

EPA Regional Operator Certification Coordinator's Handbook

Information for EPA Regional Evaluation of State Public Water
System Operator Certification Programs



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Top Seven Regional Operator Certification Coordinator Tasks

1. Review states' annual reports (Section 2.1 and Appendix B.1.1).
Maintaining effective oversight of state programs is a key goal of the EPA Regional Operator Certification coordinator in the Operator Certification program. Regional coordinators receive annual reports from states and complete Annual Regional Operator Certification Program Evaluation Forms by September 30th.
2. Collect information on the Operator Certification program in the state (Section 2.1.1).
Regional coordinators work closely with the state Operator Certification coordinators to gather information on each state program to have a complete understanding of the program's shortcomings and strengths. This can be in the form of the state operator certification annual report, meetings, phone discussions, and other correspondence.
3. Encourage states to conduct program reviews (Section 3.1).
Regional coordinators support state Operator Certification programs in their efforts to improve their programs. The Regional coordinators encourage states to conduct internal and external reviews to evaluate their program and identify areas for improvement.
4. Encourage states to focus on workforce development (Section 3.2).
Regional coordinators encourage states to work with utilities, educational institutions, and other organizations to build workforce development programs to strengthen their operator workforce, keep well-qualified operators and train Board members.
5. Coordinate with the Regional Capacity Development and Drinking Water State Revolving Fund (DWSRF) teams (Section 3.3).
The Regional coordinator works with the Capacity Development and DWSRF coordinators to foster program collaboration and to provide documentation to assess the state Operator Certification program and determine whether a 20 percent withholding is needed.
6. Be a resource to state coordinators (Section 4).
Regional coordinators provide support to the state programs within their EPA Region, which includes providing EPA resources, tools and trainings and providing opportunities for states to collaborate and share best practices, questions, and lessons learned.
7. Evaluate state Operator Certification programs to ensure they meet the nine baseline standards (Appendix A and C.1.2).
Regional coordinators assess each state Operator Certification program to ensure it is complying with the nine baseline standards outlined in the Federal Register (64 FR 5916-5921, February 5, 1999, Vol. 64, No. 24). Click on "Appendix A: Desk Guide" to review the Desk Guide for Reviewing State Operator Certification Program Annual Reports.

**Appendix A: Desk
Guide**



Keep an eye out for this icon throughout the document. Whenever this appears it indicates that section is in support of one of the Top Seven Regional Operator Certification Coordinator Tasks.

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Purpose of the Handbook

The EPA Regional Operator Certification Handbook is intended to provide comprehensive guidance for those filling the role of EPA Regional Operator Certification coordinator. As the EPA Regional Operator Certification coordinator, it is important to understand the state's Operator Certification requirements to best aid the state Operator Certification programs. The handbook will provide resources, explanations, and history of basic tasks to help new EPA Regional Operator Certification coordinators understand their role and responsibilities including:

- overseeing state Operator Certification programs,
- ensuring that state Operator Certification programs meet the federally defined nine baseline standards, and
- reviewing Operator Certification program reports annually to ensure they meet the Safe Drinking Water Act (SDWA) initiatives.

The handbook will also include resources to help Regional coordinators provide support to state Operator Certification programs, to help them improve their programs, develop a robust water operator workforce, and support small systems.

1. Why is Operator Certification Important?

Operator certification is important because it protects public health. It involves the establishment of minimum professional standards for the maintenance of safe, optimal, and reliable operations of water treatment and distribution facilities. While the specific requirements vary from state to state, the goal of all Operator Certification programs is to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water. Operator certification is an important step in promoting compliance with the SDWA.

Click on "Safe Drinking Water Act" to review that section of the document and learn more about the operator certification provisions and history of SDWA.

Safe Drinking
Water Act

At the state level, Operator Certification programs help states to improve drinking water quality by ensuring that systems have certified, qualified, and capable operators. The state programs establish classification for water systems and water operators, administer examinations to certify operators, provide training to operators, and track system compliance.

At the system level, Operator Certification programs allow systems to have confidence in the ability of their operators. Operator Certification programs require that systems have access to a certified operator of the correct level for that system.

For operators, Operator Certification programs provide continuing education opportunities to increase their knowledge and stay up to date with the latest rules, regulations, and techniques. They also enable them to increase their qualifications through offering examinations to reach higher certification levels and emphasize the importance of their role in protecting public health.

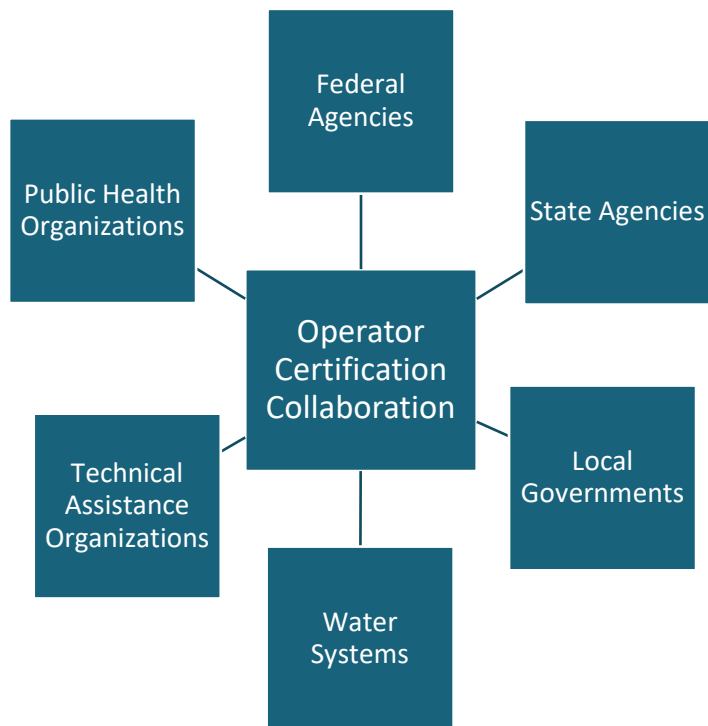
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Program Collaboration



Click on the boxes in the Operator Certification Collaboration diagram to see examples of these programs.

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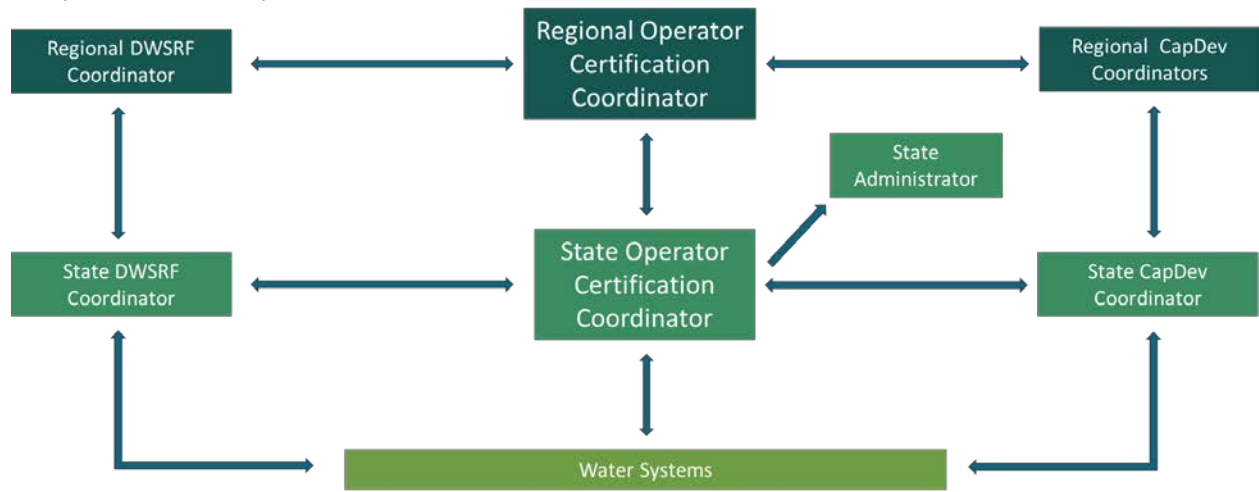
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Operator Certification programs seek input from a variety of stakeholders and programs. Key roles and responsibilities of some federal and state agency staff are reviewed in further detail below.

Key Roles & Responsibilities



Please note that while a useful visual, this graphic does not represent all drinking water program roles that make for successful program collaboration. For more information about roles and how to interact, see the [Tabletop Exercise](#).

Annual Cycle of Tasks and Actions for Regional Coordinators

EPA Regional Operator Certification coordinators have certain tasks and actions they must complete each year. The template timeline below can be used by Regional coordinators to set due dates to complete each task. The only universal date is September 30th, the date by which Regional coordinators need to document the withholding decision.

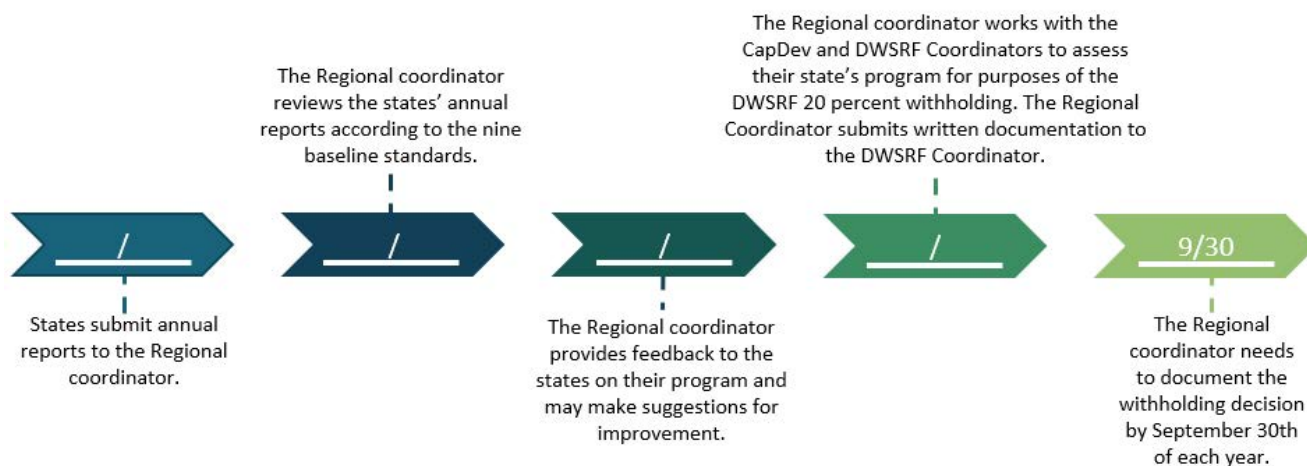


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2. Operator Certification Reporting

To maintain effective oversight of state Operator Certification programs, which is a major goal of the EPA's National Operator Certification program, the Regional coordinators assess state Operator Certification programs. Each year, state Operator Certification coordinators must provide reports to their EPA Regional Operator Certification coordinators. These reporting requirements help the EPA Region to ensure that the state is taking steps to demonstrate that all systems are maintaining compliance with Operator Certification requirements.

Click “Key Roles & Responsibilities” to review that section of the document and learn more about specific roles.

Key Roles & Responsibilities

2.1 Annual State Report

States must send an annual implementation report to the EPA that documents that their Operator Certification programs meet the nine baseline standards. The EPA Regional Operator Certification coordinators review the annual reports and complete Annual Regional Operator Certification Program Evaluation Forms that include state-by-state information.

Click “Nine Baseline Standards” to review that section of the document and learn specifics about the federally defined standards that all state Operator Certification programs must meet.

Nine Baseline Standards

Click “Appendix A: Desk Guide” to review that section of the document and learn more about reviewing annual reports.

Appendix A: Desk Guide

2.1.1 Objectives

The EPA Regional Operator Certification coordinator must review and approve each state Operator Certification program to ensure it is meeting the nine baseline standards. This process provides an opportunity for the EPA Regions to work with the states on identifying ways to continue to support and enhance the state programs, as well as an opportunity for the states to highlight program successes and the importance of Operator Certification programs in each state.

2.1.2 Timeframe

Each state should submit annual reports with enough time for the EPA Region to review prior to the September 30th deadline. The process of development and review of the annual report and any subsequent discussions related to the report or additional information needed for the annual review are critical to the oversight and implementation of Operator Certification programs. Therefore, time should be allotted to engage in this process prior to September 30th each year.

2.1.3 Process and Checklist

Once the EPA receives the report, it is reviewed using the methodology laid out in the [EPA's July 31, 2018 memo and Desk Guide for Reviewing State Operator Certification Annual Reports](#). Reviewers evaluate the report using a checklist as a guide to ensure protection of public health, antibacksliding, and that the nine baseline standards are addressed appropriately. Comments are shared with Regional management and a preliminary determination is made deeming the report as acceptable, acceptable with deficiencies, or not acceptable.

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3. Improving Operator Certification Programs

A continuous process in the Operator Certification program is to observe the effectiveness of program efforts and make improvements. EPA Regional Operator Certification coordinators can encourage states to be in a continuous cycle of development, implementation, observation, and revision of their program. A critical aspect of this continual improvement process is coordination with the state Drinking Water program, including the Capacity Development, enforcement, and DWSRF programs.



3.1 Program Reviews

States will periodically conduct a review of their own certification programs through both internal and external reviews. The results of these reviews will be included in their Annual Operator Certification Program Implementation Reports. EPA Regional Operator Certification coordinators should be familiar with the requirements and goals of internal and external reviews in order to provide valuable feedback. If states are not conducting internal or external reviews, EPA Regional Operator Certification coordinators can recommend this as a way to improve their Operator Certification program.

3.1.1 Internal Review

Internal reviews are program reviews performed within the implementing agency. EPA Regional Operator Certification coordinators may want to recommend that internal reviews be performed more frequently than external reviews. The EPA recommends they occur every three years. Internal reviews expend less resources for a state as they can be formal or informal but provide valuable information for evaluating their program. Internal reviews consider a number of different elements including, but not limited to:

- Staffing
- Budget
- Exam Reviews
- Compliance Rate Determination
- Regulation Review
- Enforcement
- Status of Certified Operators/Trends
- Training/Testing
- Renewals
- Database Management
- Outreach
- Stakeholder Involvement

Reviewing these factors provides important information for state Operator Certification programs to identify areas that need improvement.

3.1.2 External Review

External reviews are program reviews performed by an entity outside the state Operator Certification program primacy agency. The EPA recommends that these reviews happen every five years. External reviews provide the state with a report describing the results and listing recommendations for

improving their program. These reviews require more resources from the state but are essential to improving Operator Certification programs. Funding for an external review can come from several sources, including but not limited to: fees generated from certification and examination, state legislature appropriations, Public Water Supply Supervision (PWSS) support, and DWSRF Programmatic set-asides. States will need to plan ahead for the funding to conduct external reviews using existing funding sources. It is recommended that the EPA Regional Operator Certification coordinators impress upon states the importance of external program reviews. External reviews evaluate similar factors to internal reviews with some additional considerations:

- Staffing
- Budget
- Exam Reviews
- Compliance Rate Determination
- Regulation Review
- Enforcement
- Status of Certified Operators/Trends
- Training/Testing
- Renewals
- Database Management
- Outreach
- Stakeholder Involvement
- State Regulation Changes
- Strategic Planning
- Primacy Agency Delegation/Changes

External reviews examine more factors than internal reviews, providing valuable insight from an outside source that can identify further opportunities for improvement.



3.2 Workforce Development

3.2.1 Future of Water Workforce and Need for Newly Certified Operators

As in many sectors, the water industry is predicting large scale retirements in the near future. This will create challenges for the utility workforce requiring increased recruitment and succession planning. Water treatment plant operators are vital to protecting public health, so it is crucial to prevent a potential shortage of certified operators. The EPA, other federal agencies, states, and industry organizations are working to promote professional development in the water sector. If states are concerned about future availability of operators, EPA Regional Operator Certification coordinators should be aware of these efforts to provide assistance to their states.

State Framework for Workforce Development

Every state has their own unique situation when it comes to the future of their workforce. Regional coordinators can suggest that states take an active role in mapping out a framework to address their specific workforce needs. This will empower states to be proactive, instead of reactive, in dealing with workforce issues.

3.2.2 Recruitment and Training

Water Workforce Training Programs

There are several innovative recruitment and training programs that expose people to careers in the water sector and promote the water industry. It is recommended that the EPA Regional Operator Certification coordinators encourage states to work with utilities, educational institutions, and other organizations to build these types of programs to strengthen their operator workforce.

Internships

EPA Regional Operator Certification coordinators may advise their states to promote internship programs if they express that young people in their state do not seem to be entering the operator workforce. Internship programs offer a glimpse into what a career as a water operator would look like. Internship opportunities can be made available to students as early as high school. Focusing recruitment efforts on students who attend technical or vocational schools can also identify interested candidates. Through internship programs, young adults become aware of a previously unknown opportunity and utilities create a pool of eligible candidates to hire when positions become available.

Apprenticeships

Apprenticeships also serve as beneficial training programs for participants, utilities, and states. If a state reports having difficulty finding certified operators, EPA Regional Operator Certification coordinators may suggest the state implements apprenticeship programs. Apprenticeships are longer-term programs than internships, ranging from one year to a few years in length. They offer on-the-job training and classroom instruction. Participating in apprenticeship programs gives operators the experience and education they need to become certified and attain higher levels of certification. Apprenticeship programs can be set up at the utility level or the state level. Utility level apprenticeship programs serve a utility's specific needs while statewide programs standardize training across the industry.

Mentoring

As an industry that predicts large scale retirements, there is a risk that institutional knowledge may be lost as experienced, certified operators leave the profession. EPA Regional Operator Certification coordinators may recommend mentoring programs to facilitate the transfer of knowledge. Mentoring programs match more experienced operators with new operators based on their skills, areas of expertise, and preferences. Mentors pass on knowledge, proven best practices, and lessons learned from their years of experience and provide support to mentees. Mentoring programs develop a network of colleagues with established, supportive relationships, build common values, and promote lifelong learning. They also develop leadership potential among newer operators, so they can transition into management and supervisory roles. This strengthens the Operator Certification program overall.

Degree or Certificate Programs

Degree and Certificate programs offer another pathway for people interested in becoming a certified operator. Technical high schools, community colleges, colleges, universities, and other organizations offer certificates and degrees such as water treatment, water technology, and water treatment operations, which prepare students to become certified operators. These programs make the pathway to becoming a certified water operator more accessible and increase visibility for the profession. EPA Regional Operator Certification coordinators may advocate for these programs in their EPA Region to increase the pool of qualified and certified operators.

Veterans as Water System Operators

Veterans represent a major recruiting opportunity for water utilities. Prior military experience gives veterans an understanding of teamwork, discipline, and personal accountability that can make them excellent employees for this field. In addition, while serving in the Armed Forces, veterans may have held Military Occupation Specialties (MOS) that directly or indirectly translate into the type of positions needed in the water sector. In 2012, the EPA and the Department of Veterans Affairs (VA) partnered to connect veterans with careers in the water sector. When states express uncertainty about operator workforce, EPA Regional Operator Certification coordinators can recommend making use of this partnership by encouraging states and utilities to find veterans that may have compatible skills. State Operator Certification coordinators can consult [From M.O.S. to J-O-B: A Guide for Applying Military Occupational Specialties \(M.O.S.\) to Civilian Drinking Water and Wastewater Operations](#) to learn more about how veterans can be well equipped to serve in the water industry and how their prior experience can translate in their home state. In addition, the VA offers a number of programs to support both veterans and employers to facilitate veterans' entry into the water sector. EPA Regional Operator Certification coordinators can refer states to resources available through the VA.

Engaging Decision Makers

Board Member Training

EPA Regional Operator Certification coordinators can promote workforce planning by encouraging states to engage decision makers. It is crucial for board members to have a deep understanding of the water systems that they serve so they can make informed decisions. EPA Regional Operator Certification coordinators can advocate for board member trainings. Board member trainings should include sessions on workforce planning, as well as a variety of other issues related to operator certification. If decision makers understand the necessity of workforce development, more utilities may establish internships, apprenticeships, mentoring programs, or other training programs.

Regional Workforce Efforts

BAYWORK is a California-based regional consortium with a common goal of operational reliability of Bay Area water and wastewater utilities supported by a high-performance workforce. Founded in 2009, BAYWORK is open to all Bay Area water and wastewater utilities and currently has 34 members. Members collectively agree to develop qualified candidates for mission critical jobs, provide staff with the information they need to do quality work, modify work process to optimize use of available staff and maximize cost-effectiveness of workforce reliability investments through collaboration. Learn more and review their charter at <http://baywork.org/>.

3.2.3 Retaining Certified Operators

Retaining certified operators is as crucial to the success of a water system as recruiting new operators. If systems can increase financial capacity through Capacity

Development programs, systems may be more able to offer a competitive salary and benefits package. Certified operators are also more likely to remain in their role if they feel recognized, respected, and in control. Creating a culture where operators feel valued can be achieved through regional operator collaboratives, mentorship programs, or through promoting the importance of the profession to the public. State Operator Certification coordinators can work with their state's Capacity Development coordinator to promote these types of activities at water systems. Establishing a feeling of ownership

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over the system for operators and engaging them in decision making can also empower and motivate operators, encouraging operators to remain in their position.



3.3 Encouraging State Program Collaboration

State Drinking Water programs manage and oversee a variety of programs and activities that support PWSs, including: Operator Certification, Capacity Development, enforcement, and the DWSRF. Collaboration among these programs will help to ensure the greatest public health protection for the American public.

State Capacity Development and Operator Certification programs both aim to ensure the provision of safe drinking water. Drinking water system performance depends on many factors, including adequate infrastructure to effectively and efficiently manage and maintain operations. Communication and cooperation between the Capacity Development and Operator Certification programs can help determine gaps in operator skills and knowledge, promote appropriate training, assist PWSs with obtaining a qualified, certified operator, and improve system performance to protect public health. The EPA's [Capacity Development and Operator Certification Collaboration Factsheet](#) outlines examples of how the programs operate together.

Collaboration between programs allows team members to share their department's expertise and perspectives to develop new potential solutions for small system concerns. Furthermore, discussions among the different individuals and departments responsible for assisting struggling or non-compliant PWSs can help everyone develop a more comprehensive understanding of these PWSs' unique situations.

The EPA'S Table Top Exercise

The [EPA Table Top Exercise: Collaborating across State Drinking Water Programs to Support Sustainable Systems](#) (all materials for the exercise are included in the .zip file) is an exercise to enhance understanding of state Drinking Water program roles and to emphasize the importance of collaboration between programs. In this exercise, participants (state staff who oversee or assist PWSs, either directly or indirectly) are asked to take on one of the roles in a state program, and then to collaborate as a group to evaluate the needs of example water systems and to prioritize state assistance. Further details on background and instructions are provided in the "Facilitator Packet" document.

Colorado: Targeting Operator Training to Boost PWS Performance

In the past, many of Colorado's small drinking water systems did not have properly trained or certified operators. The state determined that there had been a lack of coordinated, targeted, high quality training for operators and other personnel. Colorado employed a systematic planning process for evaluating and responding to training needs for PWS personnel. The process included evaluating system failures and root causes, preparing a Baseline Assessment Report, conducting a 1-day PWS training roundtable and developing a 5-year strategic plan. Colorado also provides technical assistance to PWSs through a highly-trained "Coaching" unit. Furthermore, the Capacity Development and Operator Certification programs meet monthly as part of the "Drinking Water Advisory Team." From 2005 to 2012, CWSs and NTNCWSs with certified operators in charge increased from 89 percent to 98 percent. There has been a measurable improvement in compliance in the areas of disinfection operations and management, and in the overall development of water quality monitoring plans.

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4. Key Resources

EPA Regional Operator Certification coordinators can provide the following resources from the EPA and other organizations to state coordinators. These resources can be used by state or water system personnel to increase understanding about Operator Certification, to build an Operator Certification program, and to help improve communication and collaboration.

4.1 List of Links to Historic Program Documents and Tools

Statutes Operator Certification

[1996 SDWA Amendments](#)

[Final Guidelines for the Certification and Recertification of the Operators of Community and Non-transient Non-community Public Water Systems; Notice](#)

[Final Additions to the Final Guidelines for the Certification and Recertification of the Operators of Community and Non-transient Non-community Public Water systems; Final Allocation Methodology for Funding to States for the Operator Certification Expense Reimbursement Grants Program](#)

Websites Operator Certification

The EPA's website on [Operator Certification](#)

[Capacity Development and Operator Certification Collaboration Factsheet](#)

[Tabletop Exercise](#)

The EPA's website on [Information for States about Building the Capacity of Drinking Water Systems](#)

Workforce Development

The EPA's website on [Workforce Development](#)

[Resources for Small Systems Operators](#)

[Water Workforce Veteran Promotion](#)

[From M.O.S. to J-O-B: A Guide for Applying Military Occupational Specialties \(M.O.S.\) to Civilian Drinking Water and Wastewater Operations](#)

[Water Workforce Training Programs](#)

[Supporting Water Operator Apprenticeship Programs](#)

["Water You Waiting For?" Videos](#)

[A Selection of Training Programs for Water and Wastewater Operators](#)

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Tribal Operator Certification Programs

The EPA's website on [Tribal Drinking Water Operator Certification Program](#)
[Federal Register Notice: Tribal Drinking Water Operator Certification Program 2010](#)
[Tribal Drinking Water Operator Certification Program Final Guidelines](#)
[Tribal Drinking Water Operator Certification Program document](#)
[Drinking Water Infrastructure Grants Tribal Set-Aside Program Revised Guidelines](#)
[Find an EPA Regional Tribal Drinking Water Coordinator Contact](#)

Drinking Water State Revolving Fund

[DWSRF Eligibility Handbook](#)
[Drinking Water State Revolving Fund: Program Operations Manual - Provisional Edition](#)
[Analysis of the Use of Drinking Water State Revolving Fund Set-asides: Building the Capacity of Drinking Water Systems](#)
[Analysis of the Use of Drinking Water State Revolving Fund Set-Asides: Promoting System Sustainability](#)
[Analysis on the Use of Drinking Water State Revolving Fund Set-Asides: Promoting Capacity Development](#)

Additional Resources

[Find an EPA Drinking Water Operator Certification Contact](#)
[Operator Certification 101 Training Modules](#)

4.2 Using the SharePoint Site

The EPA maintains a SharePoint site where Operator Certification coordinators can contribute and download materials to support Operator Certification programs.

To download pertinent files: navigate to the site, select the file you are interested in, and "Download a Copy." If the EPA Regional Operator Certification coordinators are adding content to the site, ensure that they have permissions to add to the site. With the appropriate permissions, the EPA Regional Operator Certification coordinators should be able to drag and drop files directly from their local drive.

The EPA SharePoint Site Link

<https://usepa.sharepoint.com/sites/OW/DWPB/SST/capacitydevelopment/SitePages/Home.aspx>

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Appendix A: Desk Guide for Reviewing State Operator Certification Program Annual Reports

The EPA's Memorandum: [Review of State Drinking Water Operator Certification Program Annual Submittals](#)

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BACKGROUND

The 1996 amendments to the Safe Drinking Water Act (SDWA) required the establishment of the Operator Certification (OpCert) Final Guidelines to establish minimum requirements for state OpCert programs to avoid mandatory withholding of 20 percent of the Drinking Water State Revolving Funds (DWSRF) capitalization grant.

On February 5, 1999, the Final Guidelines for the Certification and Recertification of the Operators of Community and Nontransient Noncommunity Public Water Systems (“Final Guidelines”) were published in the *Federal Register* ([64 FR 5916](#)).

The resulting Nine Baseline Standards established the minimum required elements that state OpCert programs must adhere to, in order to avoid the 20 percent mandatory DWSRF withholding. As referenced in the Final Guidelines, state OpCert programs are approved by EPA for the initial submittal of the program, as well as being approved for each of the subsequent years submittals (i.e., “annual reports”). The Final Guidelines also established the reporting requirements for both the initial submittal and subsequent years submittals for approval or a withholding determination.

As stated in the Final Guidelines, states must submit annual reports that include documentation and evaluation detailing the ongoing implementation of their programs. States must also submit a new State Attorney General’s certification from the Attorney General or delegated counsel, if there were any changes to the statutes or regulations during the year. The state must also submit a copy of any revised regulations or statutes.

Each state annual report must include sufficient information to determine whether the state OpCert program meets the requirements in the Final Guidelines and thus whether or not the agency must withhold 20 percent of the capitalization grant, as required in SDWA 1419(b). Documentation and evaluation of the program must include evaluation of each of the Nine Baseline Standards, as well as each of the elements included in all baseline standards, the anti-backsliding provision in the Final Guidelines, as well as the public health objectives of the program.

PURPOSE

The purpose of this document and its accompanying attachments is to provide Regional OpCert program personnel with the tools to consistently review state OpCert annual reports, as well as provide accurate recommendations for DWSRF withholding decisions.

Objectives:

The objectives of this desk guide are to:

- 1) Provide a tool for consistent Regional review of state OpCert programs;
- 2) Describe a process for communicating any identified issues with management and the state; and
- 3) Provide a timeline for review and program DWSRF withholding determination completion.

Timeframe and overall determinations of annual report review:

There is an expectation that EPA receives the annual report with sufficient time for review prior the deadline of September 30th. States should submit annual reports in the timeframe set by the Region. At

the completion of the annual report review process, the mandatory DWSRF withholding decision will be determined with one of the following classifications: acceptable, acceptable with deficiencies or not acceptable.

Acceptable	The annual report documents and evaluates ongoing implementation of the state’s OpCert program. Mandatory DWSRF withholding is recommended to be waived.
Acceptable with deficiencies	The annual report documents and evaluates ongoing implementation of the state’s OpCert program but has deficiencies that must be corrected. Grant condition is recommended.
Not acceptable	The annual report does not document and evaluate ongoing implementation of the state’s OpCert program. A DWSRF grant withholding is recommended.

Operator Certification Program Annual Reports Review Process:

- State submits annual OpCert report (Regional review process starts)
- Regional OpCert Coordinator shares annual report with additional Regional personnel as appropriate, per Regional review process (e.g. state program managers, capacity development coordinators, etc.) See **Attachment 2** for sample distribution email.
- OpCert and other appropriate Regional personnel review and share comments about report, ensuring all elements discussed in the checklist (**Attachment 1**) are addressed. The Regional OpCert Coordinator compiles and shares the combined comments with the other reviewers. See **Attachment 3** for sample email on combined comments.
- OpCert and other appropriate Regional personnel make a preliminary determination, according to Regional processes. Comments and preliminary determination are shared with management and finalized by Regional OpCert Coordinator. The finalized document is then shared with the state OpCert representative as appropriate per Regional process. See **Attachment 4** and **Attachment 5** for example emails based on the preliminary determination.
- Regional and state representatives correspond as necessary (e.g., conference call, email, etc.) to discuss comments and to share grant recommendation determination.
- Regional OpCert Coordinator develops a recommended determination decision memo and shares it with other appropriate Regional personnel for review. See **Attachment 6** for a sample memo.
- Determination Decision Memo is signed by Regional Administrator (or delegated Division Director), finalized, and distributed as per the Regional process. Copies are shared with state OpCert representative and other appropriate Regional personnel (e.g., DWSRF).

Attachment 1
Annual Report Review Checklist

Attachment 1

Operator Certification Guidelines (Public Health Objective + Antibacksliding + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation and evaluation of ongoing program implementation</u>	Notes
<p>The public health objectives of the guidelines are to ensure that: Customers of any public water system be provided with an adequate supply of safe, potable drinking water.</p> <p>Consumers are confident that their water is safe to drink.</p> <p>Public water system operators are trained and certified and that they have knowledge and understanding of the public health reasons for drinking water standards</p>	<ul style="list-style-type: none"> The state provides an affirmative statement that the state ensures the public health objectives are met by the OpCert program. 	
<p>Antibacksliding</p>	<ul style="list-style-type: none"> A statement to show that a state’s OpCert program remains the same and that no backsliding has occurred since the last year, OR A discussion of any policy changes AND a discussion to show policy, regulatory, or statutory changes do not alter the state OpCert program which a state had in place 12 months prior to the effective date of Final Guidelines unless the reduction can be justified by the state and is approved by EPA. 	
<p>9 Baseline Standards</p>		
<p><u>1. Authorization</u> As evidenced by an Attorney General’s certification, or certification from delegated counsel, the state must have the legal authority to implement the program requiring the certification of operators of all community and nontransient noncommunity water systems and to require that the systems comply with the appropriate requirements of the program.</p>	<p>In annual reports, a state must submit the following if changes were made to regulation or statute:</p> <ul style="list-style-type: none"> Attorney General’s Certification OR Certification from delegated counsel (must include a copy of the delegation), AND Amend the initial or latest amended full program description and additional explanation (include discussion of meeting the antibacksliding provision, see above), AND Copy of new regulations or statutes 	
<p><u>2. Classification of Systems, Facilities, and Operators</u> a) It must classify all community and nontransient noncommunity water systems based on indicators of potential health risk, which for example may include: (a) complexity, size, source water for treatment facilities, and (b) complexity, size for distribution systems. It must develop specific operator certification and renewal requirements for each level of classification.</p>	<ul style="list-style-type: none"> A statement describing how the state classifies its systems and operators. Matrix showing total number of CWS and NTNCWS in each classification, or multiple classifications (<i>TNCWS would be included if the state required TNCWSs to have a certified operator 12 months before the effective date of the guidelines. Also, TNCWSs treating surface water and/or using chlorine dioxide should be included</i>). Matrix showing total number of certified operators in each classification, or multiple classifications (Recommended: discuss activities related to workforce / recruiting, such as number of trainee (OIT) designations for operators working under an operator in responsible charge (OIRC)) Names of systems where classifications were changed (and reasons) within reporting period (Recommended, but not required). 	

Attachment 1

Operator Certification Guidelines (Public Health Objective + Antibacksliding + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation and evaluation of ongoing program implementation</u>	Notes
<p>b) It must require owners of all community and nontransient noncommunity water systems to place the direct supervision of their water system, including each treatment facility and/or distribution system, under the responsible charge of an operator(s) holding a valid certification equal to or greater than the classification of the treatment facility and/or distribution system.</p> <p>c) It must require, at a minimum, that the operator(s) in responsible charge or equivalent must hold a valid certification equal to or greater than the classification of their water system, including each treatment facility and distribution system, as determined by the state.</p>	<ul style="list-style-type: none"> • An affirmative statement that it meets the requirements of both “b” and “c” in Baseline Standard 2 (see left). • Number of systems without a certified operator with date of the data compilation. • As applicable, implementation of a temporary operator certification or licensing program (i.e., operator in responsible charge temporarily does not meet minimum education, experience, and/or examination requirements). <ul style="list-style-type: none"> ○ Number of systems with temporary operators. ○ Number of systems succeeding to permanent, fully-qualified operators in responsible charge. • Description of the process used to track operators (treatment facility and/or distribution system) with respect to the name, identification, and classification of the PWS and name and classification(s) of the operator in responsible charge. 	
<p>d) It must require that all operating personnel making process control/system integrity decisions about water quality or quantity that affect public health be certified.</p>	<p>A statement reaffirming that regulations and policies are in place to ensure persons making process control/system integrity decision are certified. [Recommended: briefly describe these policies]</p>	
<p>e) It must require that a designated certified operator be available for each operating shift.</p>	<p>A statement reaffirming that regulations and policies are in place to ensure designated certified operator is available for each operating shift. [Recommended: briefly describe these policies, such as monitoring of the system when a properly certified operator is not physically on-site (e.g., SOPs, SCADA, other), and any limits or guidance regarding contract operators (e.g., travel distance, number of systems per operator).]</p>	
<p><u>3. Operator Qualifications</u> States must require the following for an operator to become certified:</p>		
<p>a) Take and pass an exam that demonstrates that the operator has the necessary skills, knowledge, ability and judgement as appropriate for the classification. All exam questions must be validated.</p>	<ul style="list-style-type: none"> • An affirmative statement that state meets this requirement (see “a” to left). • Brief description of the examination events provided during the year. • Number of exams and type of exams (e.g., treatment and/or distribution, classification). • Percent passing in each exam classification. • Exam question validation activities for the year (Short summary of issues reviewed, pass/fail rate, new questions, subject matter experts, psychometrician). [Recommended: Brief discussion of the state’s reciprocity approval process, if applicable, and the number of new operators based on reciprocity.] 	

Attachment 1

Operator Certification Guidelines (Public Health Objective + Antibracksliding + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation and evaluation of ongoing program implementation</u>	Notes
<p>b) Have a high school diploma or a general equivalency diploma (GED). States may allow experience and/or relevant training to be substituted for a high school diploma or GED. Education, training, or experience that is used to meet this requirement for any class of certification may not be used to meet the experience requirement.</p>	<ul style="list-style-type: none"> • Reaffirm all operators have high school diploma or GED or equivalent experience. 	
<p>c) Have the defined minimum amount of on-the-job experience for each appropriate level of certification. The amount of experience required increases with each classification level. Post high school education may be substituted for experience. Credit may be given for experience in a related field (e.g., wastewater). Experience that is used to meet the experience requirement for any class of certification may not be used to meet the education requirement.</p>	<ul style="list-style-type: none"> • Reaffirm that the program has a defined minimum amount of on-the-job experience for each appropriate level of certification. 	
<p>d) Grandparenting EPA recognizes that there are many competent small system operators that may not meet the initial requirements to become certified. EPA believes that states may need a transition period to allow these operators to continue to operate the system through “grandparenting”. It is recommended that grandparenting determinations be based on factors such as system compliance history, operator experience and knowledge, system complexity, and lack of treatment. If states choose to include a grandparenting provision in their programs, they must include specific requirements.</p>	<ul style="list-style-type: none"> • Provide an affirmation of previously approved grandparenting practice and current numbers. 	<p>Grandparenting is no longer allowed. However, some states may still have grandparented operators. The number of grandparented operators is expected to continue to decrease to zero. Tracking existing grandparented operators is part of meeting the Baseline Standards.</p>
<p>4. Enforcement The state agency with primary enforcement responsibility for the Public Water System Supervision (PWSS) Program must have regulations that meet the requirements of these guidelines and require community water systems and nontransient noncommunity water systems to comply with state operator certification requirements. In nonprimacy states, the Governor must determine which state Agency will have this responsibility. States must have appropriate enforcement capabilities. States must have the ability to revoke operator certifications. States must also have the ability to suspend operator certifications or take other appropriate enforcement action for operator misconduct.</p>	<ul style="list-style-type: none"> • Description of how state OpCert program is following up with systems lacking a properly certified operator (e.g., notices of violation, compliance assistance, how state is tracking/ finding out about lack of operator and how long the system is without operator), including (as applicable): <ul style="list-style-type: none"> ○ Number of systems which had some type enforcement action taken to bring system into compliance with state OpCert regulations. ○ Number of contacts/notices to system owners who have not designated an operator in responsible charge. ○ Number of letters sent to systems/operators which do not have an operator in responsible charge holding a valid certification at their system. • Number of licenses revoked in the state in current year. • Total number of licenses in the process of revocation at the end of the reporting period. 	

Attachment 1

Operator Certification Guidelines (Public Health Objective + Antibracksliding + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation and evaluation of ongoing program implementation</u>	Notes
	<ul style="list-style-type: none"> • Number of licenses suspended in the state in current year. • Total number of licenses in the process of suspension at the end of the reporting period. 	
<p>5. Certification Renewal</p> <p>a) The state must establish training requirements for renewal based on the level of certification held by the operator.</p>	<ul style="list-style-type: none"> • Number of operators renewing in each classification. • Affirmation that operators get the necessary training to cover all the knowledge, skills, and abilities required for the license classification for which an operator is certified. 	
<p>b) States must require all operators including grandparented operators to acquire necessary amounts and types of state approved training. States may determine other requirements as deemed necessary.</p>	<ul style="list-style-type: none"> • Number of training courses approved. • Number of operators required to take additional training as deemed necessary by the state. 	
<p>c) States must have a fixed cycle of renewal not to exceed three years.</p>	<ul style="list-style-type: none"> • Simple statement of renewal cycle, unless it changes, which should include a more descriptive narrative (under Antibracksliding and Baseline Standard 1, above). 	
<p>d) The state must require an individual to recertify if the individual fails to renew or qualify for renewal within two years of the date that the certificate expired.</p>	<ul style="list-style-type: none"> • Number of operators renewing after failing to renew or qualify for renewal within the state-specified time period, but no more than two years. 	
<p>e) States must pay special attention to identify specific renewal requirements for grandparented operators to ensure that they possess the knowledge, skills, ability and judgement to properly operate the system. This must be done by one or more of the following approaches or by an alternative approach approved by EPA.</p>	<ul style="list-style-type: none"> • Number of grandparented operators where renewal training was specified. 	
<p>f) States may specify renewal requirements for grandparented operators on a case-by-case basis, taking into consideration factors such as a system's compliance history and operator experience and knowledge. For systems that have a history of being out of compliance, any certification renewal decision should consider whether noncompliance is the result of actions or inactions by the system's owner or the system's operator.</p>	<ul style="list-style-type: none"> • Number of grandparented operators where renewal cycle training was specified for the operator and reason. 	
<p>g) States may require specific training requirements for certification renewal at the first renewal cycle for grandparented operators. This training should include all of the information covered by the initial certification exam for the system classification level for which the operator was grandparented even</p>	<ul style="list-style-type: none"> • N/A First renewal cycle past. 	

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Operator Certification Guidelines (Public Health Objective + Antiretroviral + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation and evaluation of ongoing program implementation</u>	Notes
<p>though an initial certification exam may not be required for certification renewal.</p>		
<p>h) States may require operators with grandparented certificates to meet all of the initial certification requirements for the classification level for which the operator was grandparented, and thereby obtain certification within a reasonable time period specified by the state.</p>	<ul style="list-style-type: none"> • Number of grandparented operators with active licenses. 	
<p><u>6. Resources Needed to Implement the Program</u> States must provide sufficient resources to adequately fund and sustain the operator certification program (components include, but are not limited to: staff, data management, testing, enforcement, administration, and training approval). EPA recommends that states establish a dedicated fund that is self-sufficient.</p>	<ul style="list-style-type: none"> • An affirmative statement that state meets Baseline Standard 6. • While the Initial Submittal may show the funding resource, additional information needs to be included if a primacy fee has been added or if Public Water System Supervision or DWSRF set-asides have been added, increased, or decreased. • A discussion of the staff describing increases or decreases in FTEs. Provide comparison to staff resources reported in the Initial Submittal (or the previous year). • A brief discussion on how resources are dedicated toward the data management, testing, enforcement, administration, and training approval. • Other. If there is an additional type of resource not listed, describe and relate to the program. 	
<p><u>7. Recertification</u> The states must have a process for recertification of individuals whose certification has expired for a period exceeding two years. This process must include: review of the individual's experience and training, and reexamination. An individual is not certified with an expired certificate. The state may develop more stringent requirements for recertification for individuals whose certificates have expired, been revoked, or been suspended.</p>	<ul style="list-style-type: none"> • A simple summary of the recertification process in the state 	
<p><u>8. Stakeholder Involvement</u> Stakeholder involvement is important to the public health objectives of the program. It helps to ensure the relevancy and validity of the program, and the confidence of all interested parties. States must include ongoing stakeholder involvement in the revision and operations of state operator certification programs. Public comment on rule revisions is not adequate stakeholder involvement. A stakeholder board or advisory committee is strongly recommended.</p>	<ul style="list-style-type: none"> • An affirmative statement that state meets Baseline Standard 8. • Documentation of meetings with stakeholders, e.g., date, purpose, stakeholders involved, summary of revisions and operations of the state OpCert programs discussed, and feedback provided 	
<p><u>9. Program Review</u> States must perform reviews of their operator certification programs. EPA recommends that states perform periodic internal reviews and occasional external/peer reviews. Examples of items to review include: regulations, exam items for relevancy and</p>	<ul style="list-style-type: none"> • Documentation of internal and external meetings which focus on program implementation which could change as a result of the meeting- e.g., include date of the meeting, an identifier as internal or external, programs or stakeholders involved, purpose of the meeting, results of the 	

Attachment 1

Operator Certification Guidelines (Public Health Objective + Antibacksliding + 9 Baseline Standards)	EPA national criteria to evaluate annual reports with respect to requirement to show <u>documentation</u> and <u>evaluation of ongoing program implementation</u>	Notes
validity, compliance, enforcement, budget and staffing, training relevancy, training needs through examination performance, and data management system.	meeting(s) or a copy of the program review report.	

Attachment 2. Example of email to appropriate Regional personnel with instructions, after receiving a state OpCert annual report.

(State PWSS Coordinator):

Attached is the annual operator certification program submittal from the (state agency).

I would appreciate your review and comments provided to me by (two weeks from the date of this email).

Please contact me if you have any questions.

Thank you,
(Op Cert Coordinator)

Attachment 3. Example of email to appropriate Regional personnel with instructions, after combining comments on the state OpCert annual report.

(State PWSS Coordinator):

Thank you for providing your comments on the (State) Operator Certification program annual submittal from the (State agency).

I have incorporated the comments you provided with the ones I developed. Please review this information and be ready to discuss the combined comments during our internal discussion on (one week from the date of this email).

Please contact me if you have any questions.

Thank you,
(Op Cert Coordinator)

Attachment 4. Example of email to the state OpCert Representatives with comments for discussion on the OpCert annual report (No major concerns).

(State Op Cert Coordinator):

We have reviewed the (State agency) Drinking Water Operator Certification program annual submittal provided to us on (Date of annual program submittal). The (State agency) Operator Certification program annual submittal shows documentation and evaluation of ongoing program implementation with respect to the Federal Guidelines.

We do have additional questions and comments for discussion related to the documentation and evaluation of ongoing program implementation. We are not expecting any changes to the current annual submittal, but may have suggestions for improvements for future annual submittals. I will work on a time to schedule a conference call in a week to discuss these questions and comments with you and others as necessary.

Our comments, suggestions and questions are as follows:

(Comments, Suggestions and Questions)

Thank you for your work to ensure that:

- Customers of any public water system be provided with an adequate supply of safe, potable drinking water;
- Consumers are confident that their water is safe to drink, and;
- Public water system operators are trained and certified and that they have knowledge and understanding of the public health reasons for drinking water standards.

We look forward to the discussion.

Please contact me if you have any questions.

Thank you,

(Op Cert Coordinator)

Send to state OpCert Coordinator and other appropriate Regional personnel.

Work with the state to have a conference call and send out invitations to everyone.

Attachment 5. Example of email to state OpCert Representative with comments for discussion on the state OpCert annual report (Major concerns).

(State Op Cert Coordinator and state PWSS Program Manager):

We have reviewed the (State agency) Drinking Water Operator Certification program annual submittal provided to us on (Date of annual program submittal). The (State agency) Operator Certification program annual submittal has major issues and does not show documentation and evaluation of ongoing program implementation with respect to the Federal Guidelines.

Our concerns with the annual submittal are such that we need additional information in the report before September 30, (year). We will need to alert our Regional Division Director and the Director or the Office of Ground Water and Drinking Water at EPA Headquarters to inform them of the situation, and that we are working with the (state agency) to address the issue(s).

The following are our concerns which will need to be addressed in a revised annual submittal.

(List of Concerns/Issues)

According to the April 18, 2001, Final Additions to the Final Guidelines, we need to review and determine if the revised annual submittal shows documentation and evaluation of ongoing program implementation to meet the Federal Guidelines by September 30. Should this requirement not be met, the Drinking Water State Revolving Loan program for (State) will have 20% of its FY(year) capitalization grant allotment withheld.

Please contact me as soon as possible to discuss these concerns and provide a time frame to provide a revised report to us in time to review and determine if the revised annual submittal shows documentation and evaluation of ongoing program implementation to meet the Federal Guidelines.

If you have questions, you can contact me at (Op Cert coordinator's phone number).

Thank you,
(Op Cert Coordinator)

*Send to state Op Cert Coordinator, and other appropriate Regional personnel as necessary.
Work with the state to have a conference call and send out invitations to everyone.*

Attachment 6. Sample of Annual state OpCert Program determination memo.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION XX
12345 Any Boulevard
Big City, State 12121

MEMORANDUM

SUBJECT: [Year] [State] Drinking Water Operator Certification Annual Evaluation for [Year] SRF Grant

FROM: [Responsible Person in EPA Region]
[Appropriate Water Management Branch]

TO: [EPA Regional SRF Coordinator]
[Appropriate Branch]

We have reviewed the [State Agency] [Year] Drinking Water Operator Certification Program Annual Report submitted [Date]. Based on our review of the report, discussions at meetings and conference calls, the [State Agency] has provided documentation and evaluation of ongoing program implementation of the [State] drinking water operator certification program for the reporting period of [Time frame] in accordance with section 1419 of the Safe Drinking Water Act. We recommend full allotment for the [State Agency] Drinking Water State Revolving Fund capitalization grant for [Federal Fiscal Year] as defined in section 1452 of the Safe Drinking Water Act.

[Summary of highlights or suggestions from the report submittal]

We would like to thank [if applicable, State of XX Operator Certification Program Manager Name] and his/her staff for their protection of public health through the drinking water operator certification program.

Questions regarding this matter can be directed to me.



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Appendix B: History of the Operator Certification Program

B.1 The Safe Drinking Water Act

The SDWA was passed in 1974 to address public health concerns by regulating drinking water. The SDWA authorizes the EPA to set national health-based standards to protect consumers from both naturally-occurring and man-made contaminants that may be present in drinking water, as well as work with states and PWSs to ensure that those standards are met.

Originally, the SDWA focused on treatment as the primary means of providing safe drinking water. The 1996 SDWA Amendments established stronger prevention programs (e.g., source water protection), increased state flexibility, provided more in-depth information to consumers, and strengthened the EPA's regulatory development process. The 1996 Amendments also included initiatives to improve communication with the public, employ better science for risk assessment, and provide funding to states and PWSs to achieve the public health protection objectives of the SDWA through the DWSRF program.

The next page depicts the timeline of how the U.S. protects public health and drinking water.



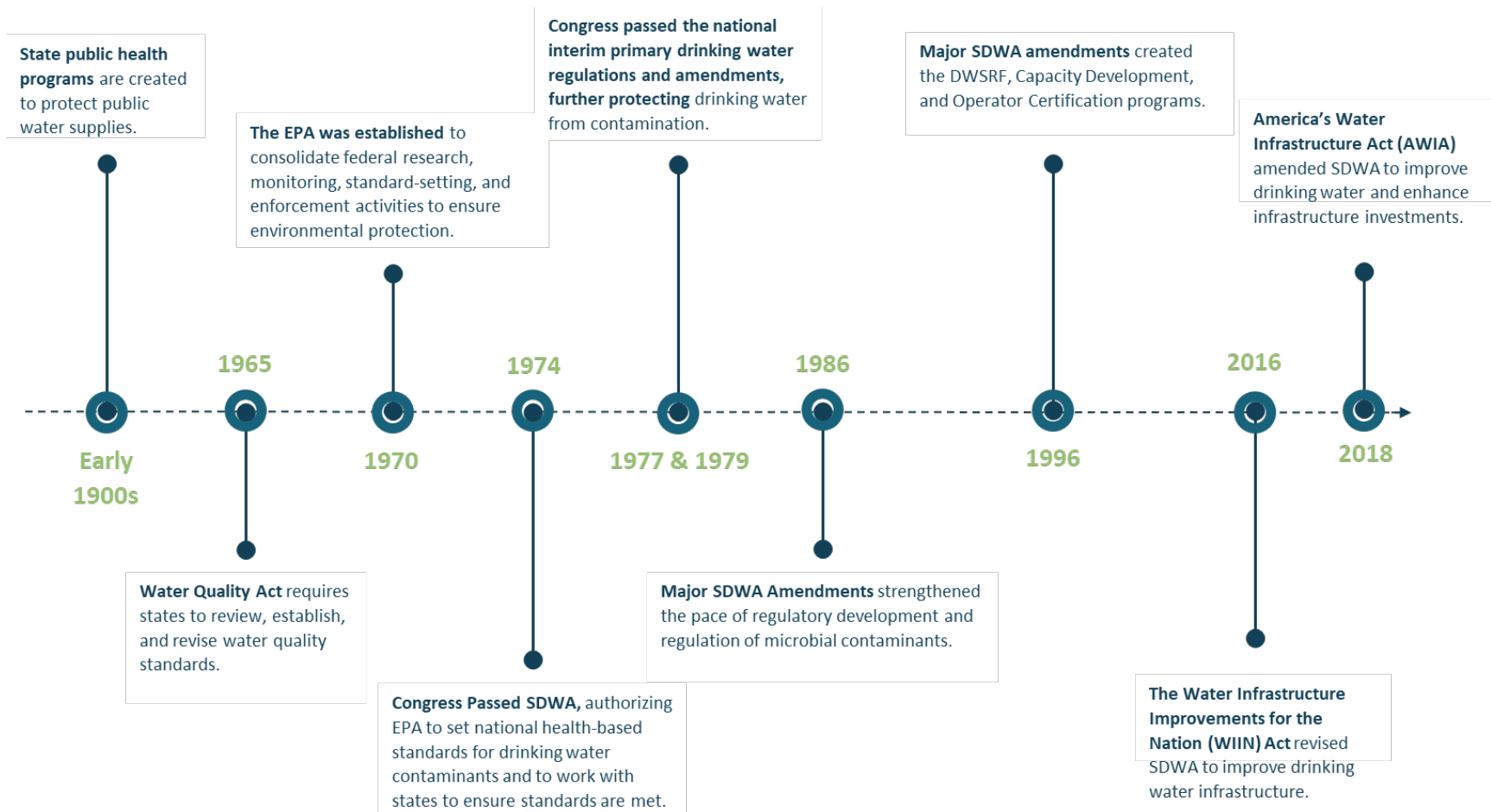
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Timeline





B.1.1 The 1996 SDWA Amendments

The 1996 Amendments provided the framework for the Operator Certification program, DWSRF, primary enforcement authority, and Capacity Development program. Operator Certification was introduced as part of the 1996 Amendments as a stronger approach to preventing drinking water contamination. Capacity Development, as discussed in the 1996 Amendments, created a national program through which states demonstrate their water systems' technical, managerial, and financial (TMF) capacity to deliver safe and reliable drinking water.

Operator Certification

Ensuring safe drinking water requires knowledgeable and skilled public water system operators. To ensure that operators are well-trained, Section 1419 of the 1996 SDWA required all states to establish an Operator Certification program that meets guidelines developed jointly by the EPA and the states. Before the SDWA and the Operator Certification Guidelines, the Surface Water Treatment Rule, promulgated in 1989, required that surface water systems were operated by qualified operators. In 1998, the regulatory requirement for operators to be qualified was added for systems that disinfect. The Operator Certification Guidelines published in 1999 specified the minimum standards for certification and recertification of operators of community water systems (CWSs) and non-transient, non-community water systems (NTNCWSs). Water system operators can be qualified based on their work experience and education, but they are certified according to each state's application and examination process. States may use a DWSRF set-aside to implement an Operator Certification program. Congress appropriates funding for the DWSRF. The EPA then awards capitalization grants to each state based on the results of the most recent Drinking Water Infrastructure Needs Survey and Assessment. The state provides a 20 percent match. The SDWA requires the EPA to withhold 20 percent of a state's DWSRF funds if the state fails to implement a program that meets the published Operator Certification Guidelines. The withholding requirement ensures that states have both a public health and a financial motivation to implement an Operator Certification program.

The objective of the Operator Certification program is not to require that every water system operator be certified. Instead, the program is to ensure that water systems have (directly, under contract, or in conjunction with other systems) an operator who is trained and certified to the level that each state determines appropriate for the functions, facilities, and operations of that system to perform certain key compliance functions. Operator Certification programs may vary between states but must meet the nine operator certification baseline standards outlined in the [Final Guidelines for Operator Certification](#).

The EPA Regions oversee state Operator Certification programs by conducting annual reviews of state Operator Certification annual reports. These annual report reviews evaluate if a state Operator Certification program meets the baseline standards set forth in the final guidelines. If the program meets the requirements, the EPA Region determines that the DWSRF grant should not be withheld.

Other SDWA Provisions Related to Operator Certification

Capacity Development

Capacity development is the process through which water systems acquire and maintain the TMF capabilities necessary for them to continuously provide safe, reliable drinking water. The SDWA's capacity development provisions (outlined in Section 1420) provide a framework for states and water systems to work together to build capacity and meet the SDWA public health protection objectives. The

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focus on capacity development is through two major provisions; both of which are associated with the DWSRF (the DWSRF provisions are outlined in Section 1452 of the SDWA).

- First, for states wishing to receive the full amount of DWSRF capitalization to which they are entitled, states must develop and implement programs for new and existing systems. Through these programs, new water systems must demonstrate capacity, while existing water systems must build and maintain capacity. States failing to develop and continue implementing such programs face having 20 percent of their annual DWSRF capitalization grant withheld.
- Second, the SDWA ties a water system's eligibility to receive assistance under the DWSRF to the system's TMF capacity. In short, providing DWSRF assistance to a system which, in the judgement of the state, lacks the TMF capacity to ensure ongoing compliance with SDWA requirements is prohibited.

Drinking Water State Revolving Fund

All 50 states and Puerto Rico are authorized to receive grants from the EPA to help capitalize their DWSRF. The District of Columbia and U.S. territories receive a share of DWSRF appropriations as grants to their governments and/or water utilities. States enjoy flexibility in establishing and managing their DWSRF in a manner most suitable to their circumstances.

Each year, as part of the application to receive its capitalization grant, each state develops an Intended Use Plan (IUP). The IUP describes how the state intends to utilize its DWSRF resources for the year. The IUP contains a Project Priority List (PPL). Priority for receiving DWSRF assistance must be given to those projects that:


- Address the most serious risks to human health.
- Are necessary to ensure compliance with the SDWA.
- Assist systems most in need according to state affordability criteria.


The state must fund projects in the order they appear on the PPL; however, projects which are not ready to proceed to construction may be skipped to reach the next most highly-ranked ready to proceed project. States may include provisions for funding emergency projects in the IUP. For more information, the [DWSRF Eligibility Handbook](#) is a one-stop-shop manual for DWSRF eligibility questions for states and interested stakeholders.


Set-Asides


The 1996 Amendments established a process through which up to approximately 31 percent of a state's capitalization grant can be used in "set-aside" programs.¹ Set-asides are a unique and important feature of the DWSRF program and states have the option to take some, none, or all the authorized set-aside amounts. The set-asides give states the flexibility through a wide range of activities to help PWSs address compliance challenges, including those which do not require capital investment to resolve. The EPA's [State-by-State Analysis](#) explores different ways in which the 50 state Drinking Water programs and Puerto Rico use DWSRF set-asides to support PWSs.

¹ The Water Infrastructure Improvements for the Nation Act amended the set-asides. See text box below.

- 
Administration and TA

This set-aside may be used to cover the costs of administering the DWSRF program and to provide technical assistance (TA) to water systems. (See text box below for additional explanation.)
- 
TA to Small Systems

This set-aside may be used to provide technical assistance exclusively to systems serving 10,000 or fewer persons.
- 
State Program Management

This set-aside may be used to develop and implement an Operator Certification program, develop and implement a Capacity Development program, administer or provide technical assistance through source water protection programs, and administer the state Public Water Supply Supervision (PWSS) program.
- 
Local Assistance and Other State Programs

This set-aside may be used to develop local drinking water initiatives in the areas of capacity development, source water protection, and wellhead protection. No more than 10 percent of the state's capitalization grant may be used for the any one activity.

In Focus: 2016 WIIN Act & 2018 AWIA

The Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 amended the SDWA. It changed the DWSRF's "4-Percent Set-Aside" calculation to be the greatest of \$400,000, one-fifth percent of the current valuation of the fund, or an amount equal to 4 percent of all grant awards to the fund for the fiscal year.

America's Water Infrastructure Act of 2018 amended SDWA to expand source water protection-related eligibilities under the 15 percent Local Assistance set-aside. Updates to source water assessments are now eligible for funding, and expenditures under section 1452(k)(1)(D) now go beyond wellhead protection programs to include the implementation of source water protection activities.

Click on "Statutory Requirements" to go to the Statutory Requirements section of this document

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Appendix C: Operator Certification Program Overview

Each state has an Operator Certification program whose mission is to assist PWSs in obtaining and retaining qualified and capable water system operators. In response to the 1996 Amendments, the EPA and states developed the nine baseline standards that all Operator Certification programs must meet. These guidelines provide states with the minimum standards for the development, implementation, and enforcement of Operator Certification programs for CWSs and NTNCWSs. The establishment of the nine baseline standards offered guidance while also allowing flexibility to develop state-specific programs to achieve compliance with Operator Certification Guidelines.

C.1 Statutory Requirements

Congress established the goals of the Operator Certification program in 1996 with the following statutory requirements:

The EPA shall establish guidelines “specifying minimum standards for certification (and recertification) of the operators of community and nontransient noncommunity public water systems. Such guidelines shall take into account existing State programs, the complexity of the system, and other factors aimed at providing an effective program at reasonable cost to States and public water systems, taking into account the size of the system.”

[§1419(a)]

“[T]he Administrator shall withhold 20 percent of the funds a State is otherwise entitled to receive under section 1452 unless the State has adopted and is implementing a program for the certification of operators of community and nontransient noncommunity public water systems that meets the requirements of the guidelines published pursuant to subsection (a) [Guidelines] or that has been submitted in compliance with subsection (c) [Existing Programs] and has not been disapproved.”

[§1419(b)]

“The Administrator shall withhold 20 percent of each capitalization grant made pursuant to this section unless the State has met the requirements of 1419 (relating to operator certification).”

[§1452(a)(1)(G)(ii)]

C.1.1 Financial Implications for Operator Certification and Capacity Development/DWSRF Programs

To avoid DWSRF withholding, a state must demonstrate that it is implementing an Operator Certification program that meets the requirements in the guidelines established pursuant to §1419(a) or the equivalent published state requirements.

Click “1996 SDWA Amendments” to review that section of this document to learn more about the 1996 Amendments.

**1996 SDWA
Amendments**

C.1.2 Nine Baseline Standards

The nine baseline standards were published in 1999 as a requirement in §1419(a). These standards establish the minimum required elements for a state drinking water Operator Certification program.



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Authorization

The state must have the authority to implement the Operator Certification program and require systems to comply with the program requirements, or they are subject to a 20 percent withholding of the state's DWSRF allocation.

Classification of Systems, Facilities and Operators

A state's program must:

- Classify all CWSs and NTNCWSs based on indicators of potential health risk.
- Develop specific requirements for each level of classification.
- Require owners to place the direct supervision of their water system under the responsible charge of an operator(s) holding a valid certification equal to or greater than the classification of their water system.
- Require that all operating personnel making decisions about water quality or quantity that affect public health be certified.
- Require that a designated certified operator be available for each operating shift.

Operator Qualifications

The state must require an exam, a high school diploma, or general equivalency diploma (GED) and appropriate job experience for an operator to become certified.

Enforcement

The state must enforce the PWSS program and water systems must meet the required regulations to comply with state Operator Certification requirements. States must have appropriate enforcement capabilities and they must have the ability to revoke or suspend operator certifications.

Certification Renewal

A state's program must:

- Establish training requirements for renewal.
- Require all operators to acquire necessary amounts and types of state approved training.
- Have a fixed cycle of renewal not to exceed three years.
- Require an individual to recertify if the individual fails to renew or qualify for renewal within two years of the date that the certificate expired.
- Identify specific renewal requirements for grandparented operators to ensure that they possess the knowledge, skills, ability, and judgement to properly operate the system.

Resources Needed to Implement the Program

States must provide sufficient resources to adequately fund and sustain the Operator Certification program.

Recertification

The states must have a process for recertification of individuals whose certification has expired for a period exceeding two years. This process must include a review of the individual's experience, training, and reexamination.

Stakeholder Involvement

States must include ongoing stakeholder involvement in the revision and operations of the state Operator Certification program.

Program Review

States must perform reviews of their Operator Certification program.

C.2 The EPA National Tribal Operator Certification Program

C.2.1 Program Overview

The EPA has primacy in some tribal lands. Regional office Direct Implementation programs implement the Tribal PWSS program, have enforcement authority over tribal drinking water systems, and implement the Tribal Operator Certification program. The EPA Regional Operator Certification coordinator is responsible for coordinating with the Direct Implementation program's Tribal Operator Certification program in their EPA Region, and may have responsibilities in both programs. The purpose of the EPA National Tribal Drinking Water Operator Certification program is to increase public health protection by increasing the training and certification opportunities for personnel operating CWSs and NCWSs in Indian country.

The [National Tribal Drinking Water Operator Certification Program](#) Final Guidelines establish the program requirements for drinking water system operators in Indian country to provide meaningful public health protection. This program provides water system operators in Indian country with further training and certification opportunities in addition to existing training or certification programs offered by states, various federal agencies, or private organizations. All CWSs, NTNCWSs, and any system receiving Drinking Water Infrastructure Grant Tribal Set-Aside (DWIG-TSA) funds must be operated by certified operators. Water system operators in Indian country can receive certification from the National Tribal program, state, and/or other certification provider programs that have received EPA approval.

C.2.2 Role of the Regional Coordinator

Tribes Under EPA Direct Implementation

The Regional Direct Implementation program oversees the National Tribal Drinking Water Operator Certification program where they have primacy for tribes in their EPA Region. The Regional Direct Implementation program facilitates training and tracks certification of tribal water system operators as state Operator Certification coordinators do with water system operators.

Tribal PWSs under State Primacy and Tribes with Primacy

For tribal PWSs under state primacy, the state primacy agency implements its Operator Certification program. The role of the EPA Regional Operator Certification coordinator for tribal PWSs under state primacy is the same as for non-tribal PWSs. Similarly, for tribes with primacy that have an Operator Certification program, the tribe implements its Operator Certification program and the EPA Regional Operator Certification coordinator provides oversight as it would a state primacy agency.

Tribal PWSs under tribal or state primacy are subject to the same certification requirements to receive Drinking Water Infrastructure Grants – Tribal Set-Aside funding as Tribal PWSs under the Regional Direct Implementation programs.

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Glossary of Terms

Term	Definition
Community water system (CWS)	According to the Safe Drinking Water Act, a drinking water conveyance system serving at least 15 service connections used by year-round residents of the area served by the system or regularly serving at least 25 year-round residents.
Drinking Water State Revolving Fund (DWSRF)	State fund that provides financial assistance for public water systems and state drinking water programs, established under the Safe Drinking Water Act. Congress appropriates funding for the DWSRF. The EPA then awards capitalization grants to each state based on the results of the most recent Drinking Water Infrastructure Needs Survey and Assessment. The state provides a 20 percent match.
Financial Capacity	The ability of a water system to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with Safe Drinking Water Act requirements. Part of a state's Capacity Development program.
Managerial Capacity	The ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with Safe Drinking Water Act requirements, including institutional and administrative capabilities. Part of a state's Capacity Development program.
Non-community water system (NCWS)	A public water system that is not a community water system. A non-community water system is either a transient, non-community water system or a non-transient, non-community water system.
Non-transient, non-community water system (NTNCWS)	A public water system, such as a school or hospital, that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.
Operator Certification	The establishment of minimum professional standards for the maintenance of safe, optimal, and reliable operations of water treatment and distribution facilities. While the specific requirements vary from state to state, the goal of all Operator Certification programs is to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water.
Primacy	The responsibility for ensuring that a law is implemented, and the authority to enforce a law and related regulations. A primacy agency has primary responsibility for administering and enforcing regulations.
Public water system (PWS)	A system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections that regularly serve at least 60 days out of the year.
Safe Drinking Water Act (SDWA)	Federal drinking water quality legislation administered by the U.S. Environmental Protection Agency (EPA) through state primacy agencies; amended in 1986 and 1996.

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Term	Definition
Technical Capacity	The physical and operational ability of a water system to meet SDWA requirements, including the adequacy of physical infrastructure and the technical knowledge and capability of personnel. Part of a state's Capacity Development program.
Transient, non-community water system (TNCWS)	A non-community water system, such as a summer camp, that does not regularly serve at least 25 of the same persons over 6 months per year.
Water System	A series of interconnected conveyance facilities owned and operated by a drinking water supplier.
Withholding	An irreversible and permanent decrease in DWSRF allocation that will occur by failing to implement a variety of programs. The SDWA requires the EPA to withhold 20 percent of a state's DWSRF funds if the state fails to implement a program that meets the published Operator Certification Guidelines.