatment and hazardous waste and emergency response. Students take a set of core courses in the program, and then select technical electives. A field internship is also a requirement of the program and these are carried out at local municipal wastewater and water treatment or with state or local agencies. This program prepares students to take the Massachusetts Drinking Water or Wastewater Treatment Plant Operator Certification Examinations. Students may also take the OSHA 40 hour HAZWOPER certification training as a 3 credit course in the program.

Certificate of Recognition - Water Quality Professional students can choose the Wastewater Treatment option or the Drinking Water Treatment option to prepare for the Massachusetts Wastewater or Drinking Water Treatment Plant Operator Certification Examinations. Students can also apply these courses toward Training Contact Hours (TCHs) for licensure renewals. Coursework from this certificate can be transferred to the Engineering Technology (Environmental Technology) degree program.

### Cape Cod Community College - Barnstable, MA

#### *Environmental Technology Certificate in Wastewater Management and Water Quality*

For more information, contact Stephanie Brady, Environmental Technology Coordinator (508) 362-2131 ext. 4468, [sbrady@capecod.edu](mailto:sbrady@capecod.edu) or visit [www.capecod.edu](http://www.capecod.edu) .

The Environmental Technology certificate programs are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in environmental fields.

The Wastewater Management program provides training for students in wastewater collection and treatment systems. Wastewater chemistry, toxicology and microbiology will be covered so those students will know the basic processes and common parameters used to measure wastewater at the various stages of treatment. The courses cover the mechanical operation of the systems, an introduction to computer data gathering and process control and the laws and regulations covering wastewater so that students will have an understanding of their significance.

Students will have the knowledge and ability to operate, maintain and/or manage many of the waste streams that exist today and will be prepared to sit for state operator's municipal and/or industrial wastewater treatment licenses.

The Water Supply program provides students with up-to-date knowledge of the physical and chemical principles of drinking water supply and the basic framework for the practical application of science and mathematics to assess and solve water supply problems. They will understand the functioning of related equipment and support systems and the responsibilities required in safely operating and maintaining a water supply system. They will learn the significance of the laws and regulations covering water supply.

Students will have the knowledge and ability to operate, maintain and/or manage a drinking water supply facility and will be prepared to sit for state operator's drinking water license.

### **University of Massachusetts - Lowell, MA**

#### ***Certificate Programs in Wastewater and Water Treatment***

For more information, contact Continuing Studies and Corporate Education at (978) 934-2480 or (978) 934-2474 or visit <http://continuinged.uml.edu/certificates/wastewater.cfm>.

The Wastewater Certificate program prepares students for all levels of state certification required to manage and operate a modern wastewater treatment facility. The program consists of seven courses that, when taken together, demonstrate expertise in the area of wastewater treatment. The program is designed for individuals seeking to enter the field of wastewater treatment and for those in the field who want to upgrade their skills or achieve a higher level of state certification. Courses in the program cover both municipal (biological) plants and industrial (physical/chemical) treatment plant operations. Many of the courses in this certificate program can be applied towards the B.S. Degree in Civil Engineering Technology: Environmental Option.

The Water Treatment Certificate program provides the most effective way to prepare for the water treatment certification exams. Courses in this program are intended to provide students with the technical knowledge to operate and maintain physical/chemical water treatment facilities and water distribution systems. The Water Treatment Certificate is for individuals seeking to enter the field of water treatment and for those currently working in the area of water treatment and distribution. Many of the courses in this certificate program can be applied towards the B.S. Degree in Civil Engineering Technology: Environmental Option

## **Gateway Community College – New Haven, CT**

### ***Wastewater Certificate Program***

For more information contact Wesley Winterbottom at (203) 285-2354, [wwinterbottom@gwcc.commnet.edu](mailto:wwinterbottom@gwcc.commnet.edu) or visit [www.gatewayct.edu](http://www.gatewayct.edu).

The Wastewater Certificate will offer students a core of courses to prepare them to sit for the Connecticut certification examination as Wastewater I and Wastewater II Operators. The program has been designed in cooperation with the CT Department of Environmental Protection. The specialized courses may be offered at local Municipal Wastewater Treatment Plants.

The Advanced Wastewater Certificate will offer students a core of courses to prepare them for certification as Wastewater III and Wastewater IV Operators. It was also designed in cooperation with CT DEP, and the courses may also be offered at local Municipal Wastewater Treatment Plants.

Water Management is a system of functions and activities that assures an adequate supply of water for domestic, commercial, industrial, and public use. Two main areas are water treatment and water distribution. Connecticut continually needs qualified individuals in the water treatment and distribution areas. The number of plants is increasing, and requirements for advanced certification presently include formal course work. This program consists of a sequence of courses that is excellent preparation for the Connecticut Department of Health certification examinations.

## **New Hampshire Community Technical College – Berlin and Laconia, NH**

### ***Water Quality Certificate Program***

For more information contact Sheldon Towne at [stowne@nhctc.edu](mailto:stowne@nhctc.edu) or call the Berlin campus at (800) 445-4525 or the Laconia campus at (800) 357-2992, or visit [www.nh.gov/nhctc](http://www.nh.gov/nhctc).

The Water Quality Technology program offers a short-term Water Quality Certificate program. This features a combination of environmental and science courses providing a comprehensive study of water and wastewater treatment. Students also learn about collection and distribution systems and plant maintenance and hydraulics. Upon completion of the program, graduates pursue entry-level positions at wastewater treatment facilities or municipal drinking water treatment plants. Graduates are also well prepared for state certification exams in both Water and Wastewater. It also leaves open the option of earning an Associate Degree in Environmental Science at a later date.

## **Online Programs**

### **California State University, Sacramento – Online**

#### ***Office of Water Programs, Operator Training & Education***

For more information contact the Office of Water Programs at (916) 278-6142, [wateroffice@owp.csus.edu](mailto:wateroffice@owp.csus.edu), or visit [www.owp.csus.edu](http://www.owp.csus.edu).

Office of Water Programs at the California State University, Sacramento (CSUS) College of Engineering and Computer Science provides distance learning courses for persons interested in the operation and maintenance of drinking water and wastewater facilities. All courses are computer-based, delivered over the internet, and include lessons, readings, video clips, animated illustrations, student exercises, and on-line exams. These training programs were developed by people who explain, through the use of our manuals, how they operate and maintain their facilities. CSUS, fully accredited by the Western Association of Schools and Colleges, administers and monitors these training programs.

### **Kirkwood Community College - Online**

#### ***Water Environmental Technology Program***

For more information contact Steve Mrstik at (877) 522-9283, [smrstik@kirkwood.edu](mailto:smrstik@kirkwood.edu), or visit [www.kirkwood.edu](http://www.kirkwood.edu) and [www.et-online.org](http://www.et-online.org).

The Water Environment Technology Program offers an Associate of Applied Science degree for individuals pursuing a career in the area of water/wastewater management. In addition, Kirkwood offers both a Water Certificate and Wastewater Certificate programs. Kirkwood's innovative programs offer students the real world experience in the environmental field of the instructors with new advances in Internet supported education.

### **Moraine Park Technical College - Online**

#### ***Water Quality Technician Associate Degree***

For more information visit [www.waterqualitydegree.com](http://www.waterqualitydegree.com)

Moraine Park Technical College offers an online Water Quality Technician associate degree. [Waterqualitydegree.com](http://Waterqualitydegree.com) is dedicated to online learning opportunities for individuals interested in expanding their knowledge of municipal or industrial water quality or wastewater quality management. You can earn your associate degree completely online. Since all you need to complete your degree is a computer and Internet access, you can earn your degree at your own pace, when it's most convenient for you, 24 hours a day, seven days a week. Water Quality Technicians are responsible for ensuring that the water we use is safe and that discharge water is processed effectively. Their work combines the precision and accuracy found in the biochemical laboratory with operational aptitude and troubleshooting skills. Each day, municipalities and industries generate billions of gallons of wastewater that must be collected, analyzed and treated. The associate degree program includes targeted instruction and practical experience through a unique offering of online Internet-based courses and on-the-job internship. The geographical location of the student does not matter. As long as the learner can access the Internet, completion of the degree can occur from anywhere on the globe.

## **Training Centers**

### **New England Water Environment Association (NEWEA)**

Established in 1929, the New England Water Environment Association, Inc. is a not-for-profit organization whose objective is the advancement of fundamental knowledge and technology of design, construction, operation and management of wastes treatment works and other water pollution control activities and dedication to the preservation of water quality and water

resources. Comprised of the six New England states, NEWEA serves over 2,000 members and is a member association of the Water Environment Federation (WEF), an internationally renowned water quality organization.

NEWEA provides programs for treatment plant operators, laboratory personnel, regulatory officials, engineers, scientists, consultants and students on all aspects of water quality and the wastewater industry. NEWEA holds an Annual Conference, Spring Meeting and multiple Seminars/Workshops throughout the year. Courses are held at locations throughout New England. For more information, call NEWEA at (781) 939-0908 or visit [www.newea.org](http://www.newea.org)

### **New England Water Works Association (NEWWA)**

The New England Water Works Association (NEWWA) is a not-for-profit dedicated to the dissemination of knowledge to enhance the drinking water profession. NEWWA's training programs not only help enhance the education of current drinking water professionals, they also provide a gateway for those wishing to enter the field.

The drinking water profession encompasses a vast number of skill sets. NEWWA's training programs touch on all of these, including water treatment operations, laboratory operations, computer applications, water system management, drinking water system distribution operations, and basic sciences/math.

NEWWA also offers a Certificate Program, which is an excellent way for those just beginning their careers to enter into a structured, comprehensive program focusing specifically on the drinking water profession. The Certificate Program provides maximum flexibility to develop and enhance skills while at the same time helps participants gain recognition for their skills and professionalism. By electing to join NEWWA's Certificate Program, five different learning pathways, or tracks, are open to students: Water Distribution Operation, Water Treatment Operation, Cross Connection Control, Water System Safety, and, Water System Management. This self-paced program allows students to fulfill the requirements over a 6-year time span.

For more information, call NEWWA at (508) 893-7979 or visit [www.newwa.org](http://www.newwa.org)

### **New England Interstate Water Pollution Control Commission (NEIWPCC)**

For almost 40 years, NEIWPCC has worked to ensure that the people who run water and wastewater treatment facilities are equipped with the latest knowledge and skills. NEIWPCC's Environmental Training Center provides programs for utilities, industries, communities, and government agencies on all aspects of water and wastewater pollution control, management, and operations. NEIWPCC's training courses cover a broad range of topics, including municipal wastewater treatment, industrial wastewater treatment, wastewater/water pump operations and repair, wastewater collection systems and, basic electricity, motors and instrumentation. Courses are held at locations throughout New England and New York State. For more information, call NEIWPCC at (978) 323-7929 or visit [www.neiwpcc.org](http://www.neiwpcc.org)

## **Joint Environmental Training Coordination Committee (JETCC)**

The Joint Environmental Training Coordinating Committee (JETCC) was established in 1985 to coordinate environmental training to meet the needs of Maine's environmental professionals. JETCC continues to meet this goal by networking the training needs of the environmental work force with the best instructional and technical support available. JETCC organizes and coordinates training in water pollution control and water quality protection.

Training topics cover process control, laboratory analysis, infrastructure, maintenance and regulatory issues. Classes are scheduled in locations throughout Maine. Training certificates are awarded to participants after successful completion of each session. All JETCC classes are approved for continuing education by the Maine Department of Environmental Protection wastewater treatment plant operator certification program. For more information, call JETCC at (207) 253-8020 or visit [www.jetcc.org/wastewateroperatortraining.htm](http://www.jetcc.org/wastewateroperatortraining.htm)

## **Job Posting Resources & Links**

### **New England Water Environment Association Job Bank**

<http://www.newea.org/jobs.htm>

### **New England Water Works Association Job Listings**

<http://www.newwa.org/NetCode/JobList.aspx>

### **Water Environment Federation Water & Wastewater Job Bank**

<http://jobbank.wef.org/search.cfm>

### **Connecticut Water Pollution Abatement Association Employment Postings**

[http://www.cwpaa.org/employment\\_postings.htm](http://www.cwpaa.org/employment_postings.htm)

### **Massachusetts Water Pollution Control Association Jobs Hotline**

<http://www.mwpca.org/mwpca9.htm>

### **Maine Wastewater Control Association Jobs Hotline**

<http://www.mwwca.org/employment.htm>

### **NH DES Wastewater Operations Wastewater Facility Job Search**

<http://www.des.state.nh.us/wwe/jobsrch.htm>

### **New Hampshire Water Pollution Control Association Jobs Listings**

<http://www.nhwpc.org/jobs.htm>

### **Green Mountain Water Environment Association Classifieds**

<http://www.gmwea.org/classifieds.html>

## **Water Jobs Now**

<http://www.waterjobnetwork.net/water/?ii=WJN-A5>

## **ACKNOWLEDGMENTS**

Many thanks to the volunteers of the NEWEA and NEWWA Careers Outreach Taskforce for working collaboratively on this important outreach effort and special thanks to Marianna Vulli and Mike Thompson who spent endless hours compiling the information presented in this publication.