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# Introduction

Communities depend on drinking water operators every day for safe water. This document is a resource that can help public water system decision-makers hire or contract with a certified water operator. Understanding how to select an operator (either a permanent employee or a contractor) and what to expect from that operator can help you ensure that your public water system complies with all state and federal regulations and delivers safe drinking water to your customers.

**What is a public water system?**

A public water system provides water for drinking or other purposes (e.g., washing hands, bathing, cooking) to 25 or more persons daily at least 60 days out of the year, or has 15 or more service connections. A public water system can be publicly owned by municipalities, towns, or counties or privately owned, such as by homeowners’ associations or manufactured home communities.

This document offers suggestions on how to find the right operator for your system, helps you communicate with your operator about water system responsibilities and assists with your documentation of expectations for operating the water system.

**Am I a decision-maker?**

You are a public water system decision-maker if you make financial or management-related decisions for a public water system. These decision-makers can include water system board members, water system owners, water system managers, elected officials, or other municipal officials. Other examples may include homeowners’ association board members and those who own or operate manufactured home communities.

Examples of public water systems that may find this resource useful include:

* Small towns.
* Rural water districts.
* Homeowners’ associations.
* Small, privately-owned water systems.

This document includes the following information.

**What is a certified operator?**

A certified operator is an individual who is certified by the Washington State Office of Drinking Water (ODW) to operate and maintain a public water system in Washington State. A certified operator is considered to be in “responsible charge” and can help you operate your water system and maintain compliance with drinking water regulations.

1. How a certified operator can help ensure provision of safe drinking water.
2. A table of roles and responsibilities of decision-makers and operators that helps you understand what to expect of your operator.
3. An interview tool to help you ask the right questions when interviewing potential operators.
4. A list of possible topics to include in a written agreement with your operator.
5. A list of suggested operator duties to include in a written agreement with your operator.

# How can a Certified Operator Help?

Public water system decision-makers are responsible for ensuring that their customers receive safe drinking water that complies with state and federal regulations. These regulations include those that pertain to:

#### **What is an operator in direct responsible charge?**

An operator in direct responsible charge is the certified operator at a public water system with authority to make operational decisions that affect water quality or quantity.

* Water quality sampling.
* Reporting and recordkeeping.
* Employing properly certified operators.
* Design, construction, and operation of water systems.
* Emergency situations.

While hiring a certified operator will not eliminate a public water system decision-maker’s legal responsibilities, a certified operator can help decision-makers meet legal requirements and ensure the public water system delivers safe drinking water.

Most public water systems are legally required to have a certified operator to operate the system. You may also be required to submit paperwork designating an operator in direct responsible charge of your water system. Contact the [Office of Drinking Water](http://www.doh.wa.gov/DrinkingWater) (ODW) to learn what level of certification is required for an operator working at your public water system and ask how to designate an operator in direct responsible charge of your system.

# How do I get started?

The first stop for information is ODW.

ODW staff will provide advice specific to your public water system, including requirements regarding certified operators. Please note there may be multiple agencies or departments that your public water system will need to interact with, but your first stop should be ODW.

**Headquarters Offices**—360-236-3100 | **Toll-free within Washington**—1-800-521-0323

PO Box 47822, Olympia, Washington 98504-7822 | [doh.wa.gov/DrinkingWater](http://www.doh.wa.gov/DrinkingWater)

**After-hours emergency hotline for water system personnel**—1-877-481-4901

(Around-the-clock troubleshooting for drinking water emergencies.)

**Public Notification**—Call the nearest ODW Regional Office for technical assistance (see below). Or contact the after-hours emergency hotline number (see above).

### Regional Offices

[**Northwest**](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/NorthwestRegionalOfficeStaff)—253-395-6750

*Counties: Island, King, Pierce, San Juan, Skagit, Snohomish, and Whatcom*.

[**Southwest**](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/SouthwestRegionalOfficeStaff)—360-236-3030

*Counties: Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Skamania, Thurston, and Wahkiakum.*

[**Eastern**](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/EasternRegionalOfficeStaff)—509-329-2100

*Counties: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Franklin, Ferry, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Orielle, Spokane, Stevens, Walla Walla, Whitman, and Yakima.*

**Operator Certification, Training, and Technical Assistance**—360-236-3140

# Water System Decision-Maker and Water System Operator Responsibilities

Delivering safe drinking water to customers is a team effort between the certified operator and the water system’s decision-maker. Clear communication about each person’s responsibilities helps ensure this is achieved. The table below outlines typical responsibilities and best practices of the water system decision-maker and operator. You can use this table to facilitate a conversation between you and your operator to ensure that you address all aspects of managing and operating your public water system. You should document the decisions you make regarding responsibilities and revisit them from time to time to adjust or improve. Note that while some tasks may be interchangeable or shared, others are usually performed by one person or the other. You should also note that delegating specific tasks does not relieve the operator of operational responsibilities, nor does it relieve the decision-maker of legal responsibilities.

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Personnel** | |
| **Summary:** Decision-makers ensure there are enough qualified staff for proper operation of the public water system. | **Summary:** Water system operators communicate with decision-makers about staff needed to complete particular tasks. |
| Employ appropriate/qualified staff (e.g., a certified operator of the appropriate type and level):   * Understand licensing/certification requirements. * Ensure the operator has appropriate experience and certification credentials for the type of public water system. | Recommend appropriate staffing levels\* to decision-maker. |
| Ensure appropriate staffing levels\*\* and appropriate onsite presence and/or offsite availability. |  |
| Conduct performance evaluations and an exit interview with the operator. Develop procedures for handling terminated employees. | Maintain centrally located and easily accessible system information in order to:   * Increase organization and coordination among operators; * Assist in personnel transition; and * Ensure decision-maker has access to current information.   For more information visit [EPA's Small Public Water System](https://www.epa.gov/region8-waterops/small-public-water-system-knowledge-retention-tool) [Knowledge Retention Tool.](https://www.epa.gov/region8-waterops/small-public-water-system-knowledge-retention-tool) |
| Ensure staff training needs are met and provide opportunities for operators and others to attend training. | Train and supervise other water system support staff in the performance of daily activities, if applicable. |
| *\*Special note about staffing surface water treatment plants: these plants must be visited by a certified water treatment plant operator every day of operation including weekends and holidays. Certain highly automated plants using slow sand, bag, or membrane filtration may request approval for remote monitoring to replace some onsite visits*  *\*\*Special note for surface water treatment plants: Even the smallest and simplest plant should have at least two trained and appropriately certified operators so that public health is not placed at risk if an operator is unavailable due to planned or unplanned absence.* | |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Continuing Education/Professional Development** | |
| **Summary:** Decision-makers stay informed about best management practices and regulatory information in order to effectively manage their public water systems. This occurs through regular communication with state and local officials. | **Summary:** Water system operators stay informed about the latest operational and regulatory information in order to maintain their certifications, operate the public water system more effectively, and ensure water system compliance. This occurs through regular communication with state and local officials. |
| Stay updated about changes in drinking water regulations and safety regulations. | Maintain required professional certification (ensure continuing education units [CEUs] are met). |
| Increase knowledge about the best practices for managing a public water system. | Stay updated about changes in drinking water treatment processes, public water system best practices, drinking water regulations and safety regulations. |
| **Written Plans, Reports, and Recordkeeping** | |
| **Summary:** Decision-makers oversee the development, maintenance and submission of required reports and plans to the regulatory agency. They also ensure copies of sampling results, inspections and any public notifications for the public water system are kept for the appropriate timeframes. | **Summary:** Water system operators develop, update and keep plans and reports of public water system activities. They also assist in other administrative recordkeeping. |
| Submit any required forms to the regulating agency designating a certified operator as the operator in responsible charge for the public water system. | Provide information to develop forms designating a certified operator in responsible charge. |
| Verify submission of monthly operational reports that capture a variety of information highlighting overall production, water quality (turbidity, pH), chemical usage, operators involved, etc. | Develop and submit monthly operational reports for operational process integrity, as applicable. |
| Work with the operator to develop Consumer Confidence Report (CCR) and other public notifications. Ensure delivery of the CCR and public notifications. | Compile data and help to prepare information for CCRs and public notifications. |
| Ensure development and maintenance of a customer complaint log and responses to customer complaints. | Develop and maintain a customer complaint log and respond/identify when/how complaints were addressed. |
| Ensure the development of monitoring plans and approval by regulatory agency. Verify monitoring plans are updated appropriately. | Develop and maintain monitoring plans. |
| Ensure the development of water system schematics and verify schematics are updated appropriately.  Ensure copies of sanitary survey/inspections are kept. Oversee the documentation of any follow-up required from inspections and document time period to address and complete required follow-up to sanitary surveys/inspections. | Develop water system schematics. |
| Maintain and update public water system inventory information and keep regulatory agency informed and updated about items such as:   * Population served. * Service connections. * Water sources. * Treatment processes. * Legal contacts. * Mailing and physical addresses.   History of operators in direct responsible charge. | Provide information to the decision-maker in order for them to maintain updated public water system profile information (e.g., new service connections, sources, treatment operations, etc.). |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Water System Planning** | |
| **Summary:** Decision-makers address planning needs related to capital improvements, future maintenance, asset management, and contingency plans. | **Summary:** Water system operators provide input to decision-maker addressing planning needs related to capital improvements, future maintenance, asset management, and contingency plans. |
| Develop a budget and provide adequate funding to properly construct, operate, and maintain the public water system and maintain delivery of a safe water supply using information provided by the operator. Review annually. | Provide input and data to the decision-maker to develop a budget for the public water system. Collect and provide information necessary for budget development to ensure delivery of a safe and adequate drinking water supply. |
| Develop and maintain an Asset Management Plan\* using information provided by the operator. For more information visit [EPA’s Asset Management Resources for State and Small Drinking Water Systems.](https://www.epa.gov/dwcapacity/asset-management-resources-states-and-small-drinking-water-systems) | Collect and provide information necessary for the decision- maker to develop and maintain an Asset Management Plan.\* |
| Ensure the operator develops and maintains an Operations and Maintenance Plan/Manual.\*\* | Develop, update, and implement the Operations and Maintenance Plan/Manual.\*\* |
| Ensure the operator develops and maintains a schedule of required sampling and a regulatory agency sanitary survey/inspection schedule. | Develop and maintain a schedule of required sampling and a regulatory agency sanitary survey/inspection schedule. |
| Obtain any necessary operation and construction approvals and permits and provide copies to the operator. | Confirm that any necessary operation and construction approvals and permits are obtained prior to the start of construction/operation and prior to making any changes in operations. Collect and provide information necessary for permits. |
| Request regular reports on subjects such as modifications, repairs, and maintenance that have been conducted and/or about the short-, mid- and long-term schedule for these activities, and appropriately communicate the status of these activities with operator. | Ensure decision-maker is fully informed about modifications, repairs, and maintenance. |
| Obtain additional supply of water or implement drought contingency plans when there is a shortage, emergency, and/or issue with source water quality. | Provide options to decision-maker about alternative sources of water to assist the decision-maker in obtaining additional supply of water when there is a shortage and/or issue with source water quality. (This can include providing options to drill a new well, purchasing water from another public water system, proposing water conservation strategies, etc.).  Carry out duties to bring new water source online, if necessary. |
| \***Asset management** is the practice of managing infrastructure capital assets (e.g., pumps, other equipment, and buildings) to minimize total cost of owning and operating them, while delivering the service level customers desire. An asset management plan is a tool to record all of a system’s asset management practices and strategies. Contact ODW for more information on asset management.  \*\*An **Operations and Maintenance (O&M) Manual** contains a discussion of a public water system’s components and other information explaining how a public water system is to be operated and maintained on a daily basis to ensure provision of safe drinking water and compliance with regulations. Contact the ODW for more information on O&M manuals. | |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Water System Operations and Water Quality Assurance** | |
| **Summary:** Decision-makers are knowledgeable about fundamental aspects of water system operations and what is needed to maintain day-to-day operational and process integrity of the public water system to deliver a safe and adequate water supply. They should also be aware of all sample results and take appropriate follow-up actions, as necessary. | **Summary:** Water system operators are knowledgeable about all operational aspects of the water system and maintain day-to-day operational and process integrity of the public water system to deliver a safe and adequate water supply. Operators should implement practices to ensure water quality, including using a certified laboratory to analyze samples, and taking appropriate actions in response to sample results, as necessary. |
| Verify that the operator has performed operational monitoring requirements. | Analyze operational data to determine changes and improvements for more efficient operation. |
| Ensure that appropriate testing equipment and materials are available to maintain operational and process integrity of the public water system. | Conduct sampling.   * Conduct operational and process integrity sampling. * Conduct compliance sampling at approved locations and frequencies. Be responsible for the setting, measurement and recording of all chemical additions:   + Creating and mixing chemical solutions.   + Adding chemicals as necessary.   + Ordering chemicals.   + Calculating disinfection and disinfectant levels.   + Maintaining and calibrating testing equipment and other water treatment instruments, including those utilized for supervisory control and data acquisition (SCADA). |
| Ensure the use of a laboratory certified by Washington Department of Ecology for the analyte being measured. Verify collection and reporting of sample results to state agency. | Collect samples and ensure that all samples are analyzed by a certified laboratory for the appropriate contaminant(s) and delivered to the laboratory to allow sufficient time for testing. Report or verify reporting to state agency. |
| Verify that water quality/quantity problems are investigated and corrective measures are taken, as needed. | Investigate water quality/quantity problems and take corrective measures, as needed. |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Regulatory Responsibilities** | |
| **Summary:** Decision-makers ensure the water system is in compliance with all federal and state requirements. They should regularly communicate with the operator to ensure compliance with public water system requirements. | **Summary:** Water system operators maintain communication with the decision-maker and regulatory agency to ensure compliance with all public water system requirements. |
| Ensure the regulatory agency is notified within regulatory specified timeframes (e.g. loss of pressure, boil order issued, maximum contaminant level [MCL] exceeded, other emergency). | Notify the regulatory agency within regulatory specified timeframes (e.g., loss of pressure. boil order issued, MCL exceeded, other emergency). |
| Ensure sampling and follow-up are conducted when necessary (e.g., public notification, emergency disinfection). | Conduct additional sampling and follow-up when necessary (e.g., public notification, emergency disinfection). |
| Attend all inspections/sanitary surveys conducted by the regulatory agency. | Attend all inspections/sanitary surveys conducted by the regulatory agency. Provide any existing information that enables the regulatory agency to conduct a sanitary survey.  Promptly report deficiencies to the decision-maker. |
| Ensure any required follow-up is conducted by the operator after the regulatory agency performs a sanitary survey/inspection. | Correct deficiencies and address areas of concern within regulatory timeframes after the regulatory agency performs a sanitary survey/inspection. |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** |
| **Water System Maintenance** | |
| **Summary:** Decision-makers ensure that repairs and improvements are performed properly and in a timely manner. This includes communicating with the operator or maintenance workers to schedule regular maintenance of the system. | **Summary:** Water system operators conduct and oversee operation and maintenance to uphold the safety and reliability of water service, ensuring that repairs and improvements are performed properly and in a timely manner. They also notify the decision-maker or responsible person about repair and improvement needs and inform them about anticipated timelines for repairs and improvements. |
| Ensure the public water system’s infrastructure is in good working order. | Perform or direct preventative routine maintenance including, but not limited to, treatment facilities, distribution systems, storage tanks, booster stations, pumps and pump stations.   * Conduct routine inspections, correct deficiencies and address areas of concern for the public water system. * Conduct routine visual inspections and follow-up of the system’s source(s), source water protection area, storage tanks and chemical feed systems. * Ensure the accuracy of water meters and other flow measuring devices, including maintaining and testing customer meters on a regular basis. * Exercise all hydrants and valves on a regular basis. * Clean, flush, disinfect and test the distribution system and storage tanks, as needed. * Disinfect ground water wells, as needed.   For more information visit [EPA’s Preventative Maintenance](https://www.epa.gov/dwcapacity/electronic-preventive-maintenance-logs) [Tasks.](https://www.epa.gov/dwcapacity/electronic-preventive-maintenance-logs) |
| Ensure that appropriate equipment and materials are available for routine maintenance of the public water system. | Oversee and monitor all repairs performed on the public water system:   * Maintain spare parts inventories. * Secure labor and order materials for correcting any maintenance or operational problems. * Repair broken mains or equipment quickly and efficiently to restore the normal level of service. * Replace mains or equipment involved with treatment or distribution, as needed. * Ensure storage tanks, well pumps and well pads are in good working order. |
|  | Oversee wellhead protection, watershed protection, and other activities associated with chemical monitoring waivers, as applicable. |
| Ensure development and implementation of a cross-connection control program. | Be responsible for protecting distribution system and treatment facilities against cross-connection contamination. |

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| **Water System Decision-Maker Responsibilities** | **Water System Operator Responsibilities** | |
| **Emergency/Security** | | |
| **Summary:** Decision-makers work closely with the operator to prepare for and respond to emergencies in the short-term and support returning the system to normal operating status. They should also ensure the facility is secure from vandalism. | **Summary**: Operators work closely with the decision-maker to prepare for and respond to emergencies in the short-term and support returning the system to normal operating status. They should also conduct activities to help ensure that the facility is secure from vandalism. | |
| Be fully informed about any emergencies. | Ensure decision-maker and regulatory agency are fully informed within appropriate timelines about any emergencies. | |
| Ensure emergency maintenance is conducted and, if necessary, implement Emergency Response Plan. | Conduct emergency maintenance and implement Emergency Response Plan. | |
| After an emergency event, support short-, mid-, and long-term strategies to return the public water system to normal operating status. Work with federal, state, or local agencies until problem is resolved and normal operation resumes. | | |
| Work with operator to create and update the Emergency Plan and Emergency Communications Plan, including a list of emergency contacts. | | Work with decision-maker to create and update Emergency Plan and Emergency Communications Plan, including a list of emergency contacts. |
| Practice implementing the Emergency Plan. | | |
| Ensure facility is secure and invest in any necessary upgrades (e.g., fences around system facilities, closed-circuit television). Ensure that proper security practices are followed. | | Practice proper security procedures, such as storing chemicals in locked areas and using proper safety equipment. |
| **Administrative/Other** | | |
| **Summary:** Decision-makers perform other duties to keep relevant stakeholders informed about the public water system and provide a safe working environment for the operator and other staff. | | **Summary:** Operators support decision-makers in keeping relevant stakeholders informed about the public water system and providing a safe working environment. |
| Regularly attend scheduled water board meetings. | | |
| Provide a safe working environment and ensure that safe work practices are always adhered to. | | |

# Operator Interview Tool

It is important to make sure that the operator you hire is a good match for your public water system, and that they have the knowledge and ability to ensure safe drinking water is provided to your customers. The Operator Interview Tool can help you as you interview and select an operator for your public water system. Use it whether you are interested in hiring an operator as a permanent employee or on a contract basis. It includes a list of recommended interview questions, as well as Yes/No checkboxes and spaces to write responses during the interview. You should review the tool prior to performing the interview to ensure you have a complete understanding of the questions. Beneath some questions is information explaining the question’s intent that can help guide your interview. Additionally, questions specific to operators hired on a permanent basis are denoted by “this question applies to **permanent operators** only,” and questions specific to operators hired on a contractual basis are denoted by “this question applies to **contract operators** only.”

## Part I—Operator License/Certification

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| --- | --- | --- | --- | --- | --- | --- |
| 1. **Does the candidate possess the appropriate certification required for your system? For which type and level is the candidate certified? When does the certification expire?** | | | | | | |
| **Yes** | The potential operator must possess the required type and level of certification for your particular water system and should have experience operating with source type (surface or groundwater), treatment processes and distribution systems that are similar to yours. | | | | | |
| **No** |
| Type and level of certification. | | | | | | |
| Expiration date of certification. | | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | **Yes** | | **No** |
| 1. **Did the candidate provide you with a photocopy of his/her current certification?** | | | | | | |
| **Yes** | The candidate should provide you with a photocopy of his/her current certification validation card, active for the current year. If you have questions regarding the level and/or type (treatment, distribution or both) of certification required for your particular system, this information can be found at [fortress.wa.gov/doh/eh/portal/odw/si/findwatersystem](https://fortress.wa.gov/doh/eh/portal/odw/si/findwatersystem.aspx). When you log into a specific system, there is an “Operators” tab showing the required certified positions, which operator is presently filling this position, and the minimum certification type and level. You can also contact your drinking water program Operator Certification staff at [dwopcert@doh.wa.gov](mailto:dwopcert@doh.wa.gov) for assistance.  If you are still unsure whether an operator’s certification is current, contact Washington Certification Services, at [WCS@GreenRiver.edu](mailto:WCS@GreenRiver.edu), or call (253) 288-3357 for a list of active certifications. | | | | | |
| **No** |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | **Yes** | | **No** |
| 1. **Does the candidate intend to obtain a higher level of licensure/certification?** | | | | | | |
| **Yes** | These questions apply to **permanent operators** only. The public water system would be concerned with the long-term goals of a permanent operator, but likely not the long-terms goals of a contract operator.  This could be useful information if you are planning to expand your system or add new treatment processes that could potentially require a higher level of licensure/certification. Discuss with the operator whether you plan to defray the cost of any education and/or exams needed to achieve a higher level of licensure/certification.  You should also discuss with the candidate whether you plan to defray the cost of continuing education units needed to renew the operator’s current certification. | | | | | |
| **No** |
| Does the candidate meet any qualifications for higher certification? | | **Yes** | **No** | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |

## Part II—Operator Experience

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. **Does the candidate have experience operating your type and size of system (with similar treatment components)?** | | | | |
| **Yes** | An operator may possess the correct level of certification, but not possess experience compatible with your particular type of system or treatment technology. For instance, the operator may be experienced with ground water systems, but not surface water systems, or vice versa. Does the operator have experience operating the treatment processes found in your system? | | | |
| **No** |
| Notes: | | | | |
| Does he/she meet the qualifications? | | | **Yes** | **No** |
| 1. **Has the candidate received the required safety and security training?** | | | | |
| **Yes** | **No** | | | |
| **Will the candidate ensure that safety and security are priorities? How will they do so?** | | | | |
| **Yes** | **No** | | | |
| Notes: | | | | |
| Does he/she meet the qualifications? | | | **Yes** | **No** |
| 1. **How many years of relevant operating experience does the candidate possess?** | | | | |
| **Number of Years** | |  | | |
| Notes: | | | | |
| Does he/she meet the qualifications? | | | **Yes** | **No** |

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| 1. **What systems has the candidate worked for previously? Do they have references?** | | | | | | |
| Ask for references, including contact information. Verify all references. | | | | | | |
| **Previous System Name** | | **Contact Information** | | | **Reference?** | |
|  | |  | | | **Yes** | **No** |
|  | |  | | | **Yes** | **No** |
|  | |  | | | **Yes** | **No** |
|  | |  | | | **Yes** | **No** |
| Previous work restrictions. | | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |
| 1. **Has the candidate ever:** | | | | | | |
| Installed a meter? | | | **Yes** | **No** | | |
| Disconnected a delinquent customer? | | | **Yes** | **No** | | |
| Installed a chlorinator? | | | **Yes** | **No** | | |
| Prepared a Consumer Confidence Report (CCR)? | | | **Yes** | **No** | | |
| Attended a sanitary survey? | | | **Yes** | **No** | | |
| Developed an emergency response plan? | | | **Yes** | **No** | | |
| Developed a preventive maintenance plan? | | | **Yes** | **No** | | |
| Provided public notification? | | | **Yes** | **No** | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |
| 1. **Does the candidate know how to locate a suspected leak?** | | | | | | |
| **Yes** | **No** | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |
| 1. **Does the candidate know how to locate an illegal connection?** | | | | | | |
| **Yes** | **No** | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |
| 1. **Ask the candidate to describe the requirements of the Revised Total Coliform Rule.** | | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |
| 1. **Ask the candidate to describe the requirements of the Surface Water Treatment Rules and/or Ground Water Rule, as applicable based on your public water system’s source water type(s).** | | | | | | |
| Notes: | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | **No** |

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| 1. **Ask the candidate to describe the process for putting a main back into service after a loss of pressure event.** | | |
| Notes: | | |
| Does he/she meet the qualifications? | **Yes** | **No** |
| 1. **Ask the candidate to explain when there is a need to chlorinate and the process and equipment used, if applicable, based on whether your water system uses disinfection.** | | |
| Notes: | | |
| Does he/she meet the qualifications? | **Yes** | **No** |
| 1. **Ask the candidate what type of reporting he/she believes is required for this system.** | | |
| Notes: | | |
| Does he/she meet the qualifications? | **Yes** | **No** |

## Part III—Availability

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Which other system(s) does the candidate currently work for and are there any work restrictions?** | | | | | | | | | | |
| Ask for the names, locations, and compliance status of all systems currently employing the candidate. | | | | | | | | | | |
| **System Name** | **Location** | | | | **Compliance Status** | | | | | |
|  |  | | | |  | | | | | |
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|  |  | | | |  | | | | | |
|  |  | | | |  | | | | | |
| Work restrictions. | | | | | | | | | | |
| **How much time does the candidate spend at each water system per week?** | | | | | | | | | | |
| Hours per week. | | | | | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | **Yes** | | | **No** | |
| 1. **How often will the operator visit your water system?** | | | | | | | | | | |
| Number of hours per visit. | | These questions apply to **contract operators** only. Permanent operators would be at the water system as the decision-maker dictates. | | | | | | | | | |
| Number of visits per week.\* | |
| **Will the visits be the same day each week or on random days?** | | | | **Same day/week** | | **Random days** | | | | |
| **Is there an appropriately certified backup operator that can manage the system in their absence? (See question 1, Part I.)** | | | | | | | **Yes** | | | **No** |
| **How does the candidate address weekends, holidays, vacations, and illnesses?** | | | | | | | | | | |
|  | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | **Yes** | | | **No** | | |
| *\*Special note about staffing surface water treatment plants: these plants must be visited by a certified water treatment plant operator every day of operation including weekends and holidays. Certain highly automated plants using slow sand, bag, or membrane filtration may request approval for remote monitoring to replace some on-site visits* | | | | | | | | | | |
| 1. **How quickly will the candidate be able to respond to an emergency?** | | | | | | | | | | |
| Estimated response time to be physically present in an emergency. | | | This question applies to **contract operators** only. Permanent operators are at the water system as the decision-maker dictates.  A contract operator must, (1) be available on-site or able to be contacted immediately by telephone or other electronic communication 24 hours per day, every day; and, (2) be able to initiate appropriate action within two hours of contact, as required for certified operators in responsible charge under WAC 246-292-032(2), for every public water system that the contract operator is under contract; (WAC 246-292-055). | | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | **Yes** | | | **No** | |

## Part IV—Tasks Performed

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **What will the candidate specifically check and record during each visit?** | | | | | | | | | | | |
| This question applies to **contract operators** only. Permanent operators would be at the water system as the public water system dictates.  See list of “Potential Operator Duties” that identifies possible duties to discuss with the candidate. | | | | | | | | | | | |
| Notes: | | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | | **Yes** | | **No** | |
| 1. **Is the candidate familiar with the particular water system’s design and operations and maintenance (O&M) requirements?** | | | | | | | | | | |
| **Yes** | | **No** | | | | | | | | |
| **Can the candidate conduct repairs and routine maintenance as needed (including equipment calibration)?** | | | | | | | | | | |
| **Yes** | | **No** | | | | | | | | |
| **Will the candidate provide the necessary testing equipment and reagents, or must the water system provide the equipment?** | | | | | | | | | | |
| **Candidate** | | | **Water System** | | | This question applies to **contract operators** only. The water system will provide all necessary equipment for use by permanent operators. | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | **Yes** | | **No** | |
| 1. **Does the candidate have a standard O&M strategy for each system they operate?** | | | | | | | | | | |
| **Yes** | | **No** | | | | | | | | |
| **Can the candidate provide an example of an operational log sheet that they completed for a similar system?** | | | | | | | | | | |
| **Yes** | | **No** | | This question applies to **contract operators** only. A public water system will likely have a form or log the permanent operator would use. Contract operators may be asked to develop one for the water system | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | **Yes** | | **No** | |
| 1. **Provide the candidate with a copy of the water system operating permit. Is he/she familiar with the regulatory requirements for this system type and size?** | | | | | | | | | | |
| **Yes** | | **No** | | | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | **Yes** | | **No** | |
| 1. **Can the candidate perform minor repairs, required operational testing and basic system troubleshooting?** | | | | | | | | | | |
| **Yes** | **No** | | | | It is desirable for the operator to be capable of performing operational testing and routine mechanical and electrical maintenance. This may provide cost savings versus hiring additional commercial services for testing and maintenance. However, commercial services and/or consulting engineering services may be required for maintenance that is more complex, or for operational problems. | | | | | |
| **Is the candidate willing to perform this work as part of the written agreement?** | | | | | | | | | | |
| **Yes** | | **No** | |  | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | **Yes** | | **No** | |

|  |  |  |
| --- | --- | --- |
| 1. **Discuss the minimum required and expected duties to be completed by the candidate.** | | |
| Include in the written agreement a list of duties that, at a minimum, must be completed and the frequency with which each duty must be performed.  See the list of “Potential Operator Duties” that identifies possible duties to discuss with the candidate.  Duties that are not required, but may be needed or expected to be done to carry out required duties, are typically system-specific and could include weed and trash removal to maintain access to a well house, storage tank or surface water system intake; vector control in a well house or electrical room to prevent destruction of electrical wiring, or insulating pressure tanks. | | |
| Notes: | | |
| Does he/she meet the qualifications? | **Yes** | **No** |

## Part V—Other Qualifications and Information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Does the candidate carry adequate liability insurance?** | | | | | | | |
| **Yes** | **No** | These questions apply to **contract operators** only.  This helps protect the owner from potential lawsuits in case the contractor or a contractor’s employee is injured.  The owner may want to ask the contract operator to have the insurance company name the utility as an additional insured party. | | | | | |
| **Does the insurance cover personal injury and claims for bodily injury, death, or personal property damage that may arise for the operation of the system?** | | | | | | | |
| **Yes** | **No** |  | | | | | |
| **If yes, how much coverage and with which insurance company?** | | | | | | | |
| Coverage Amount | | |  | Insurance Company Name |  | | |
| Notes: | | | | | | | |
| Does he/she meet the qualifications? | | | | | | **Yes** | **No** |
| 1. **Does the candidate have a tax identification number?** | | | | | | | |
| **Yes** | **No** | This question applies to **contract operators** only. | | | | | |
| Notes: | | | | | | | |
| Does he/she meet the qualifications? | | | | | | **Yes** | **No** |
| 1. **Does the candidate have a valid driver’s license?** | | | | | | | |
| **Yes** | **No** |  | | | | | |
| **Does the candidate have a license appropriate to the vehicle(s) that they will use for the job?** | | | | | | | |
| **Yes** | **No** |  | | | | | |
| **Are there any license restrictions?** | | | | | | | |
| **Yes** | **No** |  | | | | | |
| Notes: | | | | | | | |
| Does he/she meet the qualifications? | | | | | | **Yes** | **No** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **What is the candidate’s fee and what does it include?** | | | | | | | | | | |
| Fee |  | | | | | | | These questions apply to **contract operators** only. | | |
| Activities included | | | |  | | | |
| **Is time charged for travel or only for time spent on-site?** | | | | | | | | | | |
| Time for travel **and** on site. | | | | | | Time on site only. | | | | |
| **Are there additional charges for after-hours or emergency visits?** | | | | | | | | | | |
| **Yes** | | **No** |  | | | | | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | | | **Yes** | **No** |
| 1. **Is the candidate part of a group/company, or are they an independent operator?** | | | | | | | | | | |
| **Group/Company** | | | | | **Independent** | | This question applies to **contract operators** only. | | | |
| Notes: | | | | | | | | | | |
| Does he/she meet the qualifications? | | | | | | | | | **Yes** | **No** |

# Topics for the Written Agreement with the Operator—Developing Terms of Employment or a Contract

It is important for decision-makers to clearly document operator expectations in the form of a written agreement, such as a contract or terms of employment. This applies to both permanent employees and contract operators. This helps ensure all legal responsibilities are met and reduces the possibility for miscommunication about water system responsibilities. Using the information in this section along with the list of “Potential Operator Duties” can help you develop a written agreement with an operator.

The written agreement should place the operator in direct responsible charge of all matters pertaining to the water system and should cover more than routine sampling. (An operator in direct responsible charge is the certified operator at the public water system who has authority to make operational decisions affecting water quality or quantity. This can be a permanent employee or a contract operator. Contact ODW to learn how to designate an operator in responsible charge for your system.) The operator in direct responsible charge does not necessarily have to perform every day-to-day operating task, and they can have other people work under their supervision. However, please note that **while some tasks can be delegated, the responsibility that comes with being the operator in direct responsible charge cannot be delegated**. You should also note that designating an operator in direct responsible charge of your system does not transfer any of your legal responsibilities as a decision-maker for the public water system.

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| --- |
| **Topics for Written Agreement with the Operator** |
| **Parties Involved** |
| Name and address of operator. |
| Certifications held by operator. |
| Public water system name and address. |
| **Description of Water System** |
| A brief description of the public water system. Indicate number of service connections, type of treatment present, water source information, etc. |
|  |

Once you have made the decision to hire or contract with an operator, you may want to consider including the following topics in a written agreement. Note that some topics may not be applicable to your situation. Some topics are applicable only to operators hired on a permanent basis and are denoted by [Permanent Operator]. Some topics are applicable only to operators hired on a contractual basis and are denoted by [Contract Operator].

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| --- |
| **Purpose of the Written Agreement/Contract** |
| This is the reason why the written agreement/contract is needed. The purpose statement can include goals, such as delivering safe drinking water to customers, protecting public health, and complying with state and federal requirements. |
| **Contract Duration** |
| [Contract Operator] The effective starting date and the effective termination date of the contract.  [Contract Operator] Provisions to renew the contract.  [Contract Operator] This contract should have an agreement of termination (by either party) by advanced, written notice of a specified number of days. It should also outline some conditions for termination, such as falsification of records by the operator or enforcement action by the licensing/certification agency. |
| **Compensation** |
| Compensation covers how much the operator will be paid for their services.  [Contract Operator] This may include a detailed fee structure for the contract. Depending on how the contract is structured, be aware that there may be additional fees for certain situations, such as emergency call services.  [Permanent Operator] This may include a salary and terms of employment for the operator. Depending on how the agreement is structured, the operator may be entitled to overtime pay or other compensation.  [Contract Operator] Specify a payment method. Consider things such as who will make the payments and whether or not the contractor will submit monthly invoices.  Compensation can also cover health benefits, worker’s compensation and disability benefits, leave benefits (e.g., vacation, medical, holiday, personal leave and paid paternity or maternity leave) and other benefits offered by the public water system under the terms of the agreement. |
| **Operator Time** |
| [Contract Operator] The owner/decision-maker and operator should jointly designate the number of routine visits and the minimum number of hours spent per day, per week or per month at the public water system.  [Permanent Operator] The agreement should explain expectations for the operator’s work hours, such as the minimum number of hours spent per day, per week or per month at the public water system.  [Contract Operator] The owner/decision-maker and operator should also jointly determine the maximum acceptable response time when responding to an emergency or to troubleshoot operational problems. The acceptable response time may vary depending on the treatment components and distribution system of the particular water system, remoteness of system and the nature and severity of the problem. [Note that your state agency may have regulatory requirements pertaining to emergency response time and operator availability.] |
| **Operator Duties** |
| Duties and the frequency that each duty is to be performed by the operator.  Information included in the list of “Potential Operator Duties” can help you develop this section of the written agreement.  [Contract Operator] The owner/decision-maker and operator should jointly designate the extent to which the operator will provide the necessary testing, maintenance equipment, treatment supplies, and reagents. |

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| **Operator Responsibilities** |
| As the designated operator in responsible charge, the operator is responsible for maintaining a valid license/certification that is equal to or greater than the classification of the public water system being served.  The written agreement should include a statement such as: “[Name] will be in direct responsible charge of all operations and maintenance of the public water system.”  The operator should take continuing education training courses on topics relevant to the facility (e.g., based on distribution or treatment characteristics).  The operator should annually provide a photocopy of his/her renewed operator’s license/certification to the owner/decision-maker of the public water system.  [Contract Operator] The operator should also send a copy upon renewal of the contract.  [Contract Operator] The operator is also responsible for providing a certified substitute or back-up operator during those times when the system is in operation and he/she is not available or is inaccessible. The substitute/back-up operator should also provide the owner/decision-maker with a current photocopy of his/her license/certification.  The operator is responsible for maintaining adequate records to document that all agreement provisions are being met and to assure that the agreed upon duties are performed. This can include a log that will document tasks accomplished. These records will be kept at the system and available to the owner/decision-maker at all times.  The operator is responsible for having telephone numbers, email addresses or other relevant means of communication on behalf of the owner/decision-maker.  The operator is responsible for informing the owner/decision-maker of any duties performed by a subcontractor at the site. They should be given prior approval by the owner/decision-maker.  The operator is responsible for maintaining a safe working environment. |
| **Owner/Decision-Maker Responsibilities** |
| The responsibility retained by the owner/decision-maker must be clearly documented.  [Permanent Operator] Whether the owner/decision-maker will cover the cost of continuing education units to renew the operator’s license/certification.  The owner/decision-maker should also retain copies of the agreement and routinely review operations to assure the operator is performing all of the required duties.  The owner/decision-maker will provide a list of routine operational checks to be made by the operator. The owner/decision-maker will notify the operator of any unplanned operational problems, repairs or modifications that arise in the operator’s absence.  [Contract Operator] The owner/decision-maker and contract operator shall jointly determine a maximum response time within which the owner/decision-maker will notify the contract operator after the owner/decision-maker or a water system user experiences or recognizes an operational problem or emergency.  [Permanent Operator] The owner/decision-maker is responsible for providing the resources required for routine operation and maintenance, repairs, and necessary capital improvements.  [Contract Operator] The owner/decision-maker and contract operator shall jointly determine the extent to which the operator will provide the resources required for routine operation and maintenance, repairs, and necessary capital improvements and the extent to which the owner/decision-maker will provide such resources.  The owner/decision-maker is responsible for having telephone numbers, email addresses or other relevant means of communication on behalf of both the designated operator in responsible charge and any substitute operators.  The owner/decision-maker is responsible for providing a safe working environment. |
| **Insurance** |
| [Contract Operator] Specify whether the contract operator will provide comprehensive general liability insurance to cover bodily injury and property damage resulting from negligent performance of the service covered in the contract. The owner/decision-maker is responsible to provide a safe working environment and should have his/her own insurance.  [Contract Operator] The contract operator should provide a copy of proof of insurance to the owner/decision-maker. |
| **Signatures of all Parties Involved** |
| The agreement must be signed by all parties, including the owner/decision-maker and the operator.  [Contract Operator] In cases where the contractor is a firm or company, an official of the firm or company employing the operator must also sign the agreement. |
| **Note: All participants should retain a copy of the final written agreement signed by all parties.** |

# Potential Operator Duties

It is important for decision-makers to clearly document an operator’s duties in the form of a written agreement, such as a contract or terms of employment. This applies to both permanent employees and contract operators. Having a written agreement helps to ensure that all legal responsibilities are met and reduces the possibility for miscommunication about water system responsibilities.

The following list of potential operator duties can be used to help you develop a written agreement with an operator. Not all of the potential duties listed below will apply to your system. You should review and modify this list to ensure the operator duties are specific to your system. The list can be used together with the “Topics for the Written Agreement with the Operator” to help you develop a written agreement.

In order to help you determine which duties apply to your system, some duties are denoted as “applicable to **ground water systems** only,” “applicable to **surface water systems** only,” or “not applicable to systems that only **purchase water and do not treat** water.”

## Personnel

* Recommend appropriate staffing levels to the public water system decision-maker, according to the water system’s standard operating procedures (SOPs) as well as observations of system operations and personnel.
* Train and supervise other public water system personnel in the performance of daily activities, such as:
  + General public water system operations and maintenance (O&M) procedures.
  + Sampling.
  + Safety.
  + Emergency response.
  + Reporting and recordkeeping.

## Continuing Education/Professional Development

* Maintain all valid operator certifications while the agreement is in effect (treatment, distribution, wastewater, safety, etc.).
* Attend training programs/continuing education programs needed for certification renewal.
* Oversee certification and training status for public water system staff and other contract operations staff under direct supervision.
* Stay abreast of changes to EPA or state drinking water regulations and guidance/best practices.
* Hold and attend regular safety meetings for field and office staff, where appropriate. Ensure staff are properly certified for the public water system’s safety procedures (CPR, competent person, confined space entry, lock-out/tag-out, etc.).
* Obtain any other necessary training/education as a result of (for example):
  + Equipment upgrades at the public water system.
  + Changes in treatment processes at the public water system [not applicable to systems that only **purchase water and do not treat** water].
  + New regulations (e.g., related to drinking water or safety).

## Written Plans, Reports, and Recordkeeping

* Prepare and submit or securely file monthly operational reports and records for operational process integrity.
* Develop and/or maintain operational, maintenance and administrative records of all public water system activities according to state requirements, such as:
  + Water quality sampling plans.
  + Water quality sampling reports.
  + Consumer Confidence Reports (CCRs) and public notifications.
  + Backflow prevention device records (location, owner, test results, etc.), if applicable.
  + Water use efficiency reports, if applicable.
  + Monthly master meter readings of source water quantity [not applicable to systems that only **purchase water and do not treat** water] and treated water quantity entering the distribution system.
  + A distribution system map.
* Record results of inspections and sanitary surveys, including for example:
  + Completing any required state forms.
  + Noting deficiencies/hazards that have the potential to jeopardize the sanitary integrity or reliability of the public water system.
  + Recommending appropriate corrective action.
* Ensure all required state reporting forms and reports are completed properly and submitted in a timely manner.
* Answer customer complaints on water quality/quantity issues and develop and maintain a complaint log book.
* Develop or modify water system schematics and as-built drawings, as necessary.
* Supervise public water system personnel, including:
  + Providing direction for personnel to follow when the operator is not present
  + Reviewing the actions of personnel between scheduled state inspections
  + Approving work orders generated for field operators
* Maintain system information and records in centrally-located and easily-accessible system/format. For more information visit EPA’s Knowledge Retention Tool.
* Provide information to the owner/decision-maker in order for him/her to complete forms designating a certified operator in responsible charge.
* Provide information to the decision-maker for him/her to maintain updated public water system profile information (e.g., new service connections, sources, treatment operations, etc.).

## Water System Planning

* Collect and provide public water system owner/decision-maker with information on developing a budget for the public water system, for example:
  + Providing an estimate of likely capital expenditures needed during the period of service.
  + Collecting field data on the condition and operational status of infrastructure assets.
  + Identifying needed asset repair or rehabilitation projects, as well as new capital infrastructure projects, during the period of service.
* Develop and maintain a schedule of required sampling and a regulatory agency sanitary survey/inspection schedule.
* Review the regulatory monitoring/sampling schedule and determine cost of sample collection, sampling station maintenance/repair and laboratory analysis of water samples.
* Develop and maintain public water system plans, such as:
  + A distribution system map (or mapping program) showing pump stations, finished water storage reservoirs, pressure reducing valves (PRVs), pipe (date installed, diameter and material) locations, valve locations (especially pressure zone breaks), blow-offs and sampling station locations.
  + A cross-connection control program.
  + An asset management plan or other infrastructure replacement tracking program.
  + An operation and maintenance budget plan.
  + An emergency response plan.
  + A safety program plan.
  + A wellhead protection plan [applicable to **ground water systems** only].
  + A source water protection program plan [applicable to **surface water systems** only].
  + Water quality sampling plans.
  + SOPs.
* Collect and provide information for necessary permits. Confirm that required approvals and permits have been obtained, including:
  + Construction permits (prior to the start of construction).
  + Operating permits (prior to start of operation).
* Manage capital improvement projects, including managing construction contractor work and contract execution.
  + Coordinate prioritization of capital improvement projects with owner/decision-maker.
* Develop and maintain a public water system standard O&M manual with up-to-date state regulations, best practices/guidelines and other pertinent documents or correspondence.
* Ensure that the public water system owner/decision-maker is fully informed of modifications and repairs and maintenance.
* Identify potential solutions in case of a water shortage, such as:
  + Alternative water sources (e.g., new or standby emergency well) [not applicable to systems that only **purchase water and do not treat** water t].
  + Purchasing water from other public water system.
  + Water restriction and conservation strategies (for both consumers and the public water system).
* Carry out duties to bring new water sources online [not applicable to systems that **only purchase water and do not treat** water]:
  + Including following any state requirements for monitoring of new sources.

## Water System Operations and Water Quality Assurance

* Analyze operational data to determine changes and improvements to the public water system for more efficient operation.
* Recommend changes to SOPs or treatment [not applicable to systems that only purchase water and do not treat water] processes.
* Perform or oversee routine operational sampling, as well as repeat and confirmation sampling if triggered by routine sampling results, in accordance with state requirements or guidance, such as analyses for:
  + Total coliform/E. coli.
  + Nitrite/nitrate [not applicable to systems that only **purchase water and do not treat** water].
  + Lead and copper [corrosion control treatment not applicable to systems that only **purchase water and do not treat** water].
  + Arsenic [not applicable to systems that only **purchase water and do not treat** water].
  + Chlorine (if disinfecting, public water system must maintain a free chlorine/total chlorine residual of 0.2 mg/L).
  + Fluoride (public water systems must maintain a fluoride level of 0.7 mg/L) [not applicable to systems that only **purchase water and do not treat** water].
  + Turbidity and/or particle count data [applicable to **surface water systems** only].
  + Alkalinity.
  + Hardness.
  + Iron and manganese.
  + Water treatment plant residuals [not applicable to systems that only **purchase water and do not treat** water].
* Maintain a list of process control tests to be performed and prepare a monthly process control operational report.
* Monitor water turnover in finished water treatment [not applicable to systems that only **purchase water and do not treat** water] and storage tanks.
* Perform or oversee critical, routine or periodic functions, such as:
  + Ordering and mixing chemicals [not applicable to systems that only **purchase water and do not treat** water].
  + Calibrating monitoring and pumping equipment.
  + Maintaining and calibrating testing water treatment plant equipment and instruments.
  + Adjusting chemical dosage [not applicable to systems that only **purchase water and do not treat** water].
  + Exercise and locate distribution system valves.
  + Water main leak detection.
  + Calculating disinfection and disinfectant levels.
* Oversee customer connection activities, such as:
  + Performing routine customer meter reading.
  + Completing customer shut-offs/turn-ons (e.g., for nonpayment, customer vacancies, new connections).
  + Identifying and addressing illegal connections.
  + Water main locate tasks for utility location requests.
* Collect water quality samples in accordance with state requirements or guidance, including:
  + Collection of routine samples per the public water system sampling plan.
  + Collection of repeat or confirmation samples if triggered by routine sampling results.
* Confirm that appropriate sample chain of custody procedures are followed.
* Ensure that samples are analyzed by a state certified laboratory and within required timeframes.
* Respond to customer water quality and quantity (low water pressure) complaints.
* Promptly report any deficiencies to the decision-maker and take corrective action, as needed.
* Make note of any activities that may impact water quantity or quality of the public water system operation, such as:
  + Potential sources of contamination (e.g., increased activities or new structures) within a delineated wellhead [applicable to **ground water systems** only] or source water protection zone [applicable to **surface water systems** only].
  + Low well water yield affecting ground water sources [applicable to **ground water systems** only] or drought conditions affecting surface water sources [applicable to **surface water systems** only].
  + Security breaches of the water system (e.g., intruder alarms triggered at the water treatment plant [not applicable to systems that only **purchase water and do not treat** water] or storage tanks).

## Regulatory Responsibilities

* Report to EPA or state as necessary within the required timeframes, such as:
  + When a boil water order is issued.
  + When a maximum contaminant level (MCL), maximum residual disinfectant level (MRDL) or lead or copper action level is exceeded.
  + When a treatment technique requirement is not met.
  + When an emergency occurs.
* Be present for all state inspections and sanitary surveys.
  + Provide available information that will enable the regulatory agency to conduct a sanitary survey.
* Carry out follow-up activities to address issues identified within the required timeframe, such as:
  + Conducting additional sampling if triggered by routine sample results.
  + Performing public notification.
  + Conducting emergency disinfection.
  + Correcting identified significant deficiencies or sanitary defects.

## Water System Maintenance

* Conduct routine inspections, correct deficiencies and address areas of concern for the public water system.
* Perform or oversee ongoing and preventative maintenance activities in the distribution system, such as:
  + Repairing or replacing broken/non-functioning hydrants and valves that do not close properly or have broken stems.
  + Maintaining cathodic protection equipment installed for transmission and distribution system pipe.
  + Painting and resurfacing interior and exterior of finished water storage facilities.
  + Replacing water mains where condition of the main is poor or the diameter of the pipe creates flow restrictions.
  + Protecting the distribution system against cross-connection contamination.
  + Ensuring the accuracy of water meters and other flow measuring devices, including maintaining and testing customer meters on a regular basis.
  + Exercising all hydrants and valves on a regular basis.
  + Cleaning, flushing, disinfecting and testing the distribution system and storage tanks, as needed.
  + Repairing broken mains or equipment quickly and efficiently to restore the normal level of service.
* Perform or oversee ongoing and preventative maintenance activities related to pumps and pump stations, such as:
  + Regularly lubricating pumps and motors.
  + Observing pump motors routinely to detect unusual noises, vibrations or excessive heat.
  + Inspecting, adjusting and cleaning pump seals, packing glands and any mechanical seals when necessary.
* Perform or oversee ongoing and preventative maintenance activities related to treatment facilities [not applicable to systems that only **purchase water and do not treat** water], such as:
  + Cleaning and resanding filter bays and filter vessels.
  + Removing sludge from sedimentation basins.
  + Cleaning sediment from clearwells.
  + Cleaning chlorine injection points.
  + Cleaning and dewatering the backwash retention pond(s) and removing and drying the sludge (water treatment plant residuals).
  + Disinfect ground water wells [applicable to **ground water systems** only].
* Monitor activity within the wellhead protection zone [applicable to ground water systems only] and/or source water protection zone [applicable to **surface water systems** only], if applicable.
* Oversee and monitor repairs performed on the public water system, including:
  + Maintaining an adequate spare parts inventory (pipe, valves, hydrants, pipe restraints, small metering pumps, water meters, small meter and valve vaults with lids, etc.) and a list of supplier contact information.
  + Securing labor and materials for correcting any maintenance or operational problems.
  + Ensuring storage tanks and well pumps and pads [applicable to **ground water sy**stems only] are in good working order.
* Confirm that basic site work and housekeeping/maintenance activities are performed, such as:
  + Keeping interior floors free of mud, debris, trash, spilled chemicals, etc.
  + Maintaining and mowing grass around water system facilities, or securing a third party to perform this function.
  + Properly storing equipment, tools and other materials.
* Conduct periodic on-site inspections according to state requirements, including routine visual inspections and minor repairs of:
  + Water sources and intakes [applicable to **surface water systems** only].
  + Well pits and well heads [applicable to **ground water systems** only].
  + Pumps.
  + Finished water storage tanks.
  + Chemical feed equipment [not applicable to systems that only **purchase water and do not treat** water].

## Emergency/Security

* Maintain, update (if necessary) and implement an emergency response plan.
  + Update the list of emergency contacts for the public water system, as necessary.
* Maintaining emergency service contracts for after-hours water main repair, pump repair and finished water storage cleaning and repair.
* Be available for participation in table-top testing of the emergency response plan.
* After an emergency event, support short-, mid- and long-term strategies to return the public water system to normal operating status.
  + Participate in activation of an incident command center and emergency activation center, as necessary.
  + Ensure that the decision-maker and regulatory agency are fully informed about any emergencies.
* Be available during all operating shifts for emergency situations, including:
  + Responding to actual emergencies within four hours.
  + Working with federal, state and/or local agencies until the emergency is resolved and the public water system returns to normal operation.
  + If unable to respond within the required timeframe, providing for an alternate certified operator to respond to the actual emergency.
* Ensure the use of proper security procedures, such as:
  + Storing chemicals in locked areas with proper safety equipment [not applicable to systems that only **purchase water and do not treat** water].
  + Performing periodic security inspections.
  + Ensuring that security equipment (e.g., fences, closed-circuit TV systems, intrusion alarms through supervisory control and data acquisition [SCADA] systems) is in good working condition.

## Administrative/Other

* Maintain a safe working environment.
* Work in coordination with customer service, engineering, water quality and finance departments of the public water system.
* Provide required notices to the owner/decision-maker and state, such as providing notice prior to terminating a contract.
* Discuss state correspondence with the decision-maker and maintain a filing system for correspondence.
* Attend public water system board meetings, if applicable, to report on work completed on the system, as well as short-term and long-term system needs.
* Respond to information requests from local officials, such as requests regarding the location of distribution mains.

# Additional State Contacts and Resources

## Need Help Finding Information on Water System Issues?

|  |  |
| --- | --- |
| Operator Licensing/Certification | [doh.wa.gov/OpCert](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/WaterworksOperatorCertification) |
| Operator Training and Technical Assistance | [doh.wa.gov/OpTraining](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/Training) |
| Drinking Water Division—Regulatory Information, Water Quality Reporting | [doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules) |
| Capacity Development Program—Asset management, long-range planning, setting rates, access to infrastructure funding, water loss, energy efficiency, water system partnerships | [doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/CapacityDevelopment](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/CapacityDevelopment) |
| Consumer Confidence Reports (CCRs) | [doh.wa.gov/ccrreports](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/CCRReports) |
| Public Notification | [doh.wa.gov/CommunityandEnvironment/DrinkingWater/DrinkingWaterEmergencies/PublicNotification](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/DrinkingWaterEmergencies/PublicNotification) |
| State Revolving Loan Fund—Infrastructure funding | [doh.wa.gov/DWSRF](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/DrinkingWaterStateRevolvingFundDWSRF) |
| Emergency Response | [doh.wa.gov/DrinkingWaterEmergencies](http://www.doh.wa.gov/DrinkingWaterEmergencies) |

On the next page is a form to support development of available job listings. Fill in the necessary information for posting a job listing to a job board site or any other platform.

## Job Announcement Posting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Water System/Community Name** | | |  | |
| **Date of Posting** | | | Click or tap to enter a date. | |
| **Employer** | | |  | |
| **Job Title** | | |  | |
| **Job Description** | | | | |
|  | | | | |
| **Salary/Benefits** | | | | |
|  | | | | |
| **Qualifications** | | | | |
|  | | | | |
| **To apply, submit all that are checked.** | | | | |
| Cover Letter | Resume | | | Application/Form |
| **Submit by** | Click or tap to enter a date. | | | |
| **Submit to** |  | | | |
|  |  | | | |
|  |  | | | |
| **For further information contact** | |  | | |
|  | |  | | |