



# Community and Non-Community Public Water Supply Operator Certification Program



## Calendar Year 2021

Illinois Environmental Protection Agency  
Illinois Department of Public Health



## Introduction

In Illinois, regulatory oversight of Public Water Supplies (PWSs)<sup>1</sup> is shared by the Illinois Environmental Protection Agency (EPA or Agency) 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, has empowered IDPH to administer the Non-Community PWS Program while the Illinois EPA retains regulatory authority over Community PWSs<sup>2</sup>.

Illinois continues to maintain regulations for the operation and maintenance of all PWSs by properly certified individual operators. Illinois continues to report to U.S. EPA the status of the operator certification program on an annual basis. U.S. EPA Region 5 tracks completion of this report to avoid a 20 percent withholding of the Illinois Drinking Water Revolving Loan Fund grant, should Illinois EPA fail to meet this commitment. U.S. EPA Region 5 staff evaluates Illinois Operator Certification Programs based upon established baseline standards.

## Community Water Supply Operator Certification Program 2021

Illinois regulations require that owners and official custodians of Community Water Supplies (CWSs) in Illinois must provide, under the Illinois Environmental Protection Act, Illinois Pollution Control Board Rules, and the Safe Drinking Water Act, continuous operation of PWS facilities to

Illinois' Operator Certification Regulations can be found at the following web site:  
<https://ilga.gov/commission/jcar/admincode/035/03500681sections.html>

assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption. Under the Public Water Supply Operations Act (PWSO Act), all portions of a CWS must be under the direct supervision of a Responsible Operator in Charge (ROINC). 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 Agency. Each individual who is a ROINC for a CWS is jointly accountable with the owner of the CWS for the proper operation of the portions of the CWS over which they have been designated as the ROINC. 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/et seq. This Act provides rule making authority to the Illinois EPA. The Illinois EPA has promulgated these rules in 35 Illinois Administrative Code Part 681. The State ensures that the public health objectives of the national

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<sup>1</sup> PWSs serve 15 service connections or 25 residents.

<sup>2</sup> CWSs serve 15 or more year-round service connections or 25 or more year-round residents.

Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by the Illinois EPA’s Operator Certification Program.

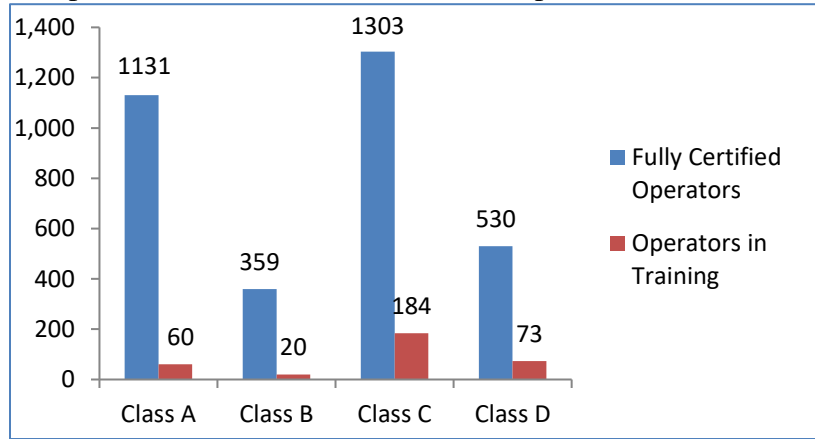
In 2021, there were 1,763 CWSs in Illinois. Eight of these facilities became inactive at some point during 2021. Four of the facilities that became inactive were absorbed into other CWSs, one no longer met the definition of a CWS, one became exempt, and two consolidated and became one new CWS. Facilities are divided into four classifications based on the complexity of treatment: Class D facilities are CWSs with limited pumpage, storage, and distribution systems; Class C facilities are CWSs whose treatment facilities are limited to chemical addition; Class B facilities are CWSs whose treatment facilities generally include filtration, filtration and aeration, or ion exchange; and Class A CWSs are water treatment facilities that generally employ surface water treatment techniques including coagulation, lime softening, sedimentation, or advanced filtration. A CWS may be designated as Exempt. Pursuant to Section 9.1 of the PWSO Act, a CWS 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 CWSs in Illinois in 2021 listed above does not include exempt facilities. In 2021, there were 159 Class A, 421 Class B, 713 Class C, 470 Class D, and 40 Exempt CWSs. One facility is a wholesaler with no customers and no treatment, and therefore has no classification designation.

Any change in facility classification is typically communicated by the Illinois EPA Field Office Section (FOS) to Illinois EPA Drinking Water Compliance personnel. The change is documented in the Safe Drinking Water Information System (SDWIS). If the change in classification of the CWS necessitates a change in certification requirements for an operator, the CWS is notified by FOS personnel. There were five facilities for which the source changed during 2021. Four of these systems had changes in classification as a result of the source change. The table below portrays these changes.

Facility	Original Source	New Source	Original Classification	New Classification
#1	Groundwater	Surface water purchase	Class C	Class D
#2	Surface water	Surface water purchase	Class A	Class D
#3	Groundwater	Groundwater purchase	Class C	Class D
#4	Groundwater under the influence of surface water	Surface water	Class A	Class A
#5	Groundwater	Groundwater purchase	Class B	Class C

In 2021, there were 3,323 fully certified drinking water operators in Illinois. The certification level breakdown was as follows: 1,131 A operators, 359 B operators, 1,303 C operators, and 530 D operators. Illinois does not have a separate certification for distribution operators. Certification at a D level covers distribution systems; certifications at higher levels are cumulative and include qualifications for distribution operations.

To become a certified drinking water operator in Illinois, a person must first take and pass an exam. The exams are comprised of multiple-choice questions to establish that



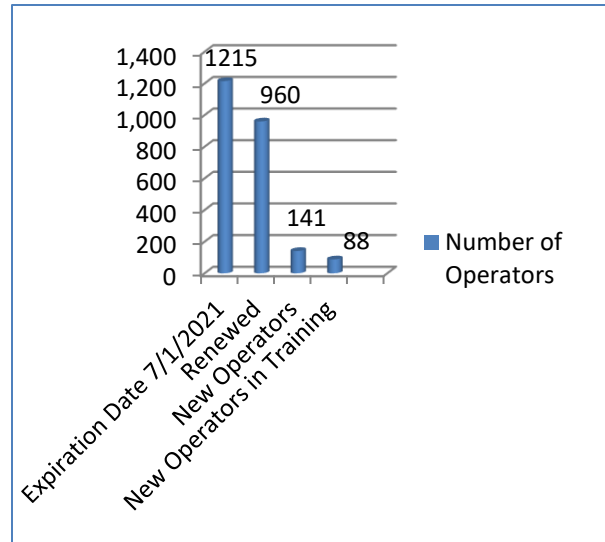
person has the necessary knowledge to perform the job. A passing score is 70 percent. In 2021, Illinois offered exams at 9 locations with 46 exam dates. On several of the 46 exam dates, exams were offered at more than one location, resulting in 57 total exam opportunities. Exams are graded by the Environmental Resources Training Center through contractual agreement with the Illinois EPA. Grades are sent to the Agency and exam result letters are issued by the Agency. There were 614 exams attempted in 2021, consisting of 115 Class A exams, 61 Class B exams, 293 Class C exams, and 145 Class D exams. The pass rates in 2021 were as follows: Class A exam passed 39.1 percent of the time, Class B exam passed 29.5 percent of the time, Class C exam passed 29.0 percent of the time and Class D exam passed 33.8 percent of the time. The seemingly low pass rate may be skewed since an applicant is not required to have any experience in the industry to take the exam.

An examinee earns the title of Operator in Training (OIT) once they achieve a passing score on an exam. 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 exam. This was changed in 2017 to promote internships by allowing a high school student to attempt the exam before graduation. The minimum criteria 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 adopted the most recent revision to the Operator Certification regulations. Operators are required to meet the experience requirements defined in hours for full certification. Certification for a Class A requires 5,340 hours of experience, a Class B requires 5,340 hours of experience, a Class C requires 1,780 hours of experience, and a Class D 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.

An operator may hold a valid certification and be an OIT at a higher certification level at the same time. During 2021, there were a total of 337 OITs broken down as follows: 60 Class A OITs, 20 Class B OITs, 184 Class C OITs, and 73 Class D OITs. A further breakdown of OITs follows: 68 operators held valid certifications at one level while holding an OIT designation at a higher level, 88 earned their OIT status in 2021, and 141 operators were fully certified in 2021 (comprised of 27 Class A, 12 Class B, 69 Class C, and 33 Class D certifications). No significant regulatory changes were made to the Operator Certification Program in 2021 therefore no backsliding occurred.



Early in the Operator Certification Program, “grandfathering” 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 grandfathered operator was then required to obtain renewal training hours in the same manner as non-grandfathered operators to maintain their certification. A grandfathered operator is required to renew their certification every three years. At one time, Illinois had 139 operators with grandfathered certifications. After the 2021 renewal cycle, only 15 of the grandfathered certifications were still valid. Illinois no longer issues grandfathered certifications for CWSs.

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 2021, Illinois issued three certifications through reciprocity: One Class A certification and two Class C certifications. Illinois also offers reciprocity to military veterans. No applications for military reciprocity were received in 2021.

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 renewal fee. No certifications are expired until after 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 Agency reviews courses after occurrence on a limited basis. Many of these are single courses

submitted by operators working out of state trying to maintain their Illinois certifications. A list of approved training courses can be found on the Operator Certification System on the Illinois EPA website.

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. 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. In March of the year that their certificate is set to expire, operators are sent a Renewal Application Form. In 2021, 960 operators successfully completed the required training and renewed their certificates while 255 operators had certificates that expired. Certifications expired for 12 operators listed as the ROINC for at least one facility, resulting in Non-Compliance Advisories (NCA) for 17 CWSs. The NCAs were issued on August 13, 2021. Five of the operators submitted restorations, returning five of the facilities to compliance. Ten facilities hired new operators and two of the facilities were issued Violation Notices (VNs). One of the facilities that received a VN had a ROINC on staff by May 18, 2022, and at the other facility the previous operator restored his certification on January 14, 2022.

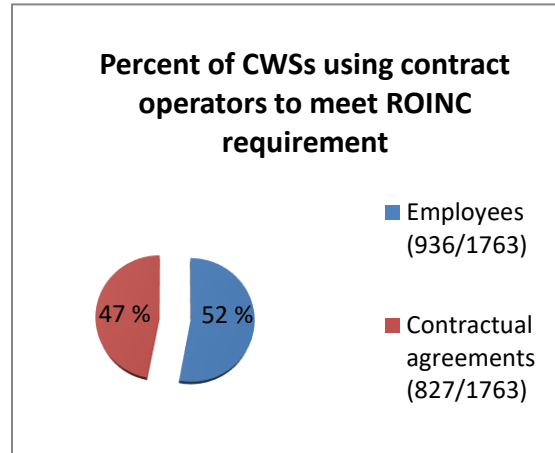
If an operator fails to renew their certification within the three-year period, their certification expires. The operator then has two years to provide documentation of successful completion of the required renewal training hours to restore their certificate. However, the date of expiration of the restored certificate remains the same as it would have been had they renewed 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 29 restorations in 2021: 11 for certifications that expired August 1, 2021, and 18 for certifications that expired prior to 2021.

The Illinois EPA uses SDWIS and an internally developed Operator Certification database to track certification requirements. Information is queried weekly to determine compliance with the requirement for each CWS to employ a ROINC. A report is run bimonthly to maintain consistency between the two databases. The regulations require that a CWS must have a ROINC at all times, therefore, the Illinois EPA does not issue temporary certifications. Once the Agency becomes aware of a CWS that is without a ROINC, an NCA is issued. A CWS is given 15 days to submit the paperwork notifying the Agency of their ROINC. A formal VN consistent with Section 31 of the Illinois Environmental Protection Act is issued if the 15 days pass without a response.

The Illinois EPA reviews and tracks contracts for CWSs 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 Agency sends CWSs a reminder letter 60 days prior to expiration of their contract. If a new contract is not received in a timely manner, the Agency’s Compliance Assurance Section follows up with an NCA and a phone call. An NCA may also be issued if an operator sends us a letter of their intent to leave a CWS prior to the end of their 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.



During this reporting period, the Illinois EPA sent 266 NCAs and 12 VNs to CWSs to address their lack of properly credentialed operational staff<sup>3</sup>. These totals include NCAs and VNs issued as a result of expired operator certificates. Of these 12 VNs, 10 were issued for failure to have a certified operator, one was issued for failure to submit an operator contract, and one was issued for failure to submit an operator contract that met all of the required parameters. Seven of the 10 VNs issued for lack of a certified operator also included other violations. Three of the VNs issued for failure to have a certified operator were referred to the Illinois Attorney General’s Office (AGO) for further enforcement and all of these facilities are still without a certified operator. One of the systems, Century Pines Apartments, was issued two separate VNs for lack of a certified operator. This system hired an operator after receiving the VN, and while they were under a compliance commitment agreement (CCA) for the remaining citations in the VN, this operator quit and a new VN was issued. A new operator was hired by Century Pines Apartments within four months of issuance of the second VN. The VN issued for failure to submit an operator contract was resolved within 13 days. One VN was issued for failure to submit an operator contract meeting the required parameters, and an approvable contract was received shortly after the VN was issued, so the VN was rescinded. The remaining five VNs issued with citations for lack of a properly certified operator were resolved in an average of 84 days. The following table displays each of these CWSs that were issued VNs in 2021.

<sup>3</sup> In previous reporting cycles, the U.S. EPA questioned whether the Illinois EPA could begin inputting a Type 12 violation to track operator noncompliance concerns. The Illinois EPA previously determined that this code has very limited application and would not supply the intended information. However, the Illinois EPA will reexamine reporting federal Type 12 in SDWIS beginning in 2023.

PWS ID	System Name	VN Description	VN Issued	Days until Violation Resolved	Notes
<b>IL1590220</b>	Acorn Acres MHP	Lack of a certified operator	12/16/2021	Ongoing	Referred to Illinois AGO
<b>IL0150020</b>	Century Pines Apartments	Lack of a certified operator	3/9/2021	396	
<b>IL0150020</b>	Century Pines Apartments	Lack of a certified operator	12/21/2021	109	
<b>IL0375125</b>	Cortland Corners MHP	Lack of a certified operator	8/19/2021	ongoing	Referred to Illinois AGO
<b>IL1135150</b>	Cropsey Mutual Water Association	Lack of a certified operator	10/20/2021	86	
<b>IL1030250</b>	Franklin Grove	Lack of a certified operator	9/2/2021	6	
<b>IL1190120</b>	Lakeshore Estates MHP	Lack of a certified operator	3/26/2021	Ongoing	Referred to Illinois AGO
<b>IL1115730</b>	Prairie Ridge Association	Failure to submit an approvable operator contract	9/10/2021	13	
<b>IL1955165</b>	Riverside Estates MHP	Lack of a certified operator	10/19/2021	211	
<b>IL0750800</b>	Sheldon	Failure to submit an operator contract	10/14/2021	8	VN retracted
<b>IL1095200</b>	Stratford West Association, Inc.	Lack of a certified operator	12/2/2021	19	
<b>IL1350700</b>	Waggoner	Lack of a certified operator	2/18/2021	98	

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 2021, nine CWSs were enforced against for failure to have a properly accredited Responsible Operator in Charge.

In addition to enforcement actions under Section 31 of the Illinois Environmental Protection Act, the Illinois EPA can utilize the following 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 ROINC.
  - The Illinois EPA issued one AC in 2021.



- 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.
  - Two potential criminal cases were referred during 2021 to U.S. EPA.
- 35 Ill. Adm. Code 681, Subpart G provides the procedure whereby the Illinois EPA may revoke or suspend an operator’s certification.
  - There were no suspensions or revocations in 2021.

The State of Illinois administers a fee program to cover a portion of the cost of administering the Operator Certification Program and utilizes several funding mechanisms, such as the 270 SRF Administrative Fund to overcome any shortfalls in the program. Fees are collected for examination, application, renewal, and reinstatement. Certification fees are processed daily by the Agency’s 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 performed.

In late 2020, the Agency’s CWS and Wastewater Treatment Works Operator Certification Programs merged to form the Operator Certification Unit. This Unit is housed under the CWS Compliance Assurance Section. The current staffing level for both programs consists of a lead worker and two specialists. In addition to operator certification duties, the two specialists each handle a CWS compliance program.

The success of the CWS Operator Certification Program relies on both Agency internal and external reviews. The Operator Certification Program is constantly reviewed to clarify current regulations and to strengthen the existing program. During 2021, 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 continued to offer operator exams under Agency-approved COVID-19 safety protocols during 2021. Exams continued to be held at all regular exam sites, as well as the addition of off-site special exams toward the end of the year. As in 2020, 2021 brought an abundance of virtual and correspondence-type courses by approved training providers for renewal training credit for certified operators. More exams were given, and fewer operator certificates expired in 2021 as compared to 2020.

The Illinois EPA meets with the Public Water Supply Operator Certification Advisory Board at least twice yearly. In 2021, only one Advisory Board meeting occurred, in September. During these meetings, the Advisory Board reviews proposed changes to the Operator Certification

Public Water Supply Operator Certification Advisory Board meeting times, minutes, and agendas can be found at: <https://www2.illinois.gov/epa/topics/drinking-water/operator-certification/Pages/default.aspx>

Regulations, reports from the Exam Committee, and application/applicant approval process for testing, and training criteria. They have been requested to review and mediate disputes by operators. The Advisory Board also provides direction to the Illinois EPA regarding Operator Certification Program enhancements. They have been an invaluable resource over the past several years as we have had major changes to the drinking water operator regulations.

The Illinois EPA meets annually with the Examination Review Committee. In 2021, remote meetings occurred along with an in-person meeting in November. The committee is comprised of Agency personnel from the regulatory units and FOS, 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 regulations change. In addition, pass/fail rates of each exam and pass/fail rates of each question on the exams are reviewed. 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 Certified Operator database, use of modernized testing software, and development of technical assistance documents.

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 a significant factor in 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 is unparalleled across the country.

## Non-Transient Non-Community Public Water Supply Operator Certification Program 2021

All major program elements for the Non-Transient Non-Community (NTNC) Public Water Supply Operator Certification Program continue to be implemented. Currently there are 428 NTNC PWSs in Illinois. Over the reporting period, 391 (91.4 percent compliance) of these have properly certified responsible operators. For the 113 NTNC supplies that have some type of chlorine disinfection installed, 107 (approximately 94.6 percent) have a certified operator. There are 436 NTNC water supply operators that are currently trained and certified in Illinois: 384 are certified by IDPH and 54 are certified by the Illinois EPA.

Initially, NTNC operators must pass a 12-hour course consisting of eight sections with an exam at the end of the course. This course is currently administered by the Water Quality Association (WQA) in coordination with IDPH. Course applicants must have a high school diploma or equivalent, or must be currently employed by a NTNC PWS. It is not anticipated that a circumstance will arise where a new certificate is requested for an operator without a high school diploma. Periodically, a review of the course's eight sections is done to evaluate the effectiveness of the training, ensure quality, review new regulations, and validate compliance with U.S. EPA's guidelines. WQA reviews their materials annually and an IDPH review of the course shows some areas that will need to be updated prior to the fall 2022 course.

The eight sections of the course include: 1) operator tasks and responsibilities; 2) water sources and characteristics; 3) water supply and distribution; 4) SDWA regulations and procedures; 5) disinfection processes and procedures; 6) sanitary procedures for water treatment operators; 7) safety practices; and 8) other water treatment technologies. Currently two initial courses are held annually allowing supplies to maintain operator compliance. In 2021, 33 new operators were certified through these two courses. The passing rate for these courses was approximately 86.8 percent.

After the initial training, operators must meet training requirements for subsequent certificate renewals. Certification renewals began in the fall of 2005. IDPH phased in the renewal training requirement as approximately one-third of the operators renew their expiring certificates each year. All NTNC operators must complete an approved renewal course as a prerequisite for their certificate renewals. Operators who renew are required to submit documentation to the IDPH that they have taken the required training.

Renewal course guidelines were reviewed with several industry-wide water education organizations: ISAWWA and IRWA were consulted, and in recent years Illinois Rural Community Assistance Program (RCAP) has been consulted. After this review was complete, computer-based training meeting renewal training requirements was chosen as the most effective option available. IDPH selected the Operator Basics 2005 Program developed by the Montana Water Center (MWC) in cooperation with U.S. EPA as the renewal course.

In June/July of each year, operators are sent a letter advising them of their expiring certificates. This letter provides instructions on how to download and complete the course or how to order the CD version from the National Environmental Services Center. As of April 30, 2008, the

availability to complete the Operator Basics 2005 Course online was discontinued by the MWC. IDPH acquired a supply of CDs from National Environmental Services Center and, in the letters mailed, informed operators a CD could be obtained directly from the IDPH. In 2021, IDPH became aware that the online course was again available on the MWC's website. Recertification letters sent in 2021 again provide the option of using either the CD or the online course.

Feedback on the course remains positive and this course has been the standby for operator recertification. However, IDPH has experienced some problems with the online login and CDs have occasional technical problems. Also, CD drives are no longer standard. Partly due to these issues with the Operator Basics 2005 course, and to offer an alternative recertification option, IDPH has been seeking help from technical providers for classroom sessions. RCAP provided a virtual classroom recertification course as an option to the Montana Course in 2021. A total of 138 current operators renewed their certifications by completing the Operator Basics 2005 Course or attending the RCAP virtual recertification course in 2021.

In August of each year, all NTNC PWS are sent "Operator Summary" letters informing them of the operators registered with IDPH. This information is tracked in an Access Database and these letters notify each supply of any operators with expiring certificates and the importance and legal responsibility of having a properly certified responsible operator. As mentioned above, in June/July of each year, a letter goes out to all certified operators that are due for recertification by the end of the year. The dates of new operator classes are also sent to all NTNC PWSs prior to each class.

Each time these letters are sent out, a list of supplies in non-compliance is sent to the IDPH Regional Offices (ROs) and Local Health Departments (LHDs) instructing them to contact these water supplies. Non-compliant NTNC water supplies are immediately advised of the serious nature of not having a properly certified responsible operator and options for achieving compliance.

The plan to issue formal violations from IDPH's central office in 2021 was delayed. However, beginning in August 2022, enforcement is going to follow IDPH's new Enforcement SOP. Non-Compliance Advisories will be sent from central office for any system in violation. A formal VN will be sent for systems in Non-Compliance for six months. An enforcement referral will follow if the water supply does not take action. These violations will be put into SDWIS as a Type 12 violation if the system adds a disinfectant. ROs and LHDs are also instructed to cite operator non-compliance as a significant deficiency in sanitary surveys.

The current compliance rate of 91.4 percent has improved over the 2020 rate. IDPH believes the compliance rate still being below the goal and past levels of approximately 95 percent was still impacted by the effects of COVID-19. Many NCPWS were still closed or partially closed in 2021 and operators had many COVID-19 related duties that distracted from normal routine water system operations.

With most business operations returning to close to pre-pandemic levels, IDPH believes the plans to follow the new Enforcement SOP will greatly enhance the efforts to address NTNC PWS in "non-compliance" and move the compliance rate above 95 percent.

Approximately 30 percent of the current supplies without a properly certified operator do not show any operator listed for the supply. The vast majority of these are new supplies recently brought into the program. This number is lower than 2020 as IDPH has taken steps to remedy this issue by ensuring operators are in-place or a plan is submitted to secure a certified operator as part of new supply approval and initial inspection. Nearly 46 percent of supplies without a properly certified operator are supplies with an operator whose certification expired in 2021. Many of these supplies should be able to achieve compliance right away by having the operator complete a recertification course. Nine supplies are showing operators whose certification expired prior to 2021.

Any systems that move on to formal violations will be prioritized as follows: 1) Systems that add a disinfectant; 2) Systems that do not list any operator and are not “new” systems; 3) Systems that do list an operator and are new; 4) Systems with operators whose certification expired before 2021; and 5) Systems with operators whose certification expired in 2021.

The IDPH enforcement process will include not issuing other IDPH licenses that are to be renewed in 2022 for facilities that are not in compliance, as the facility does not have an approved water operator as required by the licensing section of each statute. For any restaurants or food establishments, IDPH will inform the LHD that the water supply is in “non-compliance” status.

U.S. EPA has expressed concern regarding the status of NTNC PWSs that chlorinate and that utilize surface water sources. Six of these supplies (5.4 percent) are currently out of compliance with operator requirements. As discussed above, these supplies are contacted immediately by RO or LHD field staff. The IDPH Central Office Program staff are monitoring any schools/daycares that chlorinate and contacting these supplies directly if operator non-compliance persists.

**Currently, there are no NTNC PWS at schools or daycares that chlorinate and do not have a properly certified operator.** The compliance rate for chlorinating water supplies increased to 94.6 percent in 2021 which is basically at the goal of 95 percent set in 2021. The six supplies currently in non-compliance will be pursued to come into compliance as soon as possible and are the highest enforcement priorities. These supply names can be provided upon request.

IDPH continues to place emphasis on the six NTNC PWS that use surface water as their source and will continue providing training to these facilities on a periodic (as-needed) basis. IDPH is hopeful that IRWA will be able to make on-site technical assistance visits to these systems as part of IRWA’s 2023 program activities. Since these supplies receive annual sanitary surveys by RO staff, technical assistance opportunities are available at least once per year. Three NTNC Water Supplies with certified operators utilize surface water and all correspondence with them show highly capable operations.

At least five supplies utilize treatment equipment for arsenic removal. IDPH is not aware of supplies that treat specifically for iron or manganese removal. One supply has installed phosphate addition for corrosion control to address a lead Action Level Exceedance.

Supplies with complex treatment can be difficult to operate. NTNC supplies at industrial or power generating stations generally have resources to ensure proper operation of treatment.

Some schools require treatment for arsenic which can be difficult to operate and balance with meeting lead/copper action levels and other parameters. IDPH has requested help from RCAP in the past for on-site technical assistance at one of these supplies and will continue look to technical providers in the future if needed. In addition, IDPH will look for opportunities with Illinois EPA to provide additional training to systems with more complex treatment in 2022/2023.

Efforts to directly solicit stakeholder involvement with the operator certification program did not make much headway in 2021. However, IDPH did solicit stakeholder involvement as part of the Capacity Development Program which got underway in early 2022. Stakeholder involvement was provided by one water supply manager and one LHD Inspector with an Asset Management Pilot Program. IDPH hopes to continue utilizing Stakeholders in 2022 to help with review of operator training materials and possibly water supply guidance materials.

IDPH ensures the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by IDPH's program. With respect to the nine baseline standards established by the U.S. EPA for the Operator Certification Program, the following summarizes the IDPH program status:

- **Authorization** - IDPH implements the Operator Certification Program under the Drinking Water Systems Code (77 Ill. Adm. Code 900.45). The authorization is by Section 9 of the Illinois Groundwater Protection Act, (415 ILCS 55/9).
- **Certification** - Process control/system integrity decisions are made under the supervision of the certified operator.
- **Grandfathered NTNC PWS Operators** - Grandfathered operators are not allowed. All NTNC PWSs must have a properly certified operator.
- **Operational Requirements** - The certified operator does not have to be present at each operating shift. However, operations are conducted under the certified operator's direction and oversight.
- **Enforcement** - 77 Ill. Adm. Code 900.45(d) outlines the process to suspend or revoke an operator. IDPH has not suspended or revoked an operator in the recent past.
- **Certification Renewal** - IDPH requires operators to go through the initial certification class if they fail to recertify within two years of certification expiration.
- **Resources needed to Implement the Program** - IDPH personnel are funded under the Public Water System Supervisor Grant funds. Sufficient resources have been provided to run an adequate program. Currently, the Program Manager and Administrative Assistance administer the program out of the central office.
- **Stakeholder Involvement** - Stakeholder involvement in the Operator Certification Program operations and possible revisions will be pursued in 2022.
- **Program Review** - IDPH reviews all aspects of the Operator Certification Program as needed. In particular, training materials are reviewed as new Primary Drinking Water Standards are revised. Budgeting, staffing, and data management are reviewed as needed.



The number of NTNC PWSs on the U.S. EPA Emergency Response Plan non-compliance list is decreasing and compliance with drinking water regulations is on the rise. This success is, in-part, attributable to the Operator Certification Program providing qualified operators for NTNC PWS. IDPH is hopeful that with increased focus on the Operator Certification Program this success will continue to rise to higher levels.