

Operator Certification Program Annual Report

January 1, 2022 – December 31, 2022



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Introduction

This annual report is prepared by the Rhode Island Department of Health (RIDOH), Center for Drinking Water Quality. The report covers the period of January 1, 2022, through December 31, 2022.

It is prepared to fulfill the Safe Drinking Water Act requirements and presented to the Environmental Protection Agency (EPA), Region 1, Operator Certification Program Office.

This report details the State of Rhode Island's compliance with the nine major program components outlined in the guidelines for certifying and recertifying operators of community and non-transient, non-community public water systems. The State continues to ensure that the Operator Certification Office meets public health objectives.

Authorization

The State of Rhode Island, Board of Certification of Operators of Public Water Supply Treatment and Public Water Supply Transmission and Distribution Facilities (Board) amended the *Rules and Regulations Pertaining to the Certification of Operators of Public Water Supply Treatment and Public Water Supply Transmission and Distribution Facilities (Rules and Regulations)* in 2020. The following regulations were added to allow continuity of operations during emergencies:

- In the event of a State of Emergency declared by the governor pursuant to Rhode Island General Laws § 30-15-9, the Board may grant an extension beyond the six month grace period for a license that expired during the State of Emergency
- During the pendency of a State of Emergency declared by the governor pursuant to Rhode Island General Laws § 30-15-9, the superintendent (designated operator) may continue with his or her duties as operator in-direct-responsible charge of a public water system past the expiration date of his or her license.
- During a State of Emergency declared by the governor pursuant to Rhode Island General Laws § 30-15-9, an operator of a lower classification than that required in §§ 5.5(A) and (B) of this Part may take over the responsibilities of the superintendent, assistant superintendent, or an operator in charge of a shift.
 - The decision as to who would take over any of these roles shall be made by the superintendent unless the superintendent is unable to fulfill his or her superintendent duties due to circumstances that arise from the State of Emergency. In the event the superintendent is unable to fulfill his or her duties, the most senior person with the highest-level operator classification shall make the decision.
- Public water systems operated by licensed contract operators who are unable to fulfill their duties due to circumstances that arise from the State of Emergency, must make every attempt to find another contract operator of an appropriate level of certification. If another contract operator is not available to provide its services, the owner may engage other professionals, including but not limited to town officials, professional engineers, licensed plumbers, and licensed water filtration/treatment system installers, to serve as an operator. Notwithstanding the foregoing, the owner maintains responsibility for the system.
- Full certificates may be issued, upon application, without examination, in a comparable classification to any individual who holds a certificate issued by any state, territory or possession of the United States, any country, if in the judgment of the Board, the requirements for certification of operators under which such certification was issued are equivalent to the requirements of this Part.
 - Notwithstanding the foregoing, in the event of a State of Emergency declared by the governor pursuant to Rhode Island General Laws § 30-15-9, the Board shall delegate to the Director the duty to determine whether the requirements of another state, territory, or possession of the United States for certification of operators is equivalent to the requirements of this Part.
- In the event of a State of Emergency declared by the governor pursuant to Rhode Island General Laws § 30-15-9, the Board may grant a six month provisional certification to those operators who have retired within the previous five years. The six month provisional certification shall be at the same grade that the operator held at the time of retirement.

The Board amended regulations to allow for an operator of a lower classification than is typically required to assume the responsibilities of an operator in charge during a State of Emergency declared by the Governor. The most senior operator available at a public water system (PWS) is responsible for implementing this flexibility, and the PWS is responsible for notifying the Board and the Director of the Rhode Island Department of Health (Director), in writing within 24 hours of implementing this flexibility. The Board continues to meet quarterly to review the applicability and suitability of the *Rules and Regulations*. Rhode Island remained under Executive Order 20-02, a declaration of a State of Emergency, for the entirety of the reporting period. During the reporting period, 195 licenses were affected by these emergency regulations.

Classification of Systems, Facilities, and Operators

There are 89 community and 79 non-transient, non-community (NTNC) public water systems that are required to comply with the State’s operator certification rules and regulations.

The State has five system classification levels for both treatment facilities and distribution facilities: Very small system (VSS), Class 1, Class 2, Class 3, and Class 4, with Class 4 being the largest and most complex. Water supply treatment facilities are classified according to a point system incorporating size, water supply source, raw water quality and associated treatment, disinfection, sludge/backwash water disposal, laboratory control, and chemical and physical considerations. Water supply distribution systems are classified according to the population served.

Public Water Systems, by Federal Type and State Classification, 2022

Number of Community Systems by Classification	
D1	4
D2	8
D4	1
T1	1
T1/D1	1
T1/D2	7
T1/D3	5
T1/D4	2
T1/VSSD	11
T2/D1	1
T2/D3	1
T2/VSSD	1
T3/D2	3
T3/D3	1
T3/D4	1
T4/D4	4
VSSD	25
VSST	1
VSST/VSSD	11

Number of NTNC Systems by Classification	
D1	9
D2	1
T1	3
T1/D1	5
T1/D2	3
T1/VSSD	8
VSSD	35
VSST/D-1	3
VSST/VSSD	12

Classification of Systems, Facilities, and Operators

In total, 646 licenses for treatment and distribution operators were held in the state in 2022, with some individuals holding multiple licenses and certifications.

Drinking Water Operators, by License Type, 2022

Distribution Operator (DO) License Type	License Count
DO Class 1-Full	107
DO Class 1-Grandfathered	14
DO Class 1-Operator-in-Training	21
DO Class 2-Full	61
DO Class 2-Grandfathered	1
DO Class 2-Operator-in-Training	1
DO Class 3-Full	93
DO Class 3-Grandfathered	0
DO Class 3-Operator-in-Training	3
DO Class 4-Full	41
DO Class 4-Grandfathered	0
DO Class VSS-Full	22
DO Class VSS-Grandfathered	11
DO Class VSS-Operator-in-Training	1
DO Provisional	1
Total	377

Treatment Operator (TO) License Type	License Count
TO Class 1-Full	80
TO Class 1-Grandfathered	5
TO Class 1-Operator-in-Training	9
TO Class 2-Full	66
TO Class 2-Grandfathered	3
TO Class 2-Operator-in-Training	4
TO Class 3-Full	59
TO Class 3-Grandfathered	0
TO Class 3-Operator-in-Training	6
TO Class 4-Full	26
TO Class 4-Grandfathered	0
TO Class VSS-Full	7
TO Class VSS-Grandfathered	3
TO Class VSS-Operator-in-Training	1
TO Provisional	0
Total	269

Rhode Island requires that owners of all community and NTNC PWS place the direct supervision of their treatment and/or distribution facilities under the responsible charge of a suitably certified drinking water operator. The operator must hold a valid certification equal to or greater than the classification of the PWS.

There was one community and two NTNC PWSs that were without a certified operator during the reporting period.

If a PWS does not have a certified operator as required by the State due to circumstances beyond their reasonable control, the system may submit a request to the Board of Certification of Operators of Public Water Supply Treatment and Public Water Supply Transmission and Distribution Facilities to seek provisional certification for a candidate. The Board can issue provisional certification after reviewing the candidate's credentials, which only applies to that particular PWS for one year.

The RIDOH Center for Drinking Water Quality (DWQ) works diligently to ensure that each PWS has an appropriately certified operator at all times. The system owner updates any changes to the designated certified operator or confirms that no changes have been made each year at PWS license renewal. The Center for Professional Licensing checks to ensure the operator's license is active and current. The sanitary survey team verifies or updates the designated certified operator during the on-site inspection.

If DWQ learns that a PWS does not have an appropriately and actively certified operator through any of the channels outlined above, the office sends a letter informing the PWS of the requirement and gives it ten-calendar-days to update this information. If DWQ discovers that a PWS is missing an operator and the PWS then hires a contract operator, the PWS must also provide a fully executed and signed contract. Should the PWS not provide this information within ten calendar days, the matter is referred to compliance and enforcement.

DWQ identified 10 PWSs without an appropriately certified operator during the reporting period. Seven of these systems resolved the issue within 10 calendar days of the operator certification program manager making initial contact with the administrative contact of the PWS. DWQ issued violations for the remaining three systems. Two have returned to compliance, and one is without an operator as of the end of the reporting period. This system has returned to monthly monitoring to provide expanded oversight. The operator certification program manager will continue to work with the PWS management to secure an operator.

The State requires that all operating personnel making process control and system integrity decisions about water quality or quantity that affect public health be certified at the proper level. The regulations governing drinking water operator certification require a certified operator to be available for each operating shift.

Operator Qualifications

The Board maintains membership in the Association of Boards of Certification (ABC)/Water Professionals International (WPI). ABC/WPI provides the state with exam development, standardization, and validation services.

Treatment, distribution, and very small system exams are offered three times annually, in April, July, and November. The State uses the standardized exam format and holds exams in the auditorium at RIDOH, proctored by the operator certification program manager.

In 2019, Rhode Island began offering electronic exams via PSI services in addition to the in-person option. In 2022, 126 combined paper and electronic exams were conducted.

After each session, the proctor collects candidates' question comment forms for review by the Board. The Board reviews these comments at its quarterly meetings for clarity and accuracy. In 2022, the Board did not recommend that any questions be removed from the question bank.

2022 Exam Statistics

Year Totals				
	Number of Examinees	Passed	Failed	% Passed
VSS	0	0	0	0%
D1	14	4	10	29%
D2	1	0	1	0%
D3	4	1	3	25%
D4	5	0	5	0%
T1	5	3	2	60%
T2	1	0	1	0%
T3	5	0	5	0%
T4	2	0	2	0%
Total	37	8	29	22.00%

Water Treatment Operator Qualifications

Qualifications Table Acronym List

HS - high school

GED - General Educational Development test

AS - Associate of Sciences

BS - Bachelor of Sciences

mos. - months

yr./yrs. - year/years

Information current as of	12/31/2022
Is certification mandatory?	Yes
Number of Active Treatment Certifications	269

Level Name	TO-1	TO-2	TO-3	TO-4
Education Requirements	HS/GED	HS/GED	HS/AS/BS	AS/BS
Experience Requirements	6 mos.	2 yrs.	4 yrs./2 yrs./ 1 yr.	4 yrs./2 yrs.
Number of exam questions	100	100	100	100
Passing score (%)	70	70	70	70
Continuing Education Requirements (total hrs. per 3 yr. renewal period)	15	15	30	30
Fee to take a paper exam for the first time	\$47.50	\$47.50	\$47.50	\$47.50
Fee to retake a paper exam	\$47.50	\$47.50	\$47.50	\$47.50
Fee to take an electronic exam for the first time	\$104.00	\$104.00	\$104.00	\$104.00
Fee to retake an electronic exam	\$104.00	\$104.00	\$104.00	\$104.00

General Information	
Is direct responsible charge required for certification? (Direct responsible charge is active daily on-site technical direction and supervision or active daily on-site accountability of a facility or a major segment of a facility.)	No
How are plants/systems rated (i.e., by technology, by flow, or by population served)?	Technology
Is operator-in-training certification offered for those who do not meet experience requirements?	Yes
Are substitutions allowed for any certification requirements?	No
Is an exam required for certification?	Yes
Type of exam (i.e., multiple choice, essay/short answer, true/false, performance, or combination)?	Combination: Multiple choice and true/false
How is the exam taken (e.g., paper and pencil, on computer, or internet)?	Pencil and paper, or on computer
Are open book exams allowed?	No
Is there a sequential exam requirement? (That is, operators must start with the lowest level of exam, and pass each exam in sequence. They may not immediately take the highest level of exam for which they are otherwise qualified.)	No, there is no sequential exam requirement.
Is certification renewal required?	Yes
Renewal interval (yrs.)	3
Note if varies by category or level:	2-yr renewal period for operators in training
Notes	No operator-in-training classification for Grade 4 operators. Must qualify for full certification when applying to take exam.

Water Distribution Operator Qualifications

Information current as of	12/31/2021
Is certification mandatory?	Yes
Number of Active Distribution Certifications	377

Level Name	DO-1	DO-2	DO-3	DO-4
Education Requirements	HS/GED	HS/GED	HS/AS/BS	AS/BS
Experience Requirements	6 mos.	2 yrs.	4 yrs./ 2 yrs./ 1 yr.	4 yrs./ 2 yrs.
Number of exam questions	100	100	100	100
Passing score (%)	70	70	70	70
Continuing Education Requirements (total hrs. per 3 yr. renewal periods)	15	15	30	30
Fee to take an exam for the first time	\$47.50	\$47.50	\$47.50	\$47.50
Fee to retake an exam	\$47.50	\$47.50	\$47.50	\$47.50
Fee to take an electronic exam for the first time	\$104.00	\$104.00	\$104.00	\$104.00
Fee to retake an electronic exam	\$104.00	\$104.00	\$104.00	\$104.00

General Information	
Is direct responsible charge required for certification? (Direct responsible charge is active daily on-site technical direction and supervision or active daily on-site accountability of a facility or a major segment of a facility.)	No
How are plants/systems rated (i.e., by technology, by flow, or by population served)?	Technology/ Population/ Source
Is operator-in-training certification offered for those who do not meet experience requirements?	Yes
Are substitutions allowed for any certification requirements?	No
Is an exam required for certification?	Yes
Type of exam (e.g., multiple choice, essay/short answer, true/false, performance or combination)?	Combination: Multiple choice and true/false
How is the exam taken (e.g., paper and pencil, on computer, or Internet)?	Pencil and paper, or on computer
Are open book exams allowed?	No
Is there a sequential exam requirement? (That is, operators must start with the lowest level of exam, and pass each exam in sequence; they may not immediately take the highest level of exam for which they are otherwise qualified.)	No, there is no sequential exam requirement
Is certification renewal required?	Yes
Renewal interval (yrs.)	3
Note if varies by category or level:	2-yr. renewal period for operators in training
Notes	No operator-in-training classification for grade 4 operators. Must qualify for full certification when applying to take exam.

Operator Certification

The state of Rhode Island's operator certification rules and regulations contain a grandfathering provision. Requests for grandfathered certification were due by February 28, 2003. The Board approved all requests through February 28, 2003.

There were 23 active grandfathered licenses in 2022, a decrease of 22 from 2021. As those with grandfathered licenses move on from the industry, they will be replaced with certified operators who have met the full requirements, including passing the exam.

Operators with grandfathered licenses are required to complete the same number of training hours per renewal cycle as those who gained their license via exam and reciprocity. No operators with grandfathered licenses were required to obtain additional training in 2022.

Reciprocity

The Board may grant full certifications without examination to any individual holding a certificate that the Board deems comparable to Rhode Island's requirements. The Board received 17 reciprocity applications in 2022 and approved 11. Therefore, 11 licenses were obtained by reciprocity.

Enforcement and Discipline

The Board has the responsibility for taking disciplinary action against operators when necessary. The Board may revoke, suspend, or otherwise discipline the holder of a certificate issued under the *Rules and Regulations* when it is found that the individual performed their duties in a negligent manner that produced a supply below standards normal for the particular facility operated or that they practiced fraud or deception; or that reasonable care, judgment, or application of this knowledge or ability was not used in the performance of their duties; or that an individual is incompetent or unable to perform their duties, in violation of Chapter 46-13 of Rhode Island's General Laws or regulations promulgated pursuant to 46-13.

Disciplinary Actions

There were no disciplinary actions taken in 2022.

Certification Renewal

Rhode Island operator certification requires that an operator (including those with grandfathered licenses) renew their full certification every three years and operator-in-training certification every two years. Renewal requires evidence of completed training credits, a completed application, and an assigned affidavit attesting to the validity of information provided during the application process. Training credits are issued as Training Contact Hours (TCH).

As a prerequisite to certificate renewal, an applicant must complete the number of continuing training/education contact hours related to drinking supply treatment and/or transmission and distribution specified below, which are acceptable to the Board. Courses approved for TCH credit may be used for renewal only once during any renewal period.

Contact Hours Required, with one continuing education unit (CEU) equal to 10 contact hours:

Class of License	Two-Year Renewal Period (Operator-in-Training)	Three-Year Renewal Period (Full)
Class VSS	2 hours	3 hours
Class I	10 hours	15 hours
Class II	10 hours	15 hours
Class III	20 hours	30 hours
Class IV	20 hours	30 hours

Applicants must complete 50% or more of their required training contact hours in technical areas directly related to the operations of the water system employing them. They may complete up to 25% each in the areas of health, safety, and supervisory skills. In 2022, 151 operator licenses were renewed in each classification as follows:

License Type	Number of Renewals	License Type	Number of Renewals
D1	18	T1	18
D2	15	T2	23
D3	27	T3	17
D4	13	T4	4
D1-OIT	4	T1-OIT	1
D2-OIT	0	T2-OIT	0
D3-OIT	1	T3-OIT	1
VSS	8	VSS	0
D1 Grandfather	0	T1 Grandfathered	1
VSS-Grandfather	0	Total	151

All operators met the renewal training requirements outlined above.

Training and Program Funding

RIDOH continued its partnership with New England Water Works (NEWWA) to fund training initiatives included in the work plan and funded through State Revolving Loan Fund (SRF) set-asides.

In 2022, NEWWA conducted five training sessions and granted 513 training contact hours. These training sessions were scheduled in fall 2021 for delivery in winter/spring 2022.

The program selected topics to address compliance issues, violation trends, and small PWS compliance, including:

- Understanding and Using the Public Notification Rule
- Asset Management to Ensure Stable and Sustainable Water Utility Operations
- Solving Drinking Water Operator Exam Word Problems
- Where it all Begins: Knowing and Protecting Your Source Water
- How to Successfully Operate and Maintain Your Distribution System
- Energy Management for Water Utilities

RIDOH does not directly reimburse operators for expenses related to training and exams. These learning opportunities are free of charge and open to all operators while targeting those from small public water systems.

Training Course Approval

After streamlining the training course and program approval process in 2018, the new process and application were retained throughout 2022.

The list of Board-approved courses found online is now updated quarterly following each Board meeting that generates new course approvals. By the end of the reporting period, 546 courses were approved in total. In 2022, 59 new courses and programs were added.

Resources and Personnel

RIDOH's principal community development training specialist oversaw all operator certification program activities in 2022 and served as staff assistant to the Board by preparing meetings, recording and documenting the agenda, minutes, and decisions of the Board for public access, and providing applicant eligibility data to the Board. Other duties included compliance assurance, contract management, data management, and coordination among other program staff on operator-related issues and initiatives.

Staff positions are funded through the Drinking Water State Revolving Fund (DWSRF) budgetary set-asides. In 2022, the operator certification program was staffed at one full-time equivalent (FTE), with both the principal community development training specialist and senior public health promotions specialist dedicating approximately 50% of their work hours to program activities. Both positions review and prepare training course approval packages and manage licensing, renewals, and licensee correspondence. They also perform exam-related logistics, including scheduling, proctoring, and licensee communication. The public health promotions specialist also supports the program by developing outreach materials for the operator community.

RIDOH's Division of Licensing oversees the License 2000 database, utilized for licensing drinking water operators and PWSs. DWQ staff are responsible for data entry, generating licenses, and managing renewals within the database. Staff also update the database daily as they receive licensees, systems, and compliance status data. RIDOH planned to update the License 2000 database to a new database in 2022. The implementation of the new database was successfully initiated. DWQ staff are now using My License Office via web browser software to track and manage licenses.

Changes made to the database, such as license renewal and issuance of new licenses, are reflected in real-time on the state licensee lookup webpage at health.ri.gov/licensing/#water

Recertification

Typically, upon license expiration, the operator is granted a six-month grace period (during which they are considered unlicensed for compliance) to renew without any penalty. After this six-month period, the operator must re-apply and attest to meeting the experience and education requirements and taking and passing the exam again. The Board reviews reinstatement requests from operators on a case-by-case basis.

To help mitigate the impacts of the COVID-19 pandemic, the RIDOH Center for Drinking Water Quality extended this license renewal period past six months in 2020 and through 2022 as Executive Order 20-02 issuing a State of Emergency stayed in place. As Rhode Island began to recover from the COVID-19 pandemic, the Center for Drinking Water Quality initiated steps to prepare to return to the regular renewal process detailed above. The typical six-month grace period will be restored when the governor-ordered State of Emergency is lifted.

Stakeholder Involvement

The Board, established by section 23-65-2 of the Rhode Island General Laws, is comprised of seven persons, including the Director of the Rhode Island Department of Health, or their designee, and six members appointed by the governor. Appointed members must include one registered professional engineer engaged in the practice of water supply engineering, one qualified operator of a publicly owned water supply treatment facility in the state, recommended by the executive committee of the Rhode Island Water Works Association, one qualified director of a water supply facility who has general supervisory authority for a water supply facility, recommended by the executive committee of the Rhode Island Water Works Association, one representative of a labor union, one representative of business or industry, and one residential consumer of water. The Board holds annual elections to name a chairperson, vice chairperson, and secretary.

The current roster of Board members includes:

Katherine Mello, P.E. (Chair)	Professional Engineer
Jessica Lynch, P.E. (Vice Chair)	Water Supply Facility Director
Carlene Newman (Secretary)	RIDOH Representative
Robert Bozikowski	Residential Water Consumer
Mario Carlino	Business Industry Representative
Christopher Collins	Publicly Owned Water Supply Operator
John Fletcher	Labor Union Representative

The Board meets quarterly at locations throughout the state. In addition to regular meetings, the Board meets for special sessions as required. General meetings are open meetings, and the program manager is responsible for posting meeting agendas on the state website 48 hours before meetings. Due to COVID-19, the Board was authorized to meet via phone and virtual video conferences in 2020 through July 23, 2021. In-person meetings resumed in July of 2021. The Board held four in-person meetings in 2022.

Each quarter, the operator certification manager compiles the agenda items, including exam candidate information for approval, operator-in-training to full certification requests, reciprocity applications, and training course approvals. As needed, the Board addresses and reviews requests for reinstatement.

The Board does not maintain its own website. Exam dates, applications, and training resources are available online through the RIDOH website on the Center for Drinking Water Quality web pages at health.ri.gov/wateroperator/. Data is managed and updated by the program manager.

Program Review

In 2022, the Board continued to review its regulations. It held two meetings where the operator certification program manager presented research and sample regulations to guide discussion. The Board discussed and captured proposed changes, compiled in 2020, to begin the rulemaking process.



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