

WATER OPERATOR HIRING AND CONTRACTING GUIDE

Water Operator Hiring and Contracting Guide

Instructions for primacy agencies on customizing this document prior to distribution.

This document is a resource that can help public water system decision-makers hire or contract with a licensed/certified water operator. The document is not ready to be distributed to public water systems in its current form. It is designed to be customized by state drinking water programs and other primacy agencies prior to distribution. This will ensure that any primacy agency-specific regulations, resources or materials are reflected in the document.

You should review the document for the fillable areas and replace them with information specific to your state. There are also notes throughout the guide that provide additional direction and items for state personnel to consider when customizing the guide. After customization is complete, the document will be ready to distribute to the public water systems in your state. The document can be posted to a website, printed and/or distributed. A Microsoft Word version of the Guide is also available.

Use this table to find the placeholders that should be replaced with primacy agency-specific information.

Section	Page Number	Number of Placeholders	Placeholder
Operator Hiring and	1 (Top of Document)	1	State logo
Contracting Guide Start Interactive	1 (What is a licensed/certified operator?)	2	Name of state drinking water agency and state name
	2 (How can a licensed/certified operator help?)	1	Name of state drinking water agency
	2 (How do I get started?)	2	Name of state drinking water agency
	2 (Name of State Drinking Water Agency)	5	Contact information for state drinking water program staff (name of state drinking water agency, phone number(s), email address, mailing address, and website)
Water System Decision- Maker and Water System Operator Responsibilities	6 (Footnote)	2	Name of state drinking water agency
Operator Interview Tool	11 (Question 2)	4	Web link to system classification information, contact information for state drinking water program staff, and weblink to database of current operators
	18 (Question 18)	1	State regulations or recommendations for emergency response time
Topics for the Written Agreement with the Operator-Developing Terms of Employment or a Contract	25 (Top of the Page)	1	Name of state drinking water agency

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Section	Page Number	Number of Placeholders	Placeholder
Potential Operator Duties	32 (Water System Operations and Water Quality Assurance)	2	State requirement of free chlorine/total chlorine residual and state requirement for the fluoride level
	35 (Emergency/Security)	1	Required timeframe to respond to emergencies
Additional State Contacts and Resources	36 (Need help finding information on water system issues?)	7	Web link to the state website or contact information to access more information
	36 (Need help finding information on water system issues?)	1	Documents that may be useful for small systems (e.g., forms used to update information on the operator in responsible charge)

In the section "Water System Decision-Maker and Water System Operator Responsibilities," quick navigation buttons are located above the table that can be used to quickly access the sections of the multi-page table by clicking on a button.



WATER OPERATOR HIRING AND CONTRACTING GUIDE

Add state logo

Purpose of this Document

Communities depend on drinking water and wastewater operators every day for safe water. This document is a resource that can help public water system decision-makers hire or contract with a licensed/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. This document offers suggestions on how to find the right operator for your system, helps you to communicate with your operator about water system responsibilities and assists with your documentation of expectations for operating the water system.

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

- Small towns
- Rural water districts
- Manufactured home communities
- Homeowners' associations
- Small, privately-owned water systems

This document includes the following information:

1. How a licensed/certified operator can help ensure the provision of safe drinking water

- 2. A table of roles and responsibilities of decision-makers and operators that can help 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 that can be included in a written agreement with your operator

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.

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' associations board members and those who own or operate manufactured home communities.

What is a licensed/certified operator?

A licensed/certified operator is an individual who is licensed or certified by to

operate and maintain a public water system in A licensed/certified operator can help you operate your water system and maintain compliance with drinking water regulations.

How can a licensed/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:

- 1. Water quality sampling
- 2. Reporting and recordkeeping
- 3. Employing properly licensed/certified operators
- 4. Design, construction and operation of water systems
- 5. Emergency situations

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

Most public water systems are legally required to have a licensed/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 state agency to learn what level of licensure or 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.



What is an operator in direct responsible charge?

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

How do I get started?

The first stop for information is the State Drinking Water Agency

The state agency can provide advice specific to your public water system, including requirements regarding licensed/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

State Drinking Water Agency

Phone:

Email:

Mail:

Website: www.site.com

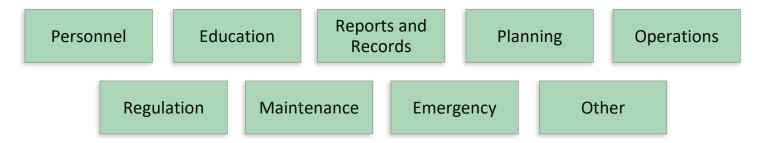
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Water System Decision-Maker and Water System Operator Responsibilities

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

If you are using this document in an electronic format, the buttons below can be used to navigate to a specific section.



Water System Decision-Maker Responsibilities and Water System Operator Responsibilities

Water System Decision-Maker Responsibilities	Water System Operator Responsibilities			
PERSONNEL				
Summary: Decision-makers should ensure that there are enough qualified staff for proper operation of the public water system.	Summary: Water system operators should communicate with the decision-maker about staff needed to complete particular tasks.			
 Employ appropriate/qualified staff (e.g., a licensed/certified operator): Understand licensing/certification requirements. Ensure the operator has appropriate experience and licensing/certification credentials for the type of public water system. 	Recommend appropriate staffing levels to decision-maker.			

Water System Water System Operator **Decision-Maker** Responsibilities Responsibilities Ensure appropriate staffing levels and appropriate onsite presence and/or offsite availability. Conduct performance evaluations and an exit interview Maintain centrally-located and easily-accessible system with the operator. Develop procedures for handling information in order to terminated employees. • Increase organization and coordination among operators; Assist in personnel transition; and ■ Ensure the decision-maker has access to current information. For more information visit EPA's Small Public Water System Knowledge Retention Tool. Train and supervise other water system support staff in the Ensure staff training needs are met and provide performance of daily activities, if applicable. opportunities for operators and others to attend training.

CONTINUING EDUCATION/PROFESSIONAL DEVELOPMENT

Summary: Decision-makers should stay informed about best management practices and regulatory information in order to effectively manage their public water systems. This can occur through regular communication with state and local officials.

Summary: Water system operators should stay informed about the latest operational and regulatory information in order to maintain their licenses/certifications, operate the public water system more effectively and ensure water system compliance. This can occur through regular communication with state and local officials.

Stay updated about changes in drinking water regulations and safety regulations.

Maintain required professional license/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.

Water System Decision-Maker Responsibilities	Water System Operator Responsibilities
Submit any required forms to the regulating agency designating a licensed/certified operator as the operator in responsible charge for the public water system.	Provide information to develop forms designating a licensed/certified operator in responsible charge.
Verify submission of monthly operational reports which capture a variety of information to highlight 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 the development and maintenance of a customer complaint log and responses to customer complaints.	Develop and maintain a customer complaint log and be responsive/identify when/how complaints were addressed.
Ensure the development of monitoring plans and that they are approved by the regulatory agency. Verify monitoring plans are updated appropriately.	Develop and maintain monitoring plans.
Ensure the development of water system schematics and verify the schematics are updated appropriately.	Develop water system schematics.
Ensure copies of sanitary survey/inspections are kept. Oversee the documentation of any follow-up that was required from inspections and document the time period it took to address and complete the required follow-up to sanitary surveys/inspections.	
Maintain and update public water system profile information and keep the 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 him/her to maintain updated public water system profile information (e.g., new service connections, sources, treatment operations, etc.).

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 the decision-maker to address 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 to maintain the delivery of a safe supply of water 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 the delivery of a safe and adequate supply of drinking water.
Develop and maintain an Asset Management Plan ¹ using information provided by the operator. For more information visit <u>EPA's Asset Management Resources</u> for State and Small Drinking Water Systems.	Collect and provide information necessary for the decision-maker to develop and maintain an Asset Management Plan. ¹
Ensure the operator develops and maintains an Operations and Maintenance Plan/Manual. ²	Develop, update and implement the Operations and Maintenance Plan/Manual. ²
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 have been obtained prior to the start of construction/operation and prior to making any changes in operations. Collect and provide information necessary for permits.

¹ **Asset management** is the practice of managing infrastructure capital assets (e.g., pumps, other equipment and buildings) to minimize the total cost of owning and operating them, while delivering the service level customers desire. An asset management plan serves as a tool to record all of a system's asset management practices and strategies. Contact for more information on asset management.

² An **Operations & 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 the provision of safe drinking water and compliance with regulations. Contact for more information on O&M manuals.

Water System Decision-Maker Responsibilities

Water System Operator Responsibilities

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.

WATER SYSTEM OPERATIONS AND WATER QUALITY ASSURANCE

Summary: Decision-makers should be knowledgeable about the 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 supply of water. They should also be aware of all sample results and take appropriate follow-up actions, as necessary.

Summary: Water system operators should be 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 supply of water. 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.

Water System Water System Operator **Decision-Maker** Responsibilities Responsibilities Ensure the use of a certified laboratory. Verify collection Collect samples and ensure that all samples are analyzed by a certified laboratory for the appropriate contaminant(s) and and reporting of sample results to state agency. delivered to the laboratory to allow sufficient time for testing. Report or verify reporting to state agency. Verify that water quality/quantity problems are Investigate water quality/quantity problems and take corrective investigated and corrective measures are taken, as measures, as needed. needed. REGULATORY RESPONSIBILITIES Summary: Decision-makers should ensure that the Summary: Water system operators should maintain communication with the decision-maker and regulatory agency water system is in compliance with all federal and to ensure compliance with all public water system state requirements. They should regularly communicate with the operator to ensure compliance requirements. with public water system requirements. Ensure that the regulatory agency is notified within Notify the regulatory agency within regulatory specified regulatory specified timeframes (e.g., boil order issued, timeframes (e.g., boil order issued, MCL exceeded, emergency). maximum contaminant level [MCL] exceeded, emergency). Conduct additional sampling and follow-up when necessary (e.g., Ensure sampling and follow-up are conducted when necessary (e.g., public notification, emergency public notification, emergency disinfection). disinfection). Attend all inspections/sanitary surveys conducted by the Attend all inspections/sanitary surveys conducted by the regulatory agency. regulatory agency. Provide any existing information that will enable the regulatory agency to conduct a sanitary survey. Promptly report deficiencies to the decision-maker. Ensure that any required follow-up is conducted by the Correct deficiencies and address areas of concern within

operator after the regulatory agency performs a sanitary

survey/inspection.

regulatory timeframes after the regulatory agency performs a

sanitary survey/inspection.

Water System Decision-Maker Responsibilities

Water System Operator Responsibilities

WATER SYSTEM MAINTENANCE

Summary: Decision-makers should 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 oversee operation and maintenance to maintain the safety and reliability of water service by ensuring that repairs and improvements are performed properly and in a timely manner. They also notify the decision-maker or responsible person about any repair and improvement needs and inform the decision-maker about the timeline 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 <u>EPA's Preventative Maintenance</u> <u>Tasks</u>.

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 ordering 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.

Water System Decision-Maker Responsibilities

Water System Operator Responsibilities

Ensure the development and implementation of a cross-connection control program.

Be responsible for protecting the distribution system against cross-connection contamination.

EMERGENCY/SECURITY

Summary: Decision-makers should 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 that the facility is secure from vandalism.

Summary: Operators should work closely with the decisionmaker to prepare for and respond to emergencies in the shortterm 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 about any emergencies.

Ensure emergency maintenance is conducted and, if necessary, implement the Emergency Response Plan.

Conduct emergency maintenance and implement 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. Work with federal, state or local agencies until the 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 should 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 should 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.

Regularly attend scheduled Water Board meetings.

Provide a safe working environment.

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 he/she has the knowledge and ability to ensure that 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. It can be used when 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 answers during the interview. You should review the Tool prior to performing the interview to ensure that you have a complete understanding of the questions. Beneath some questions is information that explains the intent of the question and 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

	candidate possess the required level of licensure/certification for your system? For which subclass is the candidate licensed/certified? When does the license/certification expire?
☐ Yes ☐ No	■ The potential operator must possess the required level of licensure/certification for your particular water system class and should have experience operating similar types of treatment processes and distribution systems.
Class and subc	ass of license/certification:
Expiration date	e of license/certification:
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No
2. Did the c	andidate provide you with a photocopy of his/her current license/certification?
□ Yes	■ The candidate should provide you with a photocopy of his/her current license/certification. If you have questions regarding the level or type (treatment, distribution or both) of license/certification required for your particular
	system, go to the to view the current system classifications, or contact your drinking water program staff at .
— ···	system, go to the to view the current system
	system, go to the classifications, or contact your drinking water program staff at . If you are unsure whether an operator's license/certification is current, go to
Notes:	system, go to the current system classifications, or contact your drinking water program staff at If you are unsure whether an operator's license/certification is current, go to for a list of current licenses/certifications,

3. Does the	candidate intend to obtain a higher level of licensure/certification?
☐ Yes ☐ No	■ 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.
□ NO	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 license/certification.
Does the car	ndidate meet any of the qualifications for a higher license/certification?
□ Yes □	No
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No
Part II – C	Operator Experience
	candidate have experience operating your type and size of system (treatment
compone	ents)?
☐ Yes ☐ No	An operator may possess the correct level of licensure/certification, but not possess experience compatible with your particular type of system. For instance, the operator may be experienced with ground water systems but not surface water systems, or vice versa.
Notes:	

5. Has the candidate received the required safety and security training?		
☐ Yes ☐ No		
Will the candidate ensure that safety and security are priorities? How?		
□ Yes □ No		
Notes:		
Does he/she meet qualifications?	☐ Yes	□ No
6. How many years of operating experience does the candidate possess?		
Number of years:		
Notes:		

Systems Previously Worked For	Contact Inform	ation	Reference	ce?
3.	a.		☐ Yes	□ No
b.	b.		☐ Yes	□ No
С.	C.		☐ Yes	□ No
d.	d.		☐ Yes	□ No
Previous work restrictions:	I			
Notos				
Notes:				
	Do	es he/she meet qualific	cations?	Yes □ No
	Do	es he/she meet qualific	cations?	Yes □ No
	Do	es he/she meet qualific	cations?	Yes 🗆 No
8. Has the candidate ever:	Do	es he/she meet qualific	cations?	Yes 🗆 No
8. Has the candidate ever: a. Installed a meter?	Do	es he/she meet qualific	cations?	Yes □ No
a. Installed a meter?				Yes □ No
		☐ Yes	□ No	Yes 🗆 No
a. Installed a meter?b. Disconnected a delinquent customer?		☐ Yes	□ No □ No	Yes □ No
a. Installed a meter?b. Disconnected a delinquent customer?c. Installed a chlorinator?	o port (CCR)?	☐ Yes ☐ Yes ☐ Yes	□ No □ No □ No	Yes □ No
a. Installed a meter?b. Disconnected a delinquent customer?c. Installed a chlorinator?d. Prepared a Consumer Confidence Rep	o port (CCR)? vey?	☐ Yes ☐ Yes ☐ Yes ☐ Yes	No No No No No	Yes
a. Installed a meter?b. Disconnected a delinquent customer?c. Installed a chlorinator?d. Prepared a Consumer Confidence Repe. Been in attendance for a sanitary surv	oort (CCR)? vey? lan?	☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	No No No No No No No	Yes
 a. Installed a meter? b. Disconnected a delinquent customer? c. Installed a chlorinator? d. Prepared a Consumer Confidence Rep e. Been in attendance for a sanitary surv f. Developed an Emergency Response Pl 	oort (CCR)? vey? lan?	☐ Yes	No No No No No No No No	Yes
 a. Installed a meter? b. Disconnected a delinquent customer? c. Installed a chlorinator? d. Prepared a Consumer Confidence Rep e. Been in attendance for a sanitary surv f. Developed an Emergency Response Pl g. Developed a preventive maintenance h. Provided public notification? 	oort (CCR)? vey? lan?	Yes Yes	No No No No No No No No	Yes
 a. Installed a meter? b. Disconnected a delinquent customer? c. Installed a chlorinator? d. Prepared a Consumer Confidence Rep e. Been in attendance for a sanitary surv f. Developed an Emergency Response Pl g. Developed a preventive maintenance 	oort (CCR)? vey? lan?	Yes Yes	No No No No No No No No	Yes
 a. Installed a meter? b. Disconnected a delinquent customer? c. Installed a chlorinator? d. Prepared a Consumer Confidence Rep e. Been in attendance for a sanitary surv f. Developed an Emergency Response Pl g. Developed a preventive maintenance h. Provided public notification? 	oort (CCR)? vey? lan?	Yes Yes	No No No No No No No No	Yes
 a. Installed a meter? b. Disconnected a delinquent customer? c. Installed a chlorinator? d. Prepared a Consumer Confidence Rep e. Been in attendance for a sanitary surv f. Developed an Emergency Response Pl g. Developed a preventive maintenance h. Provided public notification? 	oort (CCR)? vey? lan?	Yes Yes	No No No No No No No No	Yes

9. Does the candidate know how to locate a suspec	ted leak?		
☐ Yes ☐ No			
Notes:			
	Deep he /she week wellfiestions?		
	Does he/she meet qualifications?	☐ Yes	□ No
10. Does the candidate know how to locate an illega	I connection?		
☐ Yes ☐ No			
Notes:			
	Does he/she meet qualifications?	□ Yes	□ No
11. Ask the candidate to describe the requirements	of the Revised Total Coliform Ru	le.	
Notes:			
	Does he/she meet qualifications?	☐ Yes	□ No

12. Ask the candidate to describe the requirements o Ground Water Rule, as applicable based on the po			or
Notes:			
	Does he/she meet qualifications?	☐ Yes	□ No
13. Ask the candidate to describe the process for put pressure.	ing a main back into service aft	er a loss of	
Notes:			
	Does he/she meet qualifications?	□ Yes	□ No
14. Ask the candidate to explain when there is a need used, if applicable based on whether the public w		and equipm	ent
Notes:			
	Does he/she meet qualifications?	☐ Yes	□ No

15. Ask the candidat	e what type of reporting he/she be	lieves is required for this system.	
Notes:			
		oes he/she meet qualifications? Yes N	lo
Part III – Availa	ability		
16. Which other syst	em(s) does the candidate currently	work for and are there any work restrictions?	
	ons and compliance status of all systems curr		
System Name	Location	Compliance Status	
Work restrictions:			
How much time doe	s the candidate spend at the other	water systems per week?	
Hours per week:			
Notes:			
		Does he/she meet qualifications? Yes N	

17. How often will the operator visit the 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	r on random days?
☐ Same day each week ☐ Random days	
Is there a backup operator that can manage	the system in his/her absence?
☐ Yes ☐ No	
How does the candidate address weekends,	holidays, vacations and illnesses?
Notes:	
	Does he∕she meet qualifications? ☐ Yes ☐ No
18. How quickly will the candidate be able t	o respond to an emergency?
Estimated response time to be physically present in an emergency:	■ This question applies to contract operators only. Permanent operators would be at the water system as the decision-maker dictates.
,	• [Insert state regulations or recommendations for how quickly a contract operator must respond to an emergency
Notos	operator must respond to an emergency
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No

Part IV – Tasks Performed

19. What specifically	will be checked and recorded during each visit?
This question applies to condictates.	ntract operators only. Permanent operators would be at the water system as the public water system
■ See the list of "Potential Op	perator Duties" which identifies possible duties to discuss with the candidate.
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No
20. Is the candidate fa (O&M) requireme	amiliar with the particular water system's design and operations and maintenance ents?
☐ Yes ☐ No	
Can the candidate concalibration)?	nduct repairs and routine maintenance as needed (including equipment
☐ Yes ☐ No	
Will the candidate propriet of the equipment of the equip	ovide the necessary testing equipment and reagents, or must the water system nt?
☐ 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 qualifications? ☐ Yes ☐ No

21. Does the candidate have a standard O&M strategy for each system he/she operates?
□ Yes □ No
Can the candidate provide an example of an operational log sheet that he/she has completed for a similar system?
 ☐ Yes ■ 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 qualifications? ☐ Yes ☐ No
22. Provide the candidate with a copy of the water system permit. Is he/she familiar with the state permit conditions and regulatory requirements for this system type and size?
□ Yes □ No
Notes:
Does he/she meet qualifications? ☐ Yes ☐ No

23. Can the candidate perform minor repairs troubleshooting?	s, required operational testing and basic system
☐ 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
Is the candidate willing to perform this work as part of the written agreement?	testing and maintenance. However, commercial services and/or consulting engineering services may be required for maintenance that is more complex or for operating problems.
□ Yes □ No	
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No
24. Discuss the minimum duties (both requir	red and expected duties) to be completed by the candidate.
 A list of the duties which, at a minimum, must be completed the written agreement. 	eted and the frequency each duty must be performed should be included in
■ See the list of "Potential Operator Duties" which identifie	es possible duties to discuss with the candidate.
	ected to be done to carry out required duties, are typically system-specific and s to a well house, storage tank or surface water system intake; vector control of electrical wiring; or insulating pressure tanks.
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No

Part V – Other Qualifications and Information

25. Does the candidate carry adequate liability insurance?		
☐ Yes	■ These questions apply to contract operators o	nly.
□ No	 This helps protect the owner from potential la contractor or a contractor's employee is injured 	
	The owner may want to ask the contract oper insurance company name the utility as an add	
Does the insurance cover personal injury a damage that may arise from the operation		nal property
☐ Yes ☐ No		
If yes, how much coverage and with which	insurance company?	
Coverage Amount:		
Insurance Company Name:		
Notes:		
	Does he/she meet qualifications?	☐ Yes ☐ No
	Does ne/sne meet quanncations:	L fes L NO
26. Does the candidate have a tax identific	ation number?	
☐ Yes	■ This question applies to contract operators only.	
□ No		
Notes:		
	Does he/she meet qualifications?	☐ Yes ☐ No

27. Does the candidate have a valid driver's license?	
☐ Yes ☐ No	
Does the candidate have a license appropriate to th	e vehicle that they will use for the job?
☐ Yes ☐ No	
Are there any license restrictions?	
☐ Yes ☐ No	
Notes:	
	Does he/she meet qualifications? ☐ Yes ☐ No
28. What is the candidate's fee and what does it inc	ude?
Fee:	■ These questions apply to contract operators only.
Fee: Activities included:	■ These questions apply to contract operators only.
Activities	■ These questions apply to contract operators only.
Activities	
Activities included:	
Activities included: Is time charged for travel or only for time spent on s	ite?
Activities included: Is time charged for travel or only for time spent on s □ Time for travel and on site □ Time on site	ite?
Activities included: Is time charged for travel or only for time spent on s Time for travel and on site Time on site Is there an additional charge for after-hours or eme	ite?
Activities included: Is time charged for travel or only for time spent on s Time for travel and on site Time on site Is there an additional charge for after-hours or eme	ite?
Activities included: Is time charged for travel or only for time spent on s Time for travel and on site Time on site Is there an additional charge for after-hours or eme	ite?
Activities included: Is time charged for travel or only for time spent on s Time for travel and on site Time on site Is there an additional charge for after-hours or eme	ite?
Activities included: Is time charged for travel or only for time spent on s Time for travel and on site Time on site Is there an additional charge for after-hours or eme	ite?

29. Is the candidate part of a group (company), or is he/she an independent operator?	
☐ Group (company):	■ This question applies to contract operators only.
☐ Independent	
Notes:	
D	Does he/she meet 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 the expectations of the operator 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 that 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 licensed/certified operator at the public water system who has the authority to make operational decisions that affect water quality or quantity. This can be a permanent employee or a contract operator. Contact

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 he/she can have other people work under his/her 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.

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].

Topics for Written Agreement with the Operator

PARTIES INVOLVED

Name and address of operator.

Licenses/certifications held by operator.

Public water system name and address.

DESCRIPTION OF THE WATER SYSTEM

A brief description of the public water system. Indicate the number of service connections, the type of treatment present, information about the water source, etc.

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.

Topics for Written Agreement with the Operator

Scope of work for the written agreement/contract.

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 his/her 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.]

Topics for Written Agreement with the Operator

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.

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 licensed/certified substitute operator during those times when the system is in operation and he/she is not available or is inaccessible. The substitute 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 providing a safe working environment.

OWNER/DECISION-MAKER RESPONSIBILITIES

The responsibility that will be retained by the owner/decision-maker must be clearly documented.

Topics for Written Agreement with the Operator

[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.

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 that 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 licensure/certification while the agreement is in effect (treatment, distribution, wastewater, safety, etc.).
 Attend training programs/continuing education programs needed for licensure/certification renewal.
 Oversee licensure/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 licensed/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)

Vrit	ten Plans, Reports and Recordkeeping
	Prepare and submit 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 licensed/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.).
Vat	er System Planning
	Collect and provide public water system owner/decision-maker with information on developing a budget for the
ш	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.

ш	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]
	- 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
Wat	er 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

	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/ <i>E. coli</i>
	- 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
)
	- Fluoride (public water systems must maintain a fluoride level of
	[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 EPA and 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

Ц	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 resurfacing 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 systems 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, 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]
Eme	ergency/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

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	Be available during all operating shifts for emergency situations, including:
	- Responding to actual emergencies within
	 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 licensed/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
Adm	ninistrative/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	Insert State Website/Contact Information
Operator Training and Technical Assistance	
Drinking Water Division – Regulatory information, water quality reporting	
Capacity Development Program – Asset management, long-range planning, setting rates, access to infrastructure funding, water loss, energy efficiency, water system partnerships	
Consumer Confidence Reports (CCRs)	
Public Notification	
State Revolving Loan Fund – Infrastructure funding	
Emergency Response	

[Note for states: States may add any documents to this section that may be useful for small systems. For example, states may choose to add forms used to update operator in responsible charge information to this section.]

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

Date of Posting:					
Employer:					
Job Title:					
lob Description: This is a very short description of overall system and a somewhat longer description of the required duties. A classified ad should not be the full description of all the work that needs to be done, just the major responsibilities. The full description should be sent to the applicant before an interview.					
Salary/Benefits: This section is optional. The salary should be a range. Benefits can be both the obvious such as health insurance, and the not so obvious like flex hours.					
Qualifications: Think about what is the minimum level of education and experience you would accept. You do not want to lose a good, trainable candidate.					
To Apply: Submit (all that are checked):					
cover letter r	esume	application form			
Submit by:					
Submit to:					
For Further Information:					