



Community Public Water Supply Operator Certification Program Calendar Year 2024 Annual Report

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Introduction

In Illinois, regulatory oversight of Public Water Supplies (PWS)¹ is shared by the Illinois Environmental Protection Agency (EPA) and Illinois Department of Public Health (IDPH). The Illinois EPA was designated as Illinois' primary enforcement authority by the United States Environmental Protection Agency (U.S. EPA) on August 29, 1979. The Illinois EPA, through an Intergovernmental Funding Agreement, provides U.S. EPA grant funds to IDPH for the administration of the Non-Community PWS Program while the Illinois EPA administers the Community PWS Program².

The Illinois EPA and IDPH administer statewide operator certification programs to ensure that certified operators are properly operating and maintaining all PWS in the State of Illinois. Illinois reports the status of the operator certification program on an annual basis to U.S. EPA. U.S. EPA Region 5 evaluates Illinois' Operator Certification Programs based on the 9 baseline standards established in the *Final Guidelines for the Certification and Recertification of the Operators of Community and Non-Transient Non-Community Public Water Systems*, 64 CFR 5916. These baseline standards are:

1. Authorization
2. Classification of systems, facilities and operators
3. Operator qualifications
4. Enforcement
5. Certification renewal
6. Resources needed to implement the program
7. Recertification
8. Stakeholder involvement
9. Program review

This report provides detail on the Illinois EPA Community Water Supply (CWS) Operator Certification Program's adherence to these baseline standards during Calendar Year 2024 (CY2024). No backsliding or policy changes occurred during CY2024 with the program.

¹ PWS serve 15 service connections or 25 residents.

² CWS serve 15 or more year-round service connections or 25 or more year-round residents.

Authorization

Illinois regulations require that owners and official custodians of CWS in Illinois provide, under the Illinois Environmental Protection Act (Act), Illinois Pollution Control Board (Board) Rules, and the Safe Drinking Water Act,

Illinois' Community Water Supply Operator Certification Regulations can be found at: [Illinois General Assembly - ADMINISTRATIVE CODE](#)

continuous operation of PWS facilities to assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption. Pursuant to the Public Water Supply Operations Act (PWSO Act), 415 ILCS 45/1 et seq., all portions of a CWS system shall be under the direct supervision of a Responsible Operator in Charge (ROINC), who is jointly accountable for the proper operation of the CWS with the owner. Each CWS must employ a ROINC on its operational staff or by contractual agreement. The ROINC is required to hold a valid drinking water operator certificate at a level equal to or greater than the classification of the CWS. The owner or official custodian of a CWS and the ROINC must file a signed statement identifying the ROINC on forms provided by the Illinois EPA. The ROINC at a CWS, either by telephone, e-mail, or a standard operating procedure (SOP), makes all decisions concerning the proper operation of the water supply that may affect public health. Operational personnel may perform day to day operations and may carry out any operating instructions conveyed by the ROINC.

The Illinois EPA administers the Drinking Water Operator Certification Program through authority granted by the PWSO Act, 415 ILCS 45/1 et seq. This Act provides rulemaking authority to the Illinois EPA. The Illinois EPA has promulgated these rules in 35 Ill. Adm. Code Part 681 (Operator Certification regulations). The State ensures that the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by the Illinois EPA's Operator Certification Program.

Classification

There are currently 1,871 CWS in Illinois. During 2024, five CWS became inactive. Three of the facilities that became inactive were absorbed into other CWS and two no longer meet the definition of a CWS due to reductions in population and number of service connections. Facilities are divided into four classifications based on the complexity of treatment: Class D facilities are CWS limited to pumpage, storage, and distribution facilities; Class C facilities are CWS whose treatment facilities are limited to chemical addition; Class B facilities are CWS whose treatment facilities include non-membrane filtration, non-membrane filtration and aeration, or ion exchange; and Class A CWS are water treatment facilities that employ coagulation, lime softening, ultraviolet disinfection, membrane filtration, or sedimentation as treatment. In addition, a CWS may be classified “exempt.” Pursuant to Section 9.1 of the PWSO Act, a CWS is considered exempt and is not required to have a ROINC if it:

- consists only of distribution and storage facilities and does not have any collection and treatment facilities;
- obtains all of its water from, but is not owned or operated by a CWS that is required to employ a Class A, Class B, Class C, or Class D CWS operator;
- does not sell water to any person; and
- is not a carrier that conveys passengers in interstate commerce.

The total number of CWS in Illinois listed above includes exempt facilities. There are 159 Class A, 422 Class B, 699 Class C, 505 Class D, and 109 Exempt CWS.

Any change in facility classification is typically communicated by the Illinois EPA Division of Public Water Supplies (DPWS) Field Operations Section (FOS) to the Illinois EPA DPWS Compliance Assurance Section (CAS). The change in facility classification is documented in the Safe Drinking Water Information System (SDWIS). If the change in classification of the CWS necessitates a change in operator certification requirements, FOS notifies the CWS. There were five facilities with source changes during 2024. Three of these systems had changes in classification resulting from the source change, as displayed in the table below.

PWS ID	System Name	Previous Source	New Source	Previous Class	New Class
IL1075030	IL American-Lincoln	Groundwater	Groundwater under the direct influence of surface water	Class B	Class A
IL1570150	Coulterville	Surface water	Surface water purchase	Class A	Class C
IL1797050	IL American-Washington Estates	Groundwater	Groundwater purchase	Class B	Class D

Operator Qualifications

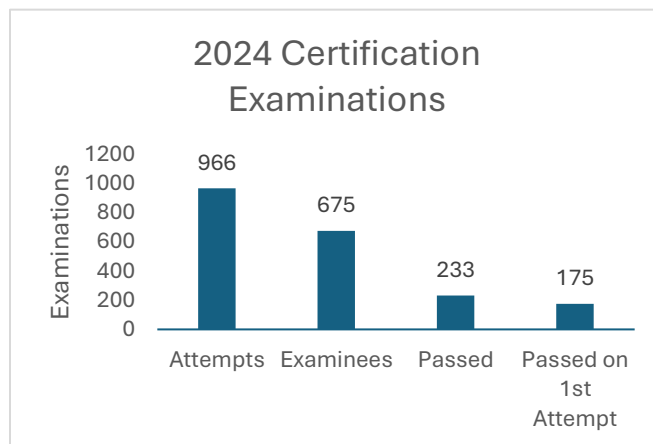
In 2024, there were 3,120 fully certified drinking water operators in Illinois:

- 1,007 Class A operators
- 381 Class B operators
- 1,212 Class C operators
- 520 Class D operators

Illinois does not have a separate certification for distribution system operators. Class D certification covers distribution systems. Certifications at higher levels are cumulative and include qualifications for distribution operations.

To become a certified drinking water operator in Illinois, an applicant must first pass a water supply examination of competency. The examinations are comprised of multiple-choice questions to establish that person has the necessary knowledge to perform the job. A passing score is 70 percent. In 2024, Illinois offered examinations at eight locations with 45 examination dates. On several of the 45 examination dates, examinations were offered at more than one location, resulting in 61 total examination opportunities. Examinations are graded by the Environmental Resources Training Center (ERTC) pursuant to a contractual agreement with the Illinois EPA. ERTC provides exam grades to the Illinois EPA, who then issues the examination result letters. There were 966 examinations attempted by 675 examinees in 2024, consisting of 138 Class A examinations, 81 Class B examinations, 475 Class C examinations, and 239 Class D examinations. 233 examinees passed a certification examination during 2024. The examination pass rates in 2024 were:

- Class A: 27%
- Class B: 45%
- Class C: 35%
- Class D: 35%



An applicant is not required to have any experience in the industry to take the examination, and an examinee may take each level of examination no more than four times within a calendar year. The overall pass rate in 2024 was 25% with 35% of examinees passing an exam. The Illinois EPA is currently exploring additional strategies to increase examination preparation. In 2023, a list of examination categories for each level of certification was posted online at: <https://epa.illinois.gov/topics/drinking-water/operator-certification.html>. Additionally, the Illinois EPA continues to approve exam preparation workshops and courses offered by approved training providers.

An examinee earns the title of Operator in Training (OIT) once they achieve a passing score on an examination. OIT status is valid for a period of six years. An OIT is not fully certified and therefore is not qualified to act as a ROINC. To obtain full certification, an OIT is required to submit an application showing the education (high school diploma or GED) and experience requirements have been met for the level of certification requested. The Illinois EPA previously required proof of a high school diploma or GED prior to allowing a person to sit for an examination. This was changed in 2017 to promote internships by allowing high school students to attempt the examination before graduation. The minimum criteria for certification were established to ensure that certified operators have the knowledge and understanding of the public health reasons for the drinking water standards.

In late 2017, Illinois modified the Operator Certification regulations to require operators to meet the experience requirements to be eligible for full certification. Certification for a Class A certificate requires 5,340 hours of experience; a Class B certificate requires 5,340 hours of experience; a Class C certificate requires 1,780 hours of experience; and a Class D certificate requires 890 hours of experience. At least half of the required hours of experience must be hands-on experience with the processes that define the level of certification. For example, a person working toward certification as a Class C operator must show that they have at least 890 hours of hands-on experience with chemical feed processes. The other 890 hours can be comprised of any combination of hands-on experience with other processes at the water treatment plant, training courses, and education. In addition, to become fully certified, the applicant must have graduated from high school or hold the equivalent of a high school education, and the applicant must be able to read and write English.

An operator may hold a valid certification and be an OIT at a higher certification level at the same time. During 2024, there were a total of 502 OITs:

- 84 Class A OITs
- 47 Class B OITs
- 250 Class C OITs
- 121 Class D OITs

The Illinois EPA certified 202 operators in 2024:

- 35 Class A
- 19 Class B
- 88 Class C
- 60 Class D

Early in the Illinois EPA's Operator Certification Program, "grandparenting" of operators was permitted. Upon successful completion of a program, a certificate was awarded at the same level as the facility for which the person was responsible. The certifications were site specific and non-transferable. The grandparented operator was then required to obtain

renewal training hours in the same manner as non-grandparented operators to maintain certification. 35 Ill. Adm. Code 681.900(b) requires grandparented operators to renew certification every three years. At one time, Illinois had 139 operators with grandparented certifications. There are only eight currently valid grandparented certificates. Illinois no longer issues grandparented certifications for CWS.

Illinois offers reciprocal certifications to operators on a case-by-case basis. Illinois has a residency requirement, and applicants for reciprocity must either live or work in Illinois to be eligible for reciprocity. The requirements for certification in the state from which the applicant is requesting reciprocity must be at least as stringent as the requirements in Illinois, and the state must in-turn offer reciprocity to Illinois' certified operators. In 2024, Illinois issued 11 certifications through reciprocity: eight (8) Class A, two (2) Class C, and one (1) Class D. Illinois also offers reciprocity to military veterans. No applications for military reciprocity were received in 2023.

Compliance and Enforcement

The Illinois EPA uses SDWIS and a web-based Operator Certification database to track certification requirements. Internal reports are generated regularly to track compliance with the certified operator requirement and to maintain consistency between the two databases. The Illinois EPA does not issue temporary certifications. Once the Illinois EPA becomes aware of a CWS that is without a ROINC, the Illinois EPA issues a Non-Compliance Advisory (NCA). A CWS is given 15 days to submit the paperwork notifying the Illinois EPA of the ROINC. A formal Violation Notice (VN) is issued through Section 31 of the Act if the CWS fails to respond within 15 days.

The Illinois EPA reviews and tracks contracts for CWS with ROINC's hired contractually. When a contract is received, it is logged into SDWIS utilizing the compliance schedule module. The contract is sent to the appropriate Illinois EPA Field Office where it is reviewed for content pursuant to 35 Ill. Adm. Code 681.1000. If a contract is acceptable, an approval letter is issued. If a contract is missing one or more of the required parameters, the contract is rejected and the CWS is sent a letter giving them 15 days to resubmit an acceptable contract. If the CWS fails to comply with the rejection letter or if they fail to submit a contract for review, a VN is issued.

The Illinois EPA sends CWS a reminder letter 60 days prior to expiration of the operator contract. If a new contract is not received in a timely manner, CAS follows up with an NCA and makes a phone call reminder. An NCA may also be issued if an operator sends a letter of intent to leave a CWS prior to the end of the contract. NCAs often garner the attention of the CWS owner and result in a return to compliance before it is necessary to initiate formal enforcement. If the CWS still does not comply, a VN is issued. The Illinois EPA is currently examining strategies to limit the number of facilities that an operator can contract operate to ensure effective facility operations. This would likely result in a change to the PWS regulations.

During 2024, the Illinois EPA sent 148 NCAs and three VNs to CWS to address their lack of properly credentialed operational staff. All three of these VNs, were issued for failure to have a certified operator. The following table displays each of these CWS that were issued VNs in 2024.

PWS ID	System Name	Violation Description	VN Issued	Days until Violation Resolved
IL0030100	Tamms	Lack Of Certified Operator	2/5/2024	8
IL1135150	Cropsey Mutual Water Association	Lack Of Certified Operator	11/25/2024	114
IL0050400	Country View MHC	Lack Of Certified Operator	12/12/2024	ongoing

A VN can be followed by a Notice of Intent to Pursue Legal Action. The culmination of this process is a referral to the Illinois AGO to ensure compliance and seek a monetary penalty. This process has generally been effective as documented by the high compliance rates described.

In addition to enforcement actions under Section 31 of the Illinois Environmental Protection Act, the Illinois EPA can utilize the following procedures to ensure actions by CWS officials are in the best interest of protecting public health:

- The PWSO Act gives the Illinois EPA the authority to issue an administrative citation (AC) for certain paperwork violations committed by a ROINC.
- Under the Illinois Environmental Protection Act, it is a Class 4 felony for a person to knowingly make a false, fictitious, or fraudulent material statement, orally or in writing to the Illinois EPA. The Illinois EPA can refer criminal cases to the Criminal Investigation Division of the U.S. EPA or pursue a criminal investigation and prosecution at the state level.
- 35 Ill. Adm. Code 681, Subpart G provides a procedure whereby the Illinois EPA may revoke or suspend an operator's certification.

Certificate Renewal

Approximately one-third of operators have certificates that are due for renewal by July 1 of each year. Illinois has a one-month grace period for submittal of the renewal application and fee. Certifications expire on August 1. All Illinois drinking water operators are required to obtain renewal training hours to renew their certificates. Training courses are approved by the Illinois EPA to ensure that the subject matter is acceptable and applicable to the profession. Training courses are reviewed throughout the year as training providers submit them, and approved courses are given a unique course ID. To ensure that a course is acceptable for credit, it is highly encouraged that courses be submitted and reviewed before training occurs. The Illinois EPA reviews courses after occurrence on a limited basis. Many of these courses are submitted by operators working out of state who desire to maintain their Illinois certifications. A list of approved training courses can be found on the [Operator Certification System](#) on the Illinois EPA website. In 2024, 1,348 new renewal training courses were approved by the Illinois EPA for drinking water operators. The Illinois EPA continues to see a large amount of online and virtual courses submitted for approval by training providers.

Operators with a valid Class A or Class B certification are required to obtain 30 renewal training hours each three-year renewal period. Operators with a valid Class C or Class D certification are required to obtain 15 renewal training hours each three-year renewal period. OIT certificates are non-renewable and do not require renewal training. A minimum of two thirds of the required training must be comprised of courses that are technical in nature. The other third of the required training may be comprised of technical or non-technical/professional courses such as safety or management. The Illinois EPA mails Renewal Application Forms to operators with expiring certificates in March of the expiration year. In 2024, 823 operators successfully completed the required training and renewed their certificates:

- 296 Class A certificates renewed
- 95 Class B certificates renewed
- 317 Class C certificates renewed
- 115 Class D certificates renewed

And in 2024, 235 operators had certificates that expired:

- 78 Class A certificates expired
- 20 Class B certificates expired
- 102 Class C certificates expired
- 35 Class D certificates expired

Certifications expired for four operators listed as the ROINC for five separate facilities, resulting in NCAs for these five CWS. The Illinois EPA issued these NCAs on September 18,

2024. Three of the operators applied for and received restoration, returning them to compliance. Two facilities hired a new operator, returning them to compliance. The Illinois EPA issued a VN to one of these facilities. This facility eventually resolved the VN by retaining the same operator once their certificate was restored.

Resources Needed to Implement the Program

The funding source for Operator Certification staff as well as for the Environmental Resources Training Center contract is the 270 SRF Administrative Fund. The State of Illinois administers a fee program to cover a portion of the cost of administering the Operator Certification Program. Fees are collected for examination, application, renewal, and reinstatement. Certification fees are processed daily by the BOW Compliance Assurance Section and then sent to the Division of Fiscal Services. These fees are tracked on reports. The Illinois EPA assures there are adequate resources to fund and sustain the Operator Certification Program including staffing, data management, testing, enforcement, administration, and training approval. There are no essential aspects of the Operator Certification Program that are not currently being funded.

The Operator Certification Unit is currently housed under the BOW Division of Public Water Supplies Compliance Assurance Section. The current staffing level for both Operator Certification programs combined consists of a working supervisor (Environmental Protection Specialist IV), an Environmental Protection Specialist II, and Environmental Protection Specialist III, and an Executive I. The specialists perform the majority of the day-to-day work (generating Letters of Admission to examinations, reviewing applications, answering operator questions, proctoring examinations held at Illinois EPA Headquarters and special examinations, processing examination results, processing renewal applications, and processing training provider applications). The executive processes change in personnel information and contractual agreements from CWS. The working supervisor assists the specialists with day-to-day work when needed, trains and guides the specialists, performs data management tasks, and serves as the specialized staff expert for issues dealing with complex operator certification regulations. A new working supervisor for the Unit started on August 1, 2025. The Illinois EPA is currently in the process of creating a Capacity Development Section within the Bureau of Water. Upon establishing this Section and hiring a Section Manager, the Operator Certification Unit will then move under the new Capacity Development Section. In this location, the Unit will be poised to further assist with operator workforce development throughout the State.

Recertification

If an operator fails to renew the certification within the three-year period, the certification expires. The operator then has two years to provide documentation of successful completion of the required renewal training hours to restore the certificate. However, the date of expiration of the restored certificate remains the same as it would have been had they renewed the certificate on time. If certification is not restored within a two-year period, the certification remains expired. To recertify, the operator must retest and submit a new application for full certification. The Illinois EPA issued 44 restorations in 2024: 19 for certificates that expired August 1, 2024, 19 for certifications that expired August 1, 2023, and six for certifications that expired August 1, 2022.

Stakeholder Involvement and Program Review

The success of the CWS Operator Certification Program relies on both internal and external reviews. The Operator Certification Program is constantly reviewed by program staff to clarify current regulations and to strengthen the existing program. The Illinois EPA plans to discuss future program review with the Public Water Supply Operator Certification Advisory Board (Advisory Board) at their next meeting. During 2024, there were no rulemaking proposals to the existing Operator Certification regulations. Generally, the Illinois EPA provides outreach at two large conferences and many operator meetings during the year to update operators on regulatory changes.

The Illinois EPA meets with the Advisory Board to ensure stakeholder involvement resulting in the relevancy and validity of the program and the confidence of all interested parties. The last Advisory

Public Water Supply Operator Certification Advisory Board meeting times, minutes, and agendas can be found at: <https://epa.illinois.gov/topics/drinking-water/operator-certification.html>

Board meeting occurred in March of 2022. Meeting minutes are posted on the Illinois EPA website once the Board votes to approve the minutes. During these Board meetings, the Advisory Board reviews proposed changes to the Operator Certification regulations, reviews reports from the Examination Committee, and reviews the application/applicant approval process for testing and training criteria. The Advisory Board also provides direction to the Illinois EPA regarding Operator Certification Program enhancements. The Advisory Board has not met since this meeting in March 2022. The Advisory Board consists of five members, requiring a quorum of 3. A quorum was not met at a regularly scheduled meeting in September 2022. The Illinois EPA called for a meeting in August 2023, but only two members attended the meeting, which did not constitute a quorum. During 2023, one Board member passed away and two members resigned. Three new Board members have been appointed in 2025, and the Illinois EPA is waiting for the remaining vacancies on the Board to be filled to continue with regularly occurring Advisory Board meetings.

The Illinois EPA meets annually with the Certification Examination Review Committee (Committee). In July of 2024, an in-person meeting was held. The Committee is comprised of Illinois EPA personnel, subject matter experts, and training partners. This committee is supported by the Environmental Resources Training Center through a contractual agreement with the Illinois EPA. The Committee reviews and updates questions in the data bank and develops new questions as CWS regulations change. All examination questions are validated by the Committee. In addition, pass rates of each examination and pass rates of each question on the examinations are reviewed. The Committee takes special interest when a pass rate of a question is remarkably low and typically rewrites or removes such questions. In 2024, the Examination Review Committee finalized a new Class C examination and worked on cleanup of the question bank. The Committee discusses overall pass rates and analyzes data analytics regarding these pass rates. For example,

pass rates on examinations beyond an examinee's first attempt are being analyzed. The Committee examines this data to identify steps to improve scores when necessary. It is important to note that the Environmental Resources Training Center is also the location of one of the state's leading water and wastewater training facilities and has been integral in assisting the Illinois EPA in the development of the Operator Certification database, use of modernized testing software, analysis of examination data, and development of technical assistance documents.

The Illinois EPA continues to aid water systems in increasing resiliency to climate change impacts. There are currently over 100 approved renewal training courses relating to topics such as climate change, resiliency, and emergency operations. In addition, the Illinois EPA and Certification Examination Review Committee have added questions pertaining to this subject to the examination question bank and have prioritized adding these questions to future examination versions.

Conclusion

The Illinois EPA would like to recognize our training partners. The operator training opportunities provided by the Environmental Resources Training Center at Southern Illinois University-Edwardsville, the Illinois Potable Water Supply Operators Association, Illinois Rural Water Association (IRWA), Illinois Section of the American Water Works Association (ISAWWA), local operator groups, and two-year colleges are invaluable sources contributing to the successful treatment of potable water in Illinois. Whether through large conferences, webinars, semester-long classes, regional forums, or water system specific curricula, these educators, associations, and individuals have afforded opportunities to water professionals in Illinois that are unparalleled across the country.

The Illinois EPA will continue to ensure that U.S. EPA's baseline standards for state Operator Certification programs are being met, as well as the provisions required under the PWSO Act and Illinois Operator Certification regulations. The Illinois EPA's Operator Certification program continues to significantly contribute to the safe and satisfactory operation of CWS in Illinois by ensuring that CWS are run by qualified and properly certified professionals.

