

Alaska Operator Certification Program Report for State Fiscal Year 2023

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Mike Dunleavy, Governor Nancy Dahlstrom, Lieutenant Governor Emma Pokon, Acting Commissioner, Department of Environmental Conservation Page intentionally left blank

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Executive Summary

The Safe Drinking Water Act Amendments of 1996 directed the Administrator of the United States Environmental Protection Agency, in cooperation with the States, to develop, implement, and enforce minimum standards for certification and recertification of operators of community and non-transient non-community public water systems. This annual program report for the Alaska Operator Certification Program is submitted pursuant to federal guidelines published in the Federal Register dated February 5, 1999, and in accordance with the guidelines provided by the EPA Drinking Water Protection Division. Alaska's annual operator certification report provides an update on the implementation of the Operator Certification Program for the period from July 1, 2022, through June 30, 2023.

Alaska currently regulates 651 community, non-transient non-community, and transient noncommunity¹ public water systems. In State Fiscal Year 2023 (SFY23), 82% of all water systems were compliant with the operator certification requirements by having operators certified at levels commensurate with the systems' classifications. During SFY23, the Alaska Operator Certification Program continued efforts to classify water systems, certify operators, and track and improve compliance rates.

The public health objectives of the Operator Certification Program are to ensure that the customers of Alaskan public water systems are provided with an adequate supply of safe, potable drinking water, are confident that their water is safe to drink, and that the operators are trained and certified as well as have the knowledge and understanding of public health reasons for drinking water standards.

Antibacksliding

The implementation of the federal requirements and level of service provided by the Alaska Operator Certification Program remains the same, and no backsliding has occurred since submitting the annual report covering SFY22.

¹ Per 18 AAC 74.006 and 18 AAC 74.400, transient non-community water systems using surface water or groundwater under the influence of surface water as a source are required to have properly certified water operators.

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Authorization (Baseline Standard 1)

Under the Safe Drinking Water Act (SDWA) Amendments of 1996, the State primacy agency is required to implement an Operator Certification Program and to provide annual reports in order to receive the full federal allocation under the Drinking Water State Revolving Fund (DWSRF). The Environmental Protection Agency (EPA) may withhold 20% of the State's funding if the Operator Certification Program requirements are not met.

The Alaska Department of Environmental Conservation (ADEC) is the designated State primacy agency for the SDWA. The Operator Certification Program (OpCert) is housed within the ADEC's Division of Water and is responsible for classifying water systems and certifying operators. Additionally, the Governor's Water and Wastewater Works Advisory Board (Board), comprised of eight water/wastewater professionals appointed to five-year terms by the Governor, provides counsel regarding critical programmatic efforts and decisions.

In response to federal guidelines, the Alaska Operator Certification Program regulations were revised in 2001 to include oversight of all community, non-transient non-community systems, and transient non-community systems that use surface water or groundwater under the influence of surface water as a source. Prior to 2001, OpCert only regulated systems serving populations of greater than 500 people or having greater than 100 service connections. Since 2001, OpCert's implementation of the program has consistently been approved by EPA as compliant with the 1996 Amendments to the SDWA.

Classification of Systems, Facilities, and Operators (Baseline Standard 2)

Water systems in Alaska are classified according to a point rating system that includes the production capacity, source water type, and complexity of the treatment processes. Water systems are divided into the following three categories:

- Small Water Systems:
 - Small Untreated Water Systems: Community water systems (CWS) and nontransient non-community water systems (NTNCWS) that serve fewer than 500 people, fewer than 100 service connections, and add no chemicals to the water. Small untreated systems may perform passive treatment such as softening or cartridge filtration.
 - Small Treated Water Systems: CWS, NTNCWS, and transient non-community water systems (TNCWS) that serve fewer than 500 people, fewer than 100 service connections, and add one chemical to the water. Small treated systems may perform passive treatment such as softening or cartridge filtration.
- Water Treatment Systems:
 - CWS, NTNCWS, and TNCWS that are required to have a certified operator per 18 AAC 74.006 and classified as classes 1 4 by using the point rating system in 18 AAC 74.120.

- Water Distribution Systems:
 - CWS and NTNCWS where no water treatment is taking place, are required to have a certified operator per 18 AAC 74.006 and classified as classes 1 – 4 per 18 AAC 74.120.

While the classifications of existing systems have been documented, constant attention must be paid to keep the data current as systems evolve, as well as to classify new systems.

The 651 Alaskan CWS, NTNCWS, and TNCWS requiring certified operators are classified as follows:

| System Type | Class | Number of Systems |
|--------------------|-----------|-------------------|
| Small | Untreated | 289 |
| Small | Treated | 117 |
| Water Treatment | 1 | 101 |
| Water Treatment | 2 | 111 |
| Water Treatment | 3 | 7 |
| Water Treatment | 4 | 3 |
| Water Distribution | 1 | 18 |
| Water Distribution | 2 | 3 |
| Water Distribution | 3 | 2 |
| Total | | 651 |

Table 1: System Types

Classification efforts continued using a variety of methods during the SFY23 reporting period.

- OpCert distributed detailed classification data to all system owners. Owners were asked to review data for accuracy and respond when necessary.
- As in the past, OpCert continued to work closely with the Drinking Water Program (DWP) during the plan review process. DWP considers operator certification requirements and consults with OpCert when issuing approvals to construct and operate.
- OpCert staff reviewed sanitary survey reports, provided by DWP, which contain updated information regarding the current configuration of water systems.
- OpCert worked closely with engineers from the Village Safe Water Program (VSW) and the Alaska Native Tribal Health Consortium (ANTHC), as well as consulting engineers, who are required to consult with OpCert regarding classification issues as systems are being designed or modified.

Operators in Responsible Charge of Water Systems

All public water systems are required to have a designated operator in responsible charge (ORC) who holds certification at a level equal to or greater than the classification of the system. For water treatment and water distribution systems, the ORC must be on-site at the system or, if off-site, the ORC must be available by radio or telephone and able to be on-site at the system within an hour. For small untreated and small treated water systems, the ORC must be on-site at the system at the system or, if off-site, the ORC must be available by radio or telephone and able to be on-site at the system or, if off-site, the ORC must be available by radio or telephone and able to be on-site at the system or, if off-site, the ORC must be available by radio or telephone and able to be on-site at the system within three hours. The ORC makes all operational decisions.

| System Class | Number of Systems | Without Certified ORC | With Certified ORC | Percent With Certified ORC | With Certified ORC at the Correct Level | Percent With Certified ORC at the Correct Level |
|-----------------|-------------------------|-----------------------------|--------------------------|-------------------------------------|---|--|
| SU | 289 | 38 | 251 | 87% | 251 | 87% |
| ST | 117 | 11 | 106 | 91% | 106 | 91% |
| WT 1 | 101 | 14 | 87 | 86% | 75 | 74% |
| WT 2 | 111 | 12 | 99 | 89% | 67 | 60% |
| WT 3 | 7 | 0 | 7 | 100% | 7 | 100% |
| WT 4 | 3 | 0 | 3 | 100% | 3 | 100% |
| WD 1 | 18 | 0 | 18 | 100% | 18 | 100% |
| WD 2 | 3 | 1 | 2 | 67% | 2 | 67% |
| WD 3 | 2 | 0 | 2 | 100% | 2 | 100% |
| Total | 651 | 76 | 575 | 88% | 531 | 82% |

The following chart summarizes water system compliance at the end of SFY23.

SU = Small Untreated

WT = Water Treatment

ST = Small Treated

WD = Water Distribution

Table 2: Compliance by System Type







Water Treatment Systems





Water Distribution Systems

Figure 3: Water Distribution System Compliance



Compliance per System Type

Maintaining Operator and System Information

ORC compliance data is updated in the OpCert database using the following methods:

- Upon certification, operators are associated with systems based on information provided in their applications.
- Operator data is updated when OpCert staff review Sanitary Survey reports provided by DWP.
- Operator data is included as part of the routine notification to system owners regarding system classifications, and system owners notify OpCert of required changes.
- Operator data is confirmed using the quarterly reports of the Remote Maintenance Worker (RMW) Program. The RMW Program is comprised of 15 circuit riders who provide technical assistance to approximately 200 rural communities across the state. RMWs report current operator information for each system they support on a quarterly basis, and OpCert uses this information to update operator data.

Operator Qualifications (Baseline Standard 3)

Exam Administration

To become certified, operators must pass exams and meet experience and education requirements. There are five levels of certification, each in water treatment and water distribution and two levels in small water system operations. Exams are available for each level and offered in a variety of settings.

Exams are purchased from Water Professionals International (WPI), formerly known as the Association of Boards of Certification (ABC); however, these exams are still referred to as ABC exams. ABC exams are used by more than 100 certification programs representing over 40 states, 10 Canadian provinces and territories, as well as numerous international and tribal programs. WPI provides both paper and web-based versions of the standardized water treatment and water distribution exams for levels 1 through 4. The ABC standardized exams were developed through a rigorous psychometric process that included the use of in-depth job analyses surveys, development of "Need-to-Know" criteria from data acquired from the surveys, creation of exam items by subject matter experts, and beta testing of exams by operators in the United States and Canada. Alaska currently uses the ABC 2017 and 2019 standardized certification exams.

Exams are administered on-demand in rural communities in addition to the biannual statewide paper-based exams and online exams. Applications for certification are not reviewed until after

operators pass exams, and it is the responsibility of the operators to submit applications. In some cases, operators take exams at levels higher than previously passed exams knowing that they have not yet met the experience and education eligibility requirements for the higher levels of certification. In those cases, applications are not typically submitted immediately. For these reasons, the number of exams passed often does not reflect the number of certifications issued.

- Due to the availability of online exams, the number of paper-based exams being administered during the biannual statewide exam cycles has decreased significantly over the years. During the Fall 2022 exam cycle, two operators took two water-related exams in Utqiagvik, and two operators took two water-related exams in Anchorage. One exam was passed. During the Spring 2023 exam cycle, three operators took three water-related exams in Utqiagvik. No exams were passed. One exam cycle represents a month-long effort by OpCert staff in reviewing exam registration forms, scheduling proctor sites, mailing exams, notifying operators, and processing exam results.
- OpCert has been administering on-demand paper exams in rural communities since 2016. In SFY23, on-demand paper-based exams were administered in 30 rural communities to 39 operators who took 46 exams with 26 exams passed, resulting in 16 certifications. Applications for certification have not yet been submitted for the remaining 10.
- Water treatment and water distribution provisional level exams were administered at five classroom and two virtual introductory level courses taught by tribal health corporations and private trainers. Classroom courses consisted of four days of instruction followed by administration of the water treatment and/or water distribution provisional level exams. Virtual courses were conducted by ANTHC. ANTHC's virtual courses were spread over five weeks with three hours of instruction on Mondays, Wednesdays, and Fridays with the instructor being available for additional tutoring as necessary. Exams were also administered in the attendees' communities upon the conclusion of the virtual courses. Sixty-two operators attended classroom courses and 23 operators attended virtual courses. The 23 operators took 88 exams at introductory courses in SFY23. Operators passed 52 exams, with 24 resulting in certification. Applications for certification have not yet been submitted by the remaining 28.
- Small treated exams were administered at three virtual courses and three classroom small treated water system courses taught by ANTHC and tribal health corporations. The virtual courses consisted of one to two-hour daily training sessions spread over two weeks, followed by the small treated exam which is administered in the attendees' communities. The classroom course consisted of 17 hours of instruction over 2 ½ days. Thirty-three operators attended virtual courses and took 33 exams administered in 21 communities. Forty-three operators attended the classroom courses and took 43 exams.

One operator who attended a course in SFY22 took his exam in SFY23. Operators passed 46 exams, with 43 resulting in certification. Three examinees did not meet the requirements for certification.

- Water distribution level 1 and 2 exams were administered at three combination level 1 and 2 courses taught by private trainers and the Alaska Rural Water Association (ARWA). The courses consisted of four days of instruction followed by administration of the water distribution level 1 or 2 exam. Forty-one operators attended the courses and took 41 exams. Operators passed 26 exams resulting in 13 certifications. Applications for certification have not yet been submitted for the remaining 13.
- Water treatment level 2 exams were administered at two intermediate water treatment courses taught by a private trainer and ARWA. The course consisted of four days of instruction followed by administration of the water treatment level 2 exam. Twenty operators attended the courses and took 20 exams. Operators passed 13 exams resulting in five certifications. Applications for certification have not yet been submitted for the remaining eight.
- Online certification exams for small untreated and small treated water system operators were available at 11 testing locations: Anchorage, Bethel, Dillingham, Fairbanks, Glennallen, Homer, Kenai, Ketchikan, Klawock, Kodiak, and Palmer. Thirty-nine operators took online small water system exams with 37 passing, with all resulting in certification.
- Online water treatment and water distribution exams were available at 14 testing locations throughout Alaska: Anchorage, Bethel, Cordova, Fairbanks, Homer, Juneau, Kenai, Ketchikan, Klawock, Kodiak, Palmer, Sitka, Utqiagvik, and Valdez. The expedited registration process allows operators to be authorized for online exams in less than a month. Registration deadlines are the 1st of each month, and operators are authorized for exams by the 22nd of the same month. Operators are allowed 100 days from authorization to take exams. The OpCert database provides operators with the convenience of online exam registration using credit cards to pay fees. Ninety-eight operators took 168 water treatment/distribution exams online. Operators passed 116 exams resulting in 44 certifications. Applications for certification have not yet been submitted for the 72 remaining who passed exams.

| Туре | Exams | Exams Passed | Exam Pass Rate | Certifications |
|------------------------|-------|--------------|----------------|----------------|
| Exam Cycle | 7 | 1 | 14% | 0 |
| On-Demand | 46 | 26 | 57% | 16 |
| Provisional Courses | 88 | 46 | 52% | 18 |
| Small Treated Courses | 77 | 46 | 60% | 43 |
| WD Level 1 & 2 Courses | 41 | 26 | 63% | 13 |
| WT 2 Courses | 20 | 13 | 65% | 5 |
| Online SU & ST | 39 | 37 | 95% | 37 |
| Online WT & WD | 168 | 116 | 69% | 42 |
| All Exams | 486 | 311 | 64% | 174 |

The following chart summarizes exam pass rates by delivery type.

Table 3: Exam Pass Rate by Delivery Type



Exam Passed and Certification Issued by Delivery

Figure 5: Number of Exams Passed and Certifications Issued by Delivery Method



Figure 6: Exam Pass Rates

In part due to the benefits of flexible scheduling and instant scoring available with online exams, the number of paper-based exams administered during exam cycles has declined each year since online exams became available in 2011. The following chart summarizes the shift from paper-based exams to online exams.

| Year | Total Paper-Based* | On-Demand Paper | Online | Total |
|------|--------------------|------------------------|--------|-------|
| 2011 | 210 | | 57 | 267 |
| 2012 | 177 | | 105 | 282 |
| 2013 | 182 | | 183 | 365 |
| 2014 | 119 | | 168 | 287 |
| 2015 | 120 | | 173 | 293 |
| 2016 | 100 | | 195 | 295 |
| 2017 | 85 | 30 | 243 | 328 |
| 2018 | 65 | 43 | 211 | 276 |
| 2019 | 82 | 65 | 167 | 249 |
| 2020 | 41 | 35 | 172 | 213 |
| 2021 | 41 | 40 | 175 | 216 |
| 2022 | 29 | 25 | 158 | 187 |
| 2023 | 53 | 44 | 207 | 260 |

*Total Paper-Based is the exam cycle and on-demand paper exams and does not include paper exams administered at courses.





Exams by Delivery Type

Figure 7: Comparison of Exam Delivery Method

Certification of Operators

After passing a certification exam, operators are required to demonstrate they have met education and experience requirements to obtain certification. The minimum education requirement for certification is possession of a high school diploma, GED, or relevant experience, substituting for the lack of education. Level 3 and 4 certifications require additional postsecondary education. Minimum experience requirements for certification are outlined in 18 AAC 74.050.

Reciprocity

Reciprocity is evaluated on a case-by-case basis taking into consideration the experience and education requirements of the certificate the operator holds from the other state, the exam passed, and education and operations experience. By Statute, reciprocity cannot be granted for certificates from states that do not grant reciprocity for Alaska certifications. Nine water-related certificates were issued via reciprocity in SFY23.

Enforcement (Baseline Standard 4)

OpCert continued to emphasize increasing exam availability and educating operators and systems about the certification requirements. As a result, OpCert staff spent significant time responding to requests for information regarding the certification requirements for large and small systems.

Historically, OpCert has focused on compliance assistance. In 2013, a Compliance and Enforcement Strategy was developed that outlines the enforcement process and describes a ranking system used to determine where OpCert will focus its efforts.

Additionally, the Drinking Water regulations (18 AAC 80) require that systems comply with the Operator Certification regulations (18 AAC 74). Therefore, DWP includes operator certification requirements as part of their enforcement actions, and both programs continue to work closely with non-compliant systems.

Efforts to Increase Compliance Rates

During the SFY23 reporting period, OpCert continued a quarterly schedule of analyzing the compliance status of systems. Compliance data was gathered, and systems were ranked using the method described in the Compliance and Enforcement Strategy. The ranking method considers factors such as system type, population served, source water, and system classification.

Water Treatment and Water Distribution Systems

All Water Treatment and Water Distribution systems, regardless of compliance status, were mailed letters, including a summary of the certification requirements, detailed system classification data, and operator information. OpCert received several responses from system owners with updated information and provided assistance regarding options for achieving compliance.

To enhance the tracking of compliance and enforcement, the water treatment and water distribution systems are divided up into geographical regions and assigned to one of the OpCert staff. This regionalized approach is also used by other ADEC programs, as well as technical assistance providers that support water systems, and allows "regional teams" to work together to address compliance issues. Additionally, enhancements are being added to the OpCert database to assist in the tracking of compliance and enforcement. These enhancements will be discussed later in the Special Projects section of this report.

Weekly staff meetings were conducted to keep abreast of the status of non-compliant systems.

Small Untreated and Small Treated Water Systems

All Small Untreated and Small Treated water systems, regardless of compliance status, were sent compliance notification letters. OpCert continued to track the compliance status of these systems and worked with operators to obtain certification.

As with the larger systems, the small water systems are divided up into geographic regions and assigned to one of the OpCert staff for more individualized attention. Additionally, OpCert conducted weekly staff meetings to keep abreast of the status of non-compliant systems.

Agency Coordination Meeting

OpCert participated in agency coordination meetings in six rural regions of the state. The meetings provided an opportunity to coordinate with agencies that work with rural Alaskan communities on issues related to sanitation. Other agencies participating in the meetings included regional tribal health corporation RMWs and sanitarians, the Rural Utility Business Advisor Program (RUBA), DWP, the ADEC Wastewater and Solid Waste Programs, and VSW and ANTHC engineers. During the meetings, OpCert described the compliance status of each rural community, received input from other agencies regarding community-specific issues, updated system classification and operator information, and discussed options available to communities for achieving compliance.

Compliance Rates

As reported in 2022, 81 percent of systems were in compliance by having a properly certified operator on staff. Currently, 82 percent of systems are in compliance.

OpCert conducted a review of systems that changed compliance status from SFY22 to the present. Those findings are shown in Appendix A. The review shows that the overall compliance rate was affected by several factors:

- Systems achieving compliance (20 systems)
- New systems becoming active and achieving compliance (6 systems)
- Inactive systems becoming active and achieving compliance (2 system)
- Nonpublic water system increasing in population to become NTNCWS and achieving compliance (1 system)
- Systems upgraded in classification and still working toward compliance (1 system)
- New systems becoming active and working toward compliance (6 systems)
- Operator turnover where properly certified operators left a system (8 systems)
- Operators failing to renew certifications (7 systems)

System Specific Training and Certification (S²TC)

Previous reports discussed efforts to develop 13 training modules and certification exams that will be used to train and certify operators of systems that are chronically out of compliance with the operator certification requirements. As reported in the SFY22 annual report, OpCert, in collaboration with the RMW Program, finalized five modules in preparation for S²TC Program beta testing; however, the modules are still under final review. Two communities, both of which have long-standing operators who have not passed certification exams despite repeated attempts, have been identified for beta testing during SFY24.

Operator Disciplinary Action

Per 18 AAC 74.830, OpCert, with the Board's recommendation, has the authority to impose disciplinary action for acts of misconduct by an operator. In SFY23, no water-related disciplinary actions on operators were taken.

Certificate Renewal (Baseline Standard 5)

Operators are required to obtain continuing education every three years to renew certifications. Operators holding water treatment or water distribution certification are required to obtain three Continuing Education Units (CEUs), while operators holding Small Treated or Small Untreated certification are required to obtain one and 0.5 CEU, respectively. An operator who has obtained the required CEUs has up to one year to pay the renewal fee. However, the price of renewal increases over time during that one year, and the certificate is not valid until the fee has been paid.

| Туре | Renewed | Lapsed Certificate with CEU Requirement Met but No Payment | Lapsed Certificate with CEU Requirement Not Met |
|-------|---------|---|--|
| SU | 36 | 0 | 8 |
| ST | 36 | 14 | 25 |
| WT P | 29 | 6 | 15 |
| WT 1 | 59 | 4 | 15 |
| WT 2 | 37 | 1 | 19 |
| WT 3 | 30 | 0 | 4 |
| WT 4 | 26 | 0 | 8 |
| WD P | 27 | 6 | 16 |
| WD 1 | 51 | 4 | 17 |
| WD 2 | 25 | 1 | 8 |
| WD 3 | 26 | 0 | 5 |
| WD 4 | 18 | 0 | 5 |
| Total | 400 | 36 | 145 _ |

Table 5: Renewal Status for Certificates that Expired on December 31, 2022

Continuing Education

Alaskan operators earned continuing education through the following means:

- Classroom courses taught by a variety of organizations
- Correspondence courses
- Utility-sponsored training
- Industry conferences
- Online training

During the SFY23 reporting period, OpCert recorded over 2,000 individual continuing education courses attended to operators' files. OpCert continued its support of training by approving 182 online and classroom courses. The Alaska Rural Water Association sponsored a statewide conference in October. The Alaska Water Wastewater Management Association sponsored regional and statewide conferences in October and May respectively.

California State University Small Water System Videos

During the SFY23 reporting period, OpCert administered 92 of the California State University (CSU) *Small Water System* and *Water Systems Operation and Maintenance* correspondence

type video series courses. The video courses are especially relevant to the operation and maintenance of small water systems and provide small system operators with the continuing education required to keep their certifications current.

ADEC Introduction to Small Water Systems Correspondence Course

The Introduction to Small Water Systems manual is administered as a correspondence course by OpCert. This course qualifies operators for provisional level water treatment and distribution certification after passing the respective certification exams. Nine operators completed this course during the SFY23 reporting period.

ADEC Small Untreated and Small Treated Water Systems Correspondence Courses

OpCert offers two correspondence courses targeting operators of small water systems. The Small Untreated Water System course qualifies operators for Small Untreated Water System certification after passing the certification exam. Five operators completed this course during the SFY23 reporting period. The Small Treated Water System course qualifies operators for Small Treated Water System certification after passing the certification exam. Twenty-two operators completed this course during the SFY23 reporting period.

Presentations at Conferences

Typically, OpCert attends and conducts presentations at several industry conferences per year. OpCert presented at the ARWA Annual Statewide Conference in Anchorage, at the AWWMA Southeast Alaska Conference in Ketchikan, and at the AWWMA Statewide Conference in Anchorage, Alaska on topics covering operator certification including the importance of certification, exam preparation, the exam/certification process, and online operator profiles.

The Technical Assistance (TA) Programs Manager attended the National Capacity Development and Operator Certification Workshop in August 2022. While at the workshop the TA Programs Manager presented and sat on a panel concerning Targeting Underserved and Disadvantaged System.

Resources Needed to Implement the Program (Baseline Standard 6)

OpCert is funded from two sources: Program Receipts generated from fees charged for exams, application reviews, certificate renewals, and reciprocity reviews; and the Drinking Water State Revolving Fund (DWSRF) Local Assistance and Other State Programs Set-Aside.

In SFY23, the Capacity Development and Operator Certification Program was split into the Capacity Development Program (CapDev) and the Operator Certification Program (OpCert).

OpCert staff currently consists of one Environmental Program Manager (EPM), three full-time professional-level Environmental Program Specialists (EPSs), one full-time paraprofessional-level Environmental Program Technician (EPT), and one part-time college intern. The EPT position was added in SFY23 and provides administrative support to the EPSs and the EPM as well as assisting with exam administration and compliance efforts.

OpCert staff provides all services related to operator certification including administration of exams, review of certification applications, classification of water systems, review of training courses for continuing education, and compliance and enforcement of water systems. OpCert has a customized database to track all data related to operator certification. This database is maintained via a five-year contract with Wostmann and Associates, Inc.

Under the current organization, and with the present level of funding, Alaska has sufficient resources to implement the OpCert Program for the foreseeable future. For several years, the DWSRF Small System Technical Assistance Set-Aside has not been used; those banked funds will be made available to OpCert should the need arise in future fiscal years.

Recertification (Baseline Standard 7)

Certificates are valid for a three-year period beginning on January 1 of the year of issuance. Once a certificate has expired, the operator is no longer certified. To regain certification, an operator must take and pass the exam and then apply for certification. Operators are allowed to take the exam at the level of the expired certificate for three years after expiration. After three years, operators must retake exams sequentially starting at level 1.

Stakeholder Involvement (Baseline Standard 8)

Stakeholder involvement is important to meeting the public health objectives of Alaska's Operator Certification Program. It helps ensure the relevancy and validity of the program and instills confidence in all interested parties. In recognition of this, Alaska employs various strategies to include ongoing stakeholder involvement, including an advisory board.

The Governor's Water and Wastewater Works Advisory Board

The Governor's Water and Wastewater Works Advisory Board (Board) is a group of eight water/wastewater professionals established to advise ADEC on matters of operator certification and training. The current Board is comprised of certified operators, public works personnel, trainers, and engineers. New members of the Board are appointed by the Governor. The Board generally meets every 9 to 18 months, as needed. The Board met on April 28, 2023; however, it met to consider disciplinary actions for a non-water related issue. An examinee who holds no active certifications was caught cheating on a wastewater treatment certification

exam at a university testing center. During this meeting, the Board developed a policy to address disciplinary actions for noncertified individuals.

Program Review (Baseline Standard 9)

The Facilities Program Manager and the Technical Assistance (TA) Programs Manager assist in conducting periodic peer review meetings of the Operator Certification Program's processes, procedures, and data management. OpCert's three EPSs are each assigned to work with water systems in a geographic region of Alaska, consistent with the regional assignments of RMWs and Local Government Specialists with the RUBA Program. This allows each EPS to develop a relationship with the system owners and operators in their regions, as well as the technical assistance providers that support them, thus enhancing communication. This approach has also improved program efficiency and effectiveness. Additionally, weekly system compliance meetings are conducted to keep the TA Program Manager and the Operator Certification Program Manager abreast of the compliance status of the systems in each EPS's region.

Special Projects during the SFY23 Reporting Period

In addition to the routine work of the Operator Certification Program, OpCert staff spent significant time and effort on special projects during SFY23.

- Water System Excellence Award
- Rural Sanitation Calendar
- Database Enhancements

Water System Excellence Award

The Water System Excellence Award (WSEA) is a joint venture between OpCert and DWP. The WSEA recognizes water systems that achieve outstanding performance in the operation of their systems. The WSEA has two tiers, Ursa Major and Ursa Minor. To earn the Ursa Major award, a water system must maintain four quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. To earn the Ursa Minor award, a water system must maintain four quarters of operator certification compliance with no more than one open, unresolved, or incurred drinking water violation compliance with no open, unresolved, or maintain three quarters of operator certification compliance with no open, or maintain three quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. For the 2022 award year, 272 water systems were awarded Ursa Major and 73 were awarded Ursa Minor. All awardees were mailed letters and certificates, and were recognized at the AWWMA Statewide Conference.

Rural Sanitation Calendar

Annually, OpCert creates and distributes a rural utility calendar that includes reminders for deadlines associated with utility management and water monitoring requirements. This calendar also includes contact information for all the state programs that assist utilities in the management of their water systems. In SFY23 OpCert mailed out over 500 calendars to rural communities. Starting in SFY24, CapDev will take over the task of creating and distributing the calendar.

Database Enhancements

OpCert has an annual maintenance contract with Wostmann & Associates Inc. for the OpCert database. This contract allows for enhancements and bug fixes. During SFY23, several minor bugs were corrected, two new reports are under development to assist with tracking system compliance and with Operations and Maintenance Best Practices scoring, and the ability for operators to print "unofficial" copies of their certifications through their online operator profile was completed.

During the last months of SFY23, the State of Alaska Office of Information Technology (OIT) migrated the OpCert database server to a cloud-based system in the State of Washington. Unfortunately, this migration caused data retrieval delays with the database. As a result, the contractor suggested that we convert the current database to a web-based application. In preparation for soliciting a request for proposal (RFP) for this database conversion in SFY24, the contractor mapped out all the data entry screens to assist in estimating the cost for the conversion.

Implementation Schedule Update

Program implementation will proceed as follows over the next year:

- Maintain the current level of exam availability by offering exams on-demand in rural communities, during the biannual exam cycles, in conjunction with courses, and in an online format.
- Continue efforts to develop the training and exam materials required for the System Specific Training and Certification Program and move forward with program implementation.
- Continue with implementation of the Compliance and Enforcement Strategy through a quarterly analysis of compliance data and targeted communication to systems, taking advantage of OpCert's approach to offering exams on-demand in rural communities.

Certification Challenges in Rural Alaska

Rural Alaskan water operators face many challenges and obstacles in obtaining certification not often seen in the contiguous United States. Due to Alaska's vast distances and severe weather changes, operators frequently experience difficulty in traveling to "hub communities" to obtain relevant training to prepare for certification exams. Additionally, many rural communities may not have the funding to send their operators to trainings. In those cases, online training may be an option; however, many rural communities lack adequate internet access; therefore, many rural operators are unable to attend and/or complete online trainings.

Language and education barriers are also significant challenges to rural operators passing certification exams and obtaining certification. Some rural operators speak primarily Alaskan Native languages and have English as a second language. Many rural operators also have relatively limited formal schooling, with some not having completed high school or equivalent.

Frequent operator turnover is also a significant challenge for rural Alaskan water systems. Some factors that lead to higher turnover in rural communities include low wages, difficult working conditions, and the need for some operators to spend considerable time in subsistence activities, such as hunting and fishing. Due to these factors and others, many rural communities struggle to employ properly trained and certified operators on a long-term basis.

Appendix A: Changes in Compliance

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Water Treatment Systems

| System | Class | July 2022 | July 2023 | Comments |
|------------------------|--------|-------------------|-------------------|---|
| Chenega Ira Village | WT 2 | Out of Compliance | In Compliance | |
| lgiugig | WT 1 | Out of Compliance | In Compliance | |
| Kaltag | WT 1 | Out of Compliance | In Compliance | |
| Marshall | WT 1 | Out of Compliance | In Compliance | |
| Stebbins | WT 1 | Out of Compliance | In Compliance | |
| Tuluksak | WT 1 | Out of Compliance | In Compliance | |
| Tuntutuliak | WT 1 | Out of Compliance | In Compliance | |
| LKSD Joann A. Alexie | W/Т 2 | No System | In Compliance | New System |
| Memorial K-12 School | VV 1 2 | NO System | | New System |
| Chignik Lagoon | WT 1 | In Compliance | Out of Compliance | System was reclassified from ST to WT 1 |
| Galena | WT 2 | In Compliance | Out of Compliance | Operator turnover |
| Galena WTP-2 | WT 2 | In Compliance | Out of Compliance | Operator turnover |
| Hughes | WT 1 | In Compliance | Out of Compliance | Operator turnover |
| Larsen Bay | WT 1 | In Compliance | Out of Compliance | Operator's certificate expired |
| Old Harbor | WT 2 | In Compliance | Out of Compliance | Operator's certificate expired |
| Shungnak | WT 1 | In Compliance | Out of Compliance | Operator turnover |
| Willow Tree Apartments | WT 1 | In Compliance | Out of Compliance | Operator turnover |

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Small Untreated and Treated Water Systems

| System | Class | July 2022 | July 2023 | Comments |
|---|-------|-------------------|---------------|---|
| Adak | ST | Out of Compliance | In Compliance | |
| AK Addiction Rehabilitation Services Inc. | SU | Out of Compliance | In Compliance | |
| Cohoe S/D | SU | Out of Compliance | In Compliance | |
| Echo Ranch Bible Camp - Juneau | ST | Out of Compliance | In Compliance | |
| Hilcorp Rig Tenders Well #3 | ST | Out of Compliance | In Compliance | |
| Interact Ministries | SU | Out of Compliance | In Compliance | |
| Kingsberry Homeowners Association | SU | Out of Compliance | In Compliance | |
| Nondalton | ST | Out of Compliance | In Compliance | |
| Pitka's Point | ST | Out of Compliance | In Compliance | |
| Saint George | SU | Out of Compliance | In Compliance | |
| Salcha Community Watering Point | SU | Out of Compliance | In Compliance | |
| Sterling Moose River Manor | SU | Out of Compliance | In Compliance | |
| Stevens Village | ST | Out of Compliance | In Compliance | |
| Sunshine Community Health Clinic | ST | Out of Compliance | In Compliance | |
| Alpine View Subdivision | SU | No System | In Compliance | New System |
| Badger Plaza | SU | No System | In Compliance | New System |
| Berry Bluff | SU | No System | In Compliance | New System |
| Knik-Fairview CCS Early Learning Center | SU | No System | In Compliance | New System |
| Liberty Tax Building | SU | No System | In Compliance | New System |
| Manh Choh Personnel Camp-Tok | SU | No System | In Compliance | New System |
| MSRSD Houston High School | ст | No System | In Complianco | School reopened after damage was repaired |
| Wisesb Houston High School | 51 | NO System | In compliance | from 2018 earthquake |
| NOAA/NESDIS CDA Station | SU | No System | In Compliance | System reclassified from NP to NTNC |
| Pump House Restaurant | SU | No System | In Compliance | New System |
| SA Exploration Sleigh Camp #2 | ST | No System | In Compliance | System reactivated |
| Set Free Alaska Snodgrass | SU | No System | In Compliance | New System |

| System | Class | July 2022 | July 2023 | Comments |
|--------------------------------|-------|---------------|-------------------|--------------------------------|
| ASD Huffman Elementary School | SU | In Compliance | Out of Compliance | Operator's certificate expired |
| ASD O'Malley Elementary School | SU | In Compliance | Out of Compliance | Operator's certificate expired |
| ASD Ravenwood School | SU | In Compliance | Out of Compliance | Operator's certificate expired |
| Brevig Mission | ST | In Compliance | Out of Compliance | Operator turnover |
| DGSD - Delta Elementary School | SU | In Compliance | Out of Compliance | Operator's certificate expired |
| DGSD - Delta School | SU | In Compliance | Out of Compliance | Operator's certificate expired |
| Mertarvik | ST | In Compliance | Out of Compliance | Operator turnover |
| Nightmute | SU | In Compliance | Out of Compliance | Operator turnover |
| Alpine View Subdivision | SU | No System | Out of Compliance | New System |
| Berry Bluff Community | SU | No System | Out of Compliance | New System |
| Kivalina K-12 School | ST | No System | Out of Compliance | New System |
| Liberty Tax Building | SU | No System | Out of Compliance | New System |
| Lupine MOB LLC | SU | No System | Out of Compliance | New System |
| Valley View Tower | SU | No System | Out of Compliance | New System |