

# Operator Certification Program Annual Report

January 1, 2023 – December 31, 2023



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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, 2023, through December 31, 2023.

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 EPA document Federal Register 64 FR 5916 Final guidelines for the Certification and Recertification of the Operators of Community and Non-Transient, Non-Community Public Water Systems<sup>1</sup> (*64 FR 5916-5921, February 5, 1999, Vol. 64, No. 24*). The State continues to ensure that the Operator Certification Office meets public health objectives.

1. Access the document online: <https://www.federalregister.gov/documents/1999/02/05/99-2692/final-guidelines-for-the-certification-and-recertification-of-the-operators-of-community-and>

## Authorization

The State of Rhode Island operator certification program derives its authority from the *Rules and Regulations Pertaining to the Certification of Public Drinking Water Supply Treatment and Public Water Supply Transmission and Distribution Operators 216-RICR-50-05-5 (Rules and Regulations)*.

The State of Rhode Island, Board of Certification of Operators of Public Water Supply Treatment and Public Water Supply Transmission and Distribution Facilities (Board) completed its review and update of the *Rules and Regulations*, during the reporting period. RIDOH's legal team is reviewing the proposed draft; at this time no changes have been approved.

## **Classification of Systems, Facilities, and Operators**

There are 90 Community and 80 Non-Transient, Non-Community (NTNC) public water systems (PWS) 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 Systems (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, 2023

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	26
VSST	1
VSST/VSSD	11
<b>Total</b>	<b>90</b>

Number of NTNC Systems by Classification	
D1	9
D2	1
T1	3
T1/D1	5
T1/D2	3
T1/VSSD	8
VSSD	36
VSST/D-1	3
VSST/VSSD	12
<b>Total</b>	<b>80</b>

## Classification of Systems, Facilities, and Operators

In total, 668 licenses for treatment and distribution operators were held in the state in 2023, with some individuals holding multiple licenses and certifications.

## Drinking Water Operators by License Type, 2023

Distribution Operator (DO) License Type	License Count
DO Class 1-Full	123
DO Class 1-Grandfathered	10
DO Class 1-Operator-in-Training	24
DO Class 2-Full	61
DO Class 2-Grandfathered	0
DO Class 2-Operator-in-Training	1
DO Class 3-Full	95
DO Class 3-Grandfathered	0
DO Class 3-Operator-in-Training	4
DO Class 4-Full	45
DO Class 4-Grandfathered	0
DO Class VSS-Full	21
DO Class VSS-Grandfathered	10
DO Class VSS-Operator-in-Training	1
DO Provisional	0
<b>Total</b>	<b>395</b>

Treatment Operator (TO) License Type	License Count
TO Class 1-Full	79
TO Class 1-Grandfathered	3
TO Class 1-Operator-in-Training	8
TO Class 2-Full	72
TO Class 2-Grandfathered	3
TO Class 2-Operator-in-Training	1
TO Class 3-Full	63
TO Class 3-Grandfathered	0
TO Class 3-Operator-in-Training	7
TO Class 4-Full	28
TO Class 4-Grandfathered	0
TO Class VSS-Full	5
TO Class VSS-Grandfathered	3
TO Class VSS-Operator-in-Training	1
TO Provisional	0
<b>Total</b>	<b>273</b>

The State requires that all operating personnel making process control and system integrity decisions about water quality or quantity be certified at the proper level. Rhode Island requires 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 regulations governing drinking water operator certification require a certified operator to be available for each operating shift. The operator must hold a valid certification equal to or greater than the classification of the PWS.

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 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. There were no provisional licenses issued during this reporting period.

The RIDOH Center for Drinking Water Quality (CDWQ) 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 when the PWS is preparing for 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 CDWQ 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. The PWS has 10 calendar days to update this information. If CDWQ discovers that a PWS is missing an operator and the PWS then hires a contract operator, the PWS must provide a fully executed and signed contract. If the PWS does not provide this information within 10 calendar days, the matter is referred to CDWQ's compliance and enforcement team.

CDWQ identified three PWSs without appropriately certified operators during the reporting period. Two 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. CDWQ issued a violation for the remaining system. At the time of this report, the system has not returned to compliance. This system has been placed on monthly Revised Total Coliform Rule monitoring to provide expanded oversight. The operator certification program manager will continue to work with the PWS management to secure an operator.



## Operator Qualifications

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

Treatment, distribution, and VSS exams are offered three times annually, in April, July, and November. The State uses the standardized exam format and holds exams on Capitol Hill in Providence, proctored by the operator certification program manager.

During the reporting period, Rhode Island continued to offer electronic exams via PSI Services throughout the year. This initiative was introduced in 2019 and continued through 2023. In 2023, 201 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 2023, the Board did not recommend that any questions be removed from the question bank.

### 2023 Exam Statistics

Year Totals				
	Number of Examinees	Passed	Failed	% Passed
<b>VSS</b>	1	1	0	100%
<b>D1</b>	83	33	50	40%
<b>D2</b>	9	6	3	67%
<b>D3</b>	27	13	14	48%
<b>D4</b>	17	6	11	35%
<b>T1</b>	33	6	27	18%
<b>T2</b>	11	4	7	36%
<b>T3</b>	16	3	13	19%
<b>T4</b>	4	2	2	50%
<b>Total</b>	<b>201</b>	<b>74</b>	<b>127</b>	<b>37%</b>

## Water Treatment Operator Qualifications

### Qualifications Table Acronym List

TO - Treatment Operator

DO - Distribution Operator

HS - high school

GED - General Educational Development test

AS - Associate of Sciences

BS - Bachelor of Sciences

mos. - months

yr./yrs. - year/years

<b>Information current as of</b>	<b>12/31/2023</b>
<b>Is certification mandatory?</b>	<b>Yes</b>
<b>Number of Active Treatment Certifications</b>	<b>273</b>

<b>Level Name</b>	<b>TO-1</b>	<b>TO-2</b>	<b>TO-3</b>	<b>TO-4</b>
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

<b>General Information</b>	
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 Class IV operators. Must qualify for full certification when applying to take exam.

## Water Distribution Operator Qualifications

<b>Information current as of</b>	<b>12/31/2023</b>
<b>Is certification mandatory?</b>	<b>Yes</b>
<b>Number of Active Distribution Certifications</b>	<b>395</b>

<b>Level Name</b>	<b>DO-1</b>	<b>DO-2</b>	<b>DO-3</b>	<b>DO-4</b>
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

<b>General Information</b>	
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 Class IV 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 29 active grandfathered licenses in 2023, a decrease of 5 from 2022. 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 2023.

## **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 14 reciprocity applications in 2023 and approved 14. Therefore, 14 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 2023.

## Certification Renewal

Rhode Island drinking water operators (including those with grandfathered licenses) are required to renew full certification licenses every three years and operator-in-training certification licenses 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 (TCHs) or continuing education units (CEUs). One CEU is equal to 10 contact hours.

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

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

Applicants must complete 50% or more of their required TCH/CEU 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 2023, operator licenses were renewed in each classification as follows:

License Type	Number of Renewals
D1	30
D2	18
D3	26
D4	14
D1-OIT	5
D2-OIT	0
D3-OIT	1
VSSD	6
D1 Grandfather	9
VSS Grandfather	10

License Type	Number of Renewals
T1	24
T2	18
T3	17
T4	7
T1-OIT	1
T2-OIT	0
T3-OIT	4
VSST	3
T1 Grandfather	3
T2 Grandfather	3
<b>Total</b>	<b>199</b>

All operators met the renewal training requirements outlined above during the reporting period.

## 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 set-asides. However, there were no trainings held under the New England Water Works Association operator training contract in 2023. Work will continue under these contracts in 2024.

In 2023, the Center for Drinking Water Quality worked with the Rhode Island Office of the Postsecondary Commissioner's Workforce Development Partnership in conjunction with the Rhode Island Department of Labor and Training to offer a 10-week preparation class for drinking water operators. This 10-week course aims to provide a foundation for professionals working in water treatment, water distribution, and water quality. Following the 10 weeks, a RIDOH proctor administers the treatment and distribution exams for the class. Curriculum topics include:

- Water Treatment Process
- Water Operator Math (treatment and distribution)
- Aeration, Coagulation, Flocculation
- Sedimentation Basins, Clarifiers
- Iron and Manganese, Filtration
- Security, Compliance, Ethics and Administrative
- Corrosion Control, Scaling, Lime Softening
- Water Quality: Disinfection, Fluoridation, Chlorination
- Water Storage and Water Services
- Water Quality Testing
- Water Main Install and Rehab
- Pumps: Centrifugal Pumps, Vertical Turbine, Submersible, Deep-well
- Hydrants: Proper Operation, Hydrant Design
- Meters: Meter Types and Operating Principles; Meter Sizing and Installation

In 2024 the Center for Drinking Water Quality will continue to work with industry assistance providers to offer free training initiatives and provide extensive opportunities for exam preparation funded through Drinking Water State Revolving Fund set-asides.

## Training Course Approval

After streamlining the training course and program approval process in 2018, the new process and application were retained throughout 2023.

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, 604 courses were approved in total. In 2023, 37 new courses and programs were added.



## Resources and Personnel

RIDOH's principal community development training specialist oversaw all operator certification program activities in 2023 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 budgetary set-asides. In 2023, the operator certification program was staffed at one full-time equivalent, with both the principal community development training specialist and 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.

In 2022 RIDOH retired the use of the License 2000 database and successfully initiated the use of the My License Office database. RIDOH's Division of Licensing oversees My License Office, utilized for licensing drinking water operators and PWSs. CDWQ staff are responsible for data entry, generating licenses, and managing renewals within the database. Staff also update the database daily as they receive licensee, system, and compliance status data.

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 [healthri.mylicense.com/verification](https://healthri.mylicense.com/verification).

## **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. The operator must take and pass 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 November 2023 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 CDWQ took steps to prepare to return to the regular renewal process detailed above. Program staff coordinated with Center for Licensing in ensuring the My License Office database showed accurate license statuses and used targeted outreach via email, hardcopy letters, and phone calls to notify Rhode Island operators of the end of Executive Order 20-02 and potential impacts to their certification statuses. During this reporting period the typical six-month grace period was restored with minimal impacts to operator certification licensing in Rhode Island.

## Stakeholder Involvement

The Board, established by section 23-65-2 of the Rhode Island General Laws, is composed 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:

<b>Katherine Mello, P.E. (Chair)</b>	Professional Engineer
<b>Jessica Lynch, P.E. (Vice Chair)</b>	Water Supply Facility Director
<b>Carlene Newman (Secretary)</b>	RIDOH Representative (until June 30, 2023)
<b>Deborah LaMond (Secretary)</b>	RIDOH Representative (start date: July 1, 2023)
<b>Robert Bozikowski</b>	Residential Water Consumer
<b>Mario Carlino</b>	Business Industry Representative
<b>Christopher Collins</b>	Publicly Owned Water Supply Operator
<b>John Fletcher</b>	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. During this reporting period the Board held four in-person meetings.

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](http://health.ri.gov/wateroperator). Data is managed and updated by the program manager.

## Program Review

In 2023, the Board completed the review of the *Rules and Regulations*. There was one meeting held to review these regulations in 2023. A final draft of the proposed regulations has been submitted to RIDOH's legal department for further review.



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